

By Category PDF

Category LED

Opto Devices

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SMD LEDs ROHM's chip LEDs are designed for automatic surface mount processes and are available in a wide variety of package sizes (from 1.0x0.6mm)

Red (V, U) Quick Reference of Luminous intensity

Package Structure	Package Size (mm)	Height (mm)	I_f (mA)	Luminous Intensity (mcd)	1.0 to 1.6	1.6 to 2.5	2.5 to 4.0	4.0 to 6.3	6.3 to 10	10 to 16	16 to 25	25 to 40	40 to 63	63 to 100	100 to 160	160 to 250	250 to 400	400 to 630	630 to 1000	1000 to 1600	1600 to 2500	2500 to 3120
Mini-mold	1006	0.2	1				SML-P11VT (R)															
							SML-P11UT (R)															
		20										SML-P12VT (R)										
												SML-P12UT (R)										
	1608	0.36	20									SML-E12V8W										
												SML-E12U8W										
												SML-E12UW*1										
		0.55	2				CSL1901VW															
							CSL1901UW															
									SML-D12L8W													
														SML-D15VW								
Reflector	20125	0.8	20											SML-D13VW (A)*								
														SML-D12V1W								
														SML-D12V8W								
	3020	1.3	20																			
		20																				
PLCC2	3528	1.9	50																			
			20																			
Side View (mold)	16115	0.55	20																			
Reverse Mount	34125	1.1	10																			
Lens	1608	1.24	20																			

Package Structure	Package Size (mm)	Height (mm)	I_f (mA)	Luminous Intensity (cd)	4.5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 12	12 to 14	14 to 16	16 to 18	18 to 20	20 to 22	22 to 25
Lens	2924	3.1	20													

Orange (D) Quick Reference of Luminous intensity

Package Structure	Package Size (mm)	Height (mm)	I_f (mA)	Luminous Intensity (mcd)	1.0 to 1.6	1.6 to 2.5	2.5 to 4.0	4.0 to 6.3	6.3 to 10	10 to 16	16 to 25	25 to 40	40 to 63	63 to 100	100 to 160	160 to 250	250 to 400	400 to 630	630 to 1000	1000 to 1600	1600 to 2800
Mini-mold	1006	0.2	1					SML-P11DT (R)													
		20																			
	1608	0.36	20																		
		0.55	2																		
Reflector	20125	0.8	20																		
	3020	1.3	20																		
		20																			
PLCC2	3528	1.9	50																		
			20																		
Side View (mold)	16115	0.55	20																		
Reverse Mount	34125	1.1	10																		
Lens	1608	1.24	20																		

Package Structure	Package Size (mm)	Height (mm)	I_f (mA)	Luminous Intensity (cd)	6 to 7	7 to 8	8 to 9	9 to 10	10 to 12	12 to 14	14 to 16	16 to 18	18 to 20	20 to 22	22 to 24	24 to 27	27 to 30	30 to 33	33 to 36	36 to 40	40 to 45	45 to 56
Lens	2924	3.1	20																			

*Please note that the luminous intensity of some products may fall between ranks (half rank).

*1 Luminous intensity on specification sheet include tolerance of within $\pm 10\%$. Note: Please be sure to refer the specifications about the rank.

SMD LEDs

Yellow (Y, W) Quick Reference of Luminous intensity

Package Structure	Package Size (mm)	Height (mm)	Luminous Intensity (mcd)	1.0 to 1.6	1.6 to 2.5	2.5 to 4.0	4.0 to 6.3	6.3 to 10	10 to 16	16 to 25	25 to 40	40 to 63	63 to 100	100 to 160	160 to 250	250 to 400	400 to 630	630 to 1000	1000 to 1600	1600 to 2800
Mini-mold	1006	0.2	1					SML-P11YT (R)					SML-P12YT (R)							
			20										SML-P12Y2T (R)							
		0.36	20										SML-P12Y3T (R)							
			2										SML-P12YT (R)							
	1608	0.55	20										SML-P12WT (R)							
			2										SML-E12Y8W							
			20										SML-D11YW							
			20										SML-D12W8W (A)*							
			20										CSL1901YW							
			20																	
Reflector	20125	0.8	20																	
			20																	
			20																	
			20																	
	3020	1.3	20																	
			10																	
			20																	
			20																	
			20																	
			20																	
PLCC2	3528	1.9	50																	
Side View (mold)	16115	0.55	20																	
Reverse Mount	34125	1.1	10																	
Lens	1608	1.24	20																	
	3216	1.85	20																	

Yellow Green (M), Green (P, F) Quick Reference of Luminous intensity

Package Structure	Package Size (mm)	Height (mm)	Luminous Intensity (mcd)	0.63 to 1.0	1.0 to 1.6	1.6 to 2.5	2.5 to 4.0	4.0 to 6.3	6.3 to 10	10 to 16	16 to 25	25 to 40	40 to 63	63 to 100	100 to 160	160 to 250	250 to 400	400 to 630	630 to 1000	1000 to 1800	1800 to 2500		
Mini-mold	1006	0.2	1	SML-P11MT (R)					SML-P12M2T (R)														
	20							SML-P12MT (R)															
	1608	0.36							SML-P13FT (R)														
	20							SML-P13PT (R)															
	1608	0.55	20	SML-E12P8W					SML-E12M8W														
			2	CSL1901MW																			
		20											SML-D15MW										
													SML-D14MW (A)*										
													SML-D13MW (A)*										
								SML-D13FW															
20125	0.8	20						SML-D13M8W															
			SML-D12P8W																				
								SML-D12M1W															
								SML-D12M8W															
Reflector	20125	0.8	20						SML-D12FW														
									SML-H12M8T														
	3020	1.3	20	SML-H12P8T										SML-M13MT									
									SML-M13PT														
PLCC2	3528	1.9	50						SML-M10MT														
				SML-010PT																			
			20						SML-012PT (A)*														
									SML-012M8T														
Side View (mold)	16115	0.55	20						SML-012P8T														
									SML-Z14P4T*										SML-Z14M4T*				
														SML-Z14F4T*									
									SML-Z14MT (A)*														
Reverse Mount	34125	1.1	20						SML-Z14PT (A)*														
									SML-Z14FT (A)*														
									SML-A12MT (J)*1														
									SML-A12M8T														
Lens	1608	1.24	20						SML-A12P8T														
									SML-812MT														
									CSL0901PT					CSL0901MT									
														CSL0902MT					SML-S13MT				
3216	1.85	20											SML-S13PT										

*Please note that the luminous intensity of some products may fall between ranks (half rank).

*1 Luminous intensity on specification sheet include tolerance of within $\pm 10\%$. Note: Please be sure to refer the specifications about the rank.

Green (E)/Blue Green (E2, E3) Quick Reference of Luminous intensity

Package Structure	Package Size (mm)	Height (mm)	Luminous Intensity (mcd)	I _F (mA)	9.0 to 14	14 to 22	22 to 36	36 to 56	56 to 90	90 to 140	140 to 220	220 to 360	360 to 560	560 to 900	900 to 1400	1400 to 2200	2200 to 3600	3600 to 5600	
Mini-mold	1006	0.2	5	5					SMLP14ECNW										
	1608	0.36								SMLN3EC8T									
		0.55								SMLD12EN1W									
		1.06								SMLD12E2N1W									
											SMLD12E3N1W								
Reflector	20125	0.8	5	20					CSL1001ET										
	3020	1.3						SMLMN2ECT (C)											
PLCC2	3528	1.9	20	20								SML012ENT							
													SMLZ24E2N3T						
Side View (mold)	16115	0.55	5	20					SMLA12ENT										
	3216	1.85														SMLS14ENT			
Lens	1608	1.24	20	20								CSL0901ET							
														CSL0902ET					

Blue (B) Quick Reference of Luminous intensity

Package Structure	Package Size (mm)	Height (mm)	Luminous Intensity (mcd)	I _F (mA)	0.9 to 1.4	1.4 to 2.2	2.2 to 3.6	3.6 to 5.6	5.6 to 9.0	9 to 14	14 to 22	22 to 36	36 to 56	56 to 90	90 to 140	140 to 220	220 to 360	360 to 560	560 to 900	900 to 1400
Mini-mold	1006	0.2	5	5							SMLP14BCNW									
		0.36									SMLN3BC8T									
	1608	0.55									SMLD12BN1W									
		1.06							CSL1001BT											
Reflector	20125	0.8	5	20							SMLMN2BCT (C)									
	3020	1.3	20												SML013BNT					
PLCC2	3528	1.9	20	20													SMLZ24BN3T			
																	SMLZN4BGT (A)*			
Side View (mold)	16115	0.55	5	20						SMLA12BN8T										
Reverse Mount	34125	1.1	20												SML813BNT					
Lens	1608	1.24	5	20									CSL0901BT							
	3216	1.85	20														CSL0902BT			
																			SMLS14BNT	

White (WB) Quick Reference of Luminous intensity

Package Structure	Package Size (mm)	Height (mm)	Luminous Intensity (mcd)	I _F (mA)	9 to 14	14 to 22	22 to 36	36 to 56	56 to 90	90 to 140	140 to 220	220 to 360	360 to 560	560 to 900	900 to 1100	1100 to 1400	1400 to 1800	1800 to 2200	2200 to 2800	2800 to 3600	3600 to 7000	7000 to 8500	
Mini-mold	1006	0.2	5							SMLP14WBCNIW													
	1608	0.36	5							SMLN3WBC8W													
		0.55								SMLD12WBN1W													
Side View (Reflector)	16115	0.55	5				SMLA12WBN7W											CSL0416WBCW					
Reverse Mount	34125	1.1	2		SML811WBCN1W																		
Reflector	1608	0.55	20	5					CSL1101WBxW														
													CSL1102WBxW										
	20125	0.8	5													CSL1103WBxW							
																CSL1104WBxW							
PLCC2	3528	1.9	20															SMLZN4WBGUW (A)*					

Package Structure	Package Size (mm)	Height (mm)	Luminous Intensity (cd)	I _F (mA)	2.2 to 2.8	2.8 to 3.3	3.3 to 4.0	4.0 to 4.8	4.8 to 5.8	5.8 to 7.0	7.0 to 8.5	8.5 to 10.2	10.2 to 12.3	12.3 to 14.8	14.8 to 19	19 to 21.8	21.8 to 24.5	24.5 to 27.2	27.2 to 29.3	29.3 to 32.6	32.6 to 35.4	
Reflector	4520	0.6	90						SMLK18WBCNW													

*Please note that the luminous intensity of some products may fall between ranks (half rank).

*1 Luminous intensity on specification sheet include tolerance of within ±10%. Note: Please be sure to refer the specifications about the rank.

SMD LEDs

2 Colors Quick Reference of Luminous intensity

Package Structure	Package Size (mm)	Height (mm)	I _F (mA)	Luminous Intensity (mcd)	2.5 to 4.0	4.0 to 6.3	6.3 to 10	10 to 16	16 to 25	25 to 40	40 to 63	63 to 100	100 to 160
Mini-mold	1010	0.2	20	Red									
				Yellow Green									
				Blue									
	1315	0.6	20	Red									
				Yellow Green									
				Red									
				Yellow Green									
				Orange									
				Yellow Green									
	1608	0.55	5	Yellow									
				Yellow Green									
				Red									
				Yellow									
				Red									
				Yellow									
Reflector	3025	1.3	20	Orange									
				Yellow Green									
				Red									
				Yellow Green									
				Yellow									
Reverse Mount	34125	1.1	20	Yellow Green									
				Red									
				Yellow Green									

3 Colors Quick Reference of Luminous intensity

Package Structure	Package Size (mm)	Height (mm)	I _F (mA)	Luminous Intensity (mcd)	Emitting Color	5.6 to 9.0	9.0 to 14	14 to 22	22 to 36	36 to 56	56 to 90	90 to 140	140 to 220	220 to 360	360 to 560	560 to 900	900 to 1400	1400 to 1800	
Mini-mold	1010	0.2	5	Red															
				Green															
				Blue															
	1510	0.2	5	Red															
				Green															
Blue																			
Reflector	1816	0.5	20	Red															
				Green															
				Blue															
				Red															
				Green															
				Blue															
	3528	0.6		Red															
				Green															
				Blue															
				Red															
				Green															
				Blue															
Side View (Reflector)	29135	1.0	20	Red															
				Green															
				Blue															
				Red															
	6922	2.15		Green															
				Blue															
				Red															
				Green															
				Blue															
				Red															

*1 Luminous intensity on specification sheet include tolerance of within $\pm 10\%$. Note: Please be sure to refer the specifications about the rank.

SMD LEDs (Automotive Grade)

Red (V, U) Quick Reference of Luminous intensity

Package Structure	Package Size (mm)	Height (mm)	Luminous Intensity (mcd)	6.3 to 10	10 to 16	16 to 25	25 to 40	40 to 63	63 to 100	100 to 160	160 to 250	250 to 400	400 to 630	630 to 1000	1000 to 1600	1600 to 2500	2500 to 3120
Mini-mold	1608	0.55	20							SML-D15VW (C)							
									SML-D13VW (C)								
										SML-D12V8W (C)							
	20125	0.8	20								SML-D15UW (C)						
											SML-D15U2W (C)						
											SML-D13UW (C)						
PLCC	3528	1.9	20							SML-D12U8W (C)							
										SML-H12V8T (C)							
Reverse Mount	34125	1.1	10														
Lens	1608	1.24	20														

Orange (D) Quick Reference of Luminous intensity

Package Structure	Package Size (mm)	Height (mm)	Luminous Intensity (mcd)	10 to 16	16 to 25	25 to 40	40 to 63	63 to 100	100 to 160	160 to 250	250 to 400	400 to 630	630 to 1000	1000 to 1600	1600 to 2800
Mini-mold	1608	0.55	20								SML-D15DW (C)				
										SML-D13DW (C)					
	20125	0.8	20								SML-D12D8W (C)				
PLCC	3528	1.9	20								SML-H12D8T (C)				
Lens	1608	1.24	20												
Reverse Mount	34125	1.1	10												

Yellow (Y, W) Quick Reference of Luminous intensity

Package Structure	Package Size (mm)	Height (mm)	Luminous Intensity (mcd)	2.5 to 4.0	4.0 to 6.3	6.3 to 10	10 to 16	16 to 25	25 to 40	40 to 63	63 to 100	100 to 160	160 to 250	250 to 400	400 to 630	630 to 1000	1000 to 1600	1600 to 2800
Mini-mold	1608	0.55	20			SML-D12W8W (C)												
	20125	0.8	20															
PLCC	3528	1.9	20															
Reverse Mount	34125	1.1	10															
Lens	1608	1.24	20															

Yellow Green (M), Green (P, F) Quick Reference of Luminous intensity

Package Structure	Package Size (mm)	Height (mm)	Luminous Intensity (mcd)	1.6 to 2.5	2.5 to 4.0	4.0 to 6.3	6.3 to 10	10 to 16	16 to 25	25 to 40	40 to 63	63 to 100	100 to 160	160 to 250	250 to 400	400 to 630	630 to 1000
Mini-mold	1608	0.55	20														
	20125	0.8	20														
PLCC	3528	1.9	20														
Lens	1608	1.24	20														

SMD LEDs (Automotive Grade)

Green (E)/Blue Green (E2, E3) Quick Reference of Luminous intensity

Package Structure	Package Size (mm)	Height (mm)	I _F (mA)	Luminous Intensity (mcd)	36 to 56	56 to 90	90 to 140	140 to 220	220 to 360	360 to 560	560 to 900	900 to 1400	1400 to 2200	2200 to 3600	3600 to 5600
Mini-mold	1608	1.06	5				CSL1001ET (C)								
Reflector	20125	0.8	5			SMLMN2ECT (C)									
PLCC	3528	1.9	20							SMLZ24E2N3T (C)					
Lens	1608	1.24	5					CSL0901ET (C)							
			20									CSL0902ET (C)			

Blue (B) Quick Reference of Luminous intensity

Package Structure	Package Size (mm)	Height (mm)	I _F (mA)	Luminous Intensity (mcd)	2.2 to 3.6	3.6 to 5.6	5.6 to 9.0	9 to 14	14 to 22	22 to 36	36 to 56	56 to 90	90 to 140	140 to 220	220 to 360	360 to 560	560 to 900
Mini-mold	1608	0.55	5						SMLD12BN1W (C)								
		1.06	1			CSL1001BT (C)											
Reflector	20125	0.8	5						SMLMN2BCT (C)								
PLCC	3528	1.9	20											SMLZ24BN3T (C)			
Lens	1608	1.24	5							CSL0901BT (C)							
			20											CSL0902BT (C)			

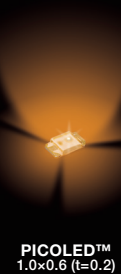
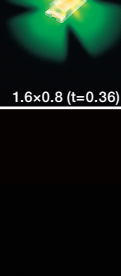
White (WB) Quick Reference of Luminous intensity

Package Structure	Package Size (mm)	Height (mm)	I _F (mA)	Luminous Intensity (mcd)	36 to 56	56 to 90	90 to 140	140 to 220	220 to 360	360 to 560	560 to 900	900 to 1100	1000 to 1400	1400 to 1800
Mini-mold	1608	0.55	5			SMLD12WBN1W (C)								
							CSL1101WBAW (C)							
							CSL1101WBBW (C)							
							CSL1101WBCW (C)							
							CSL1101WBDW (C)							
Reflector	1608	0.55	5									CSL1102WBAW (C)		
												CSL1102WBBW (C)		
												CSL1102WBCW (C)		
												CSL1102WBDW (C)		
	20125	0.8	5			SMLMN2WB1CW (C)								

3 Colors (RGB) Quick Reference of Luminous intensity

Package Structure	Package Size (mm)	Height (mm)	I _F (mA)	Luminous Intensity (mcd)	220 to 280	280 to 360	360 to 450	450 to 560	560 to 710	710 to 900	900 to 1100	1100 to 1400	1400 to 1800	1800 to 2200
Reflector	3528	0.6	20	Red										
				Green						SMLVN6RGBFU1 (C)				
				Blue										

SMD LEDs

PICOLED™ Mold type 0402 (1006M)																				
Package (mm)	Emitting Color	Part No.	Electrical and Optical Characteristics (T _a =25°C)										Absolute Maximum Ratings (T _a =25°C)							
			Dominant Wavelength λ _D /Chromaticity Coordinates (x, y)		Luminous Intensity I _v				Forward Voltage V _F		Reverse Current I _R		Power Dissipation P _D (mW)	Forward Current I _F (mA)	Peak Forward Current I _{FM} (mA)	Reverse Voltage V _R (V)	Operating Temperature T _{opr} (°C)	Storage Temperature T _{stg} (°C)		
			Typ* (nm)	I _F (mA)	Min (mcd)	Typ (mcd)	Max (mcd)	I _F (mA)	Typ (V)	I _F (mA)	Max (μA)	V _R (V)								
	Red	SML-P11VT (R)	626	1	2	4	6	1	1.8	1	10	5	50	20	100 ^{*2}	5	-40 to +85	-40 to +100		
		SML-P11UT (R)	621	1	1	3	6	1	1.8	1	10	5	50	20	100 ^{*2}	5	-40 to +85	-40 to +100		
	Orange	SML-P11DT (R)	605	1	4	7	16	1	1.9	1	10	5	52	20	100 ^{*2}	5	-40 to +85	-40 to +100		
	Yellow	SML-P11YT (R)	586	1	4	8	16	1	1.9	1	10	5	52	20	100 ^{*2}	5	-40 to +85	-40 to +100		
	Yellow Green	SML-P11MT (R)	569	1	1	2	4	1	1.9	1	10	5	54	20	100 ^{*2}	5	-40 to +85	-40 to +100		
	Red	SML-P12VT (R)	630	20	25	60	100	20	2.0	20	10	5	50	20	100 ^{*2}	5	-40 to +85	-40 to +100		
		SML-P12UT (R)	620	20	40	85	160	20	2.0	20	10	5	50	20	100 ^{*2}	5	-40 to +85	-40 to +100		
		SML-P12UT2 (R)	615	20	25	70	160	20	2.1	20	10	5	52	20	100 ^{*2}	5	-40 to +85	-40 to +100		
	Orange	SML-P12DT (R)	605	20	63	100	250	20	2.1	20	10	5	52	20	100 ^{*2}	5	-40 to +85	-40 to +100		
		SML-P12Y3T (R)	596	20	40	90	250	20	2.1	20	10	5	52	20	100 ^{*2}	5	-40 to +85	-40 to +100		
	Yellow	SML-P12YT (R)	590	20	40	100	160	20	2.1	20	10	5	52	20	100 ^{*2}	5	-40 to +85	-40 to +100		
		SML-P12WT (R)	585	20	25	70	160	20	2.1	20	10	5	52	20	100 ^{*2}	5	-40 to +85	-40 to +100		
		SML-P12YT2 (R)	580	20	16	50	100	20	2.1	20	10	5	52	20	100 ^{*2}	5	-40 to +85	-40 to +100		
	Yellow Green	SML-P12M2T (R)	576	20	10	25	63	20	2.2	20	10	5	54	20	100 ^{*2}	5	-40 to +85	-40 to +100		
		SML-P12MT (R)	572	20	10	25	63	20	2.2	20	10	5	54	20	100 ^{*2}	5	-40 to +85	-40 to +100		
	Green	SML-P13FT (R)	566	20	6	18	40	20	2.1	20	10	5	52	20	100 ^{*2}	5	-40 to +85	-40 to +100		
		SML-P13PT (R)	560	20	4	10	16	20	2.1	20	10	5	52	20	100 ^{*2}	5	-40 to +85	-40 to +100		
		New SMLP14ECNW	527	5	56	110	220	5	3.0	5	100	5	34	10	50 ^{*2}	5	-40 to +85	-40 to +100		
		New SMLP14BCNW	470	5	9	25	56	5	2.9	5	100	5	33	10	50 ^{*2}	5	-40 to +85	-40 to +100		
	White	SMLP14WBCN1W	(x, y) (0.30, 0.30)	5	90	180	360	5	2.9	5	100	5	33	10	50 ^{*2}	5	-40 to +85	-40 to +100		
Mold type 0603 (1608M)																				
Package (mm)	Emitting Color	Part No.	Electrical and Optical Characteristics (T _a =25°C)										Absolute Maximum Ratings (T _a =25°C)							
			Dominant Wavelength λ _D /Chromaticity Coordinates (x, y)		Luminous Intensity I _v				Forward Voltage V _F		Reverse Current I _R		Power Dissipation P _D (mW)	Forward Current I _F (mA)	Peak Forward Current I _{FM} (mA)	Reverse Voltage V _R (V)	Operating Temperature T _{opr} (°C)	Storage Temperature T _{stg} (°C)		
			Typ* (nm)	I _F (mA)	Min (mcd)	Typ (mcd)	Max (mcd)	I _F (mA)	Typ (V)	I _F (mA)	Max (μA)	V _R (V)								
	Red	SML-E12V8W	630	20	16	40	100	20	2.2	20	10	5	54	20	100 ^{*2}	5	-40 to +85	-40 to +100		
		SML-E12UW	624	20	36	85	280	20	2.0	20	10	5	62	25	60 ^{*1}	5	-30 to +85	-40 to +85		
		SML-E12U8W	620	20	25	63	160	20	2.2	20	10	5	54	20	100 ^{*2}	5	-40 to +85	-40 to +100		
	Orange	SML-E12DW	607	20	56	150	450	20	2.0	20	10	5	62	25	60 ^{*1}	5	-30 to +85	-40 to +85		
		SML-E12D8W	605	20	40	100	250	20	2.2	20	10	5	54	20	100 ^{*2}	5	-40 to +85	-40 to +100		
	Yellow	SML-E12Y8W	590	20	25	63	160	20	2.2	20	10	5	54	20	100 ^{*2}	5	-40 to +85	-40 to +100		
	Yellow Green	SML-E12M8W	572	20	10	25	63	20	2.2	20	10	5	54	20	100 ^{*2}	5	-40 to +85	-40 to +100		
		SML-E12P8W	560	20	3	6	16	20	2.2	20	10	5	54	20	100 ^{*2}	5	-40 to +85	-40 to +100		
	Green	New SML-EN3EC8T	527	5	56	120	360	5	3.0	5	10	5	68	20	100 ^{*2}	5	-40 to +85	-40 to +100		
	Blue	SML-EN3BC8T	470	5	14	40	90	5	2.9	5	10	5	66	20	100 ^{*2}	5	-40 to +85	-40 to +100		
White	SML-EN3WBC8W	(x, y) (0.30, 0.30)	5	56	120	220	5	2.9	5	10	5	33	10	50 ^{*2}	5	-40 to +85	-40 to +100			
	Red	SML-D12L8W	635	20	10	16	40	20	2.0	20	10	5	50	20	100 ^{*5}	5	-40 to +85	-40 to +100		
		SML-D14VW (A)				100	180						72	30						
		Single rank SML-D15VW			71	90	112		2.0				84	35			-40 to +100			
		SML-D13VW (A)			36	55	90	20		20			72	30			-40 to +100			
		SML-D12V8W			16		100		2.2				54				-40 to +85			
		SML-D12V1W			25		63							20						
		New CSL1901VW		2	1.6	4.8	6.3	2	1.8	2			44							
		Single rank SML-D15UW			90	112		140		2.0			84	35			-40 to +100			
		SML-D13UW (A)			56	85							72	30			-40 to +100			
		SML-D13U8W			40	70		160	20	2.1	20		52				-40 to +85			
		SML-D12U8W			25		63		2.2				54	20			-40 to +85			
		SML-D12U1W			40		100													
		New CSL1901UW		2	2.5	6	10	2	1.8	2			44							
		SML-D14U2W (A)			90	160	224						72	30			-40 to +100			
		Single rank SML-D15U2W			112	140	180		2.0	20	10	5	84	35			-40 to +100			
		Orange	Single rank SML-D15DW			180	224	280		2.0				84	35			-40 to +100		
	SML-D14DW (A)				112	200							72	30			-40 to +100			
	SML-D13DW (A)				71	120	180	20		20							-40 to +85			
	SML-D12D8W				40		250		2.2				54	20			-40 to +85			
	SML-D12D1W				63		160													
	New CSL1901DW			2	6.3	9.4	25	2	1.8	2			44							
	Yellow	Single rank SML-D15YW			180	224	280		2.1				87	35			-40 to +100			
		SML-D14YW (A)			112	200							75	30			-40 to +85			
		SML-D12Y1W			63	100		160		2.2	20		54	20			-40 to +85			
		SML-D13Y8W			25		63													
		New CSL1901YW		2	6.3	9.4	25	2	1.8	2			44							
		SML-D12W8W (A)		588	2	5	7	9	2	2.0			12	52	20		12	-40 to +100		
	Yellow Green	SML-D11YW			2		6		1.9			10	5	67	25		5	-40 to +85		
		SML-D14WW (A)			112	180	280		2.1	20			75	30			-40 to +100			
		SML-D13WW (A)			71	110	180		2.1	20			78	30			-40 to +100			
		SML-D13Y2W			40	80	160		2.1	20			54	20			-40 to +85			
		SML-D12Y3W			16	40	100		2.2	20							-40 to +85			
		SML-D12M1W			16	30			2.2	20			54	20			-40 to +85			
		SML-D13M8W			10	25														
		Single rank SML-D15MW			56	71		90					87	35			-40 to +100			
		SML-D14MW (A)			36	60			2.1	20			75	30			-40 to +100			
		SML-D13MW (A)			28	45	71													
	Green	New CSL1901MW		570	2	1	3	4	2	1.8	2		44	20			-40 to +85			
		SML-D13FW			18	22	36		2.1	20			81	30			-40 to +85			
		SML-D12FW			14	18	28		2.2	20			67	25			-40 to +85			
		SML-D12P8W			20	3	6	16	20	2.2	20		5	54	20		100 ^{*2}	5	-40 to +85	-40 to +100
		SMLD12EN1W			5	56	140	220	5	3.0	5	10	5	70	20		100 ^{*2}	5	-40 to +100	-40 to +100
	Blue Green	SMLD12E2N1W			5	56	120	140	5	2.9	5	10	5	66	20		100 ^{*2}	5	-40 to +100	-40 to +100
SMLD12E3N1W				5	56	85	140	5	2.9	5	10	5	66	20		100 ^{*2}	5	-40 to +100	-40 to +100	
SMLD12BN1W				5	14	40	56	5	2.9	5	10	5	66	20		100 ^{*2}	5	-40 to +100	-40 to +100	
White	SMLD12WBN1W	(x, y) (0.295, 0.280)	5	56	120	220	5	2.9	5	10	5	66	20		100 ^{*2}	5	-40 to +100	-40 to +100		

SMD LEDs

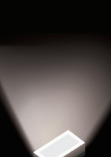
Mold type 0603 (1608M)

Package (mm)	Emitting Color	Part No.	Electrical and Optical Characteristics (T _a =25°C)										Absolute Maximum Ratings (T _a =25°C)						
			Dominant Wavelength λ _D		Luminous Intensity I _v					Forward Voltage V _F		Reverse Current I _R		Power Dissipation P _D (mW)	Forward Current I _F (mA)	Peak Forward Current I _{FM} (mA)	Reverse Voltage V _R (V)	Operating Temperature T _{opr} (°C)	Storage Temperature T _{stg} (°C)
			Typ (nm)	I _F (mA)	Min (mcd)	Typ (mcd)	Max (mcd)	I _F (mA)	Typ (V)	I _F (mA)	Max (μA)	V _R (V)							
 1.6×0.8 (t=1.06)	Green	CSL1001ET (C)	527	5	90	140	224	5	3.0	5	10	5	35	10	50*2	5	-40 to +100	-40 to +100	
	Blue	CSL1001BT (C)	470	1	4	6	9	1	2.8	1	10	5	33	10	50*2	5	-40 to +100	-40 to +100	

Mold type 0805 (20125M)

Package (mm)	Emitting Color	Part No.	Electrical and Optical Characteristics (T _a =25°C)										Absolute Maximum Ratings (T _a =25°C)						
			Dominant Wavelength λ _D		Luminous Intensity I _v					Forward Voltage V _F		Reverse Current I _R		Power Dissipation P _D (mW)	Forward Current I _F (mA)	Peak Forward Current I _{FP} (mA)	Reverse Voltage V _R (V)	Operating Temperature T _{opr} (°C)	Storage Temperature T _{stg} (°C)
			Typ (nm)	I _F (mA)	Min (mcd)	Typ (mcd)	Max (mcd)	I _F (mA)	Typ (V)	I _F (mA)	Max (μA)	V _R (V)							
 2.0×1.25 (t=0.8)	Red	SML-H12V8T	630	20	16	25	63	20	2.2	20	10	5	54	20	100 ^{*2}	5	-40 to +85	-40 to +100	
		SML-H12U8T	620	20	25	40	100	20	2.2	20	10	5	54	20	100 ^{*2}	5	-40 to +85	-40 to +100	
	Orange	SML-H12D8T	605	20	40	63	160	20	2.2	20	10	5	54	20	100 ^{*2}	5	-40 to +85	-40 to +100	
	Yellow	SML-H12Y8T	590	20	40	63	160	20	2.2	20	10	5	54	20	100 ^{*2}	5	-40 to +85	-40 to +100	
	Yellow Green	SML-H12M8T	572	20	10	25	40	20	2.2	20	10	5	54	20	100 ^{*2}	5	-40 to +85	-40 to +100	
	Green	SML-H12P8T	560	20	3	4	10	20	2.2	20	10	5	54	20	100 ^{*2}	5	-40 to +85	-40 to +100	

Reflector type 0603 (1608M)

Package (mm)	Emitting Color	Part No.	Electrical and Optical Characteristics (T _a =25°C)											Absolute Maximum Ratings (T _a =25°C)						
			Dominant Wavelength λ _D / Chromaticity Coordinates (x, y)		Luminous Intensity I _v				Forward Voltage V _F		Reverse Current I _R			Power Dissipation P _D (mW)	Forward Current I _F (mA)	Peak Forward Current I _{FM} (mA)	Reverse Voltage V _R (V)	Operating Temperature T _{opr} (°C)	Storage Temperature T _{stg} (°C)	
			Typ* (nm)	I _F (mA)	Min (mcd)	Typ (mcd)	Max (mcd)	I _F (mA)	Typ (V)	I _F (mA)	Max (μA)	V _R (V)								
 1.6×0.8 (t=0.55)	White	<i>New</i> CSL1101WBAW	(x, y) (0.282, 0.249)	5	90	140	220	5	2.9	5	10	5	68	20	100 ^{*2}	12	-40 to +110	-40 to +110		
		<i>New</i> CSL1101WBBW	(x, y) (0.261, 0.261)	5	90	140	220	5	2.9	5	10	5	68	20	100 ^{*2}	12	-40 to +110	-40 to +110		
		<i>New</i> CSL1101WBCW	(x, y) (0.303, 0.294)	5	90	140	220	5	2.9	5	10	5	68	20	100 ^{*2}	12	-40 to +110	-40 to +110		
		<i>New</i> CSL1101WBDW	(x, y) (0.284, 0.303)	5	90	140	220	5	2.9	5	10	5	68	20	100 ^{*2}	12	-40 to +110	-40 to +110		
		<i>New</i> CSL1102WBAW	(x, y) (0.282, 0.249)	20	710	1,000	1,400	20	3.2	20	10	5	152	40	100 ^{*2}	12	-40 to +110	-40 to +110		
		<i>New</i> CSL1102WBBW	(x, y) (0.261, 0.261)	20	710	1,000	1,400	20	3.2	20	10	5	152	40	100 ^{*2}	12	-40 to +110	-40 to +110		
		<i>New</i> CSL1102WBCW	(x, y) (0.303, 0.294)	20	710	1,000	1,400	20	3.2	20	10	5	152	40	100 ^{*2}	12	-40 to +110	-40 to +110		
		<i>New</i> CSL1102WBDW	(x, y) (0.284, 0.303)	20	710	1,000	1,400	20	3.2	20	10	5	152	40	100 ^{*2}	12	-40 to +110	-40 to +110		
		<i>New</i> CSL1103WBAW	(x, y) (0.282, 0.249)	20	900	1,500	2,200	20	3.2	20	10	5	152	40	100 ^{*2}	5	-40 to +110	-40 to +110		
		<i>New</i> CSL1103WBBW	(x, y) (0.261, 0.261)	20	900	1,500	2,200	20	3.2	20	10	5	152	40	100 ^{*2}	5	-40 to +110	-40 to +110		
		<i>New</i> CSL1103WBCW	(x, y) (0.303, 0.294)	20	900	1,500	2,200	20	3.2	20	10	5	152	40	100 ^{*2}	5	-40 to +110	-40 to +110		
		<i>New</i> CSL1103WBDW	(x, y) (0.284, 0.303)	20	900	1,500	2,200	20	3.2	20	10	5	152	40	100 ^{*2}	5	-40 to +110	-40 to +110		
		<i>New</i> CSL1104WBAW	(x, y) (0.282, 0.249)	20	1,400	2,000	2,800	20	2.9	20	10	5	144	40	100 ^{*2}	5	-40 to +110	-40 to +110		
		<i>New</i> CSL1104WBBW	(x, y) (0.261, 0.261)	20	1,400	2,000	2,800	20	2.9	20	10	5	144	40	100 ^{*2}	5	-40 to +110	-40 to +110		
		<i>New</i> CSL1104WBCW	(x, y) (0.303, 0.294)	20	1,400	2,000	2,800	20	2.9	20	10	5	144	40	100 ^{*2}	5	-40 to +110	-40 to +110		
		<i>New</i> CSL1104WBDW	(x, y) (0.284, 0.303)	20	1,400	2,000	2,800	20	2.9	20	10	5	144	40	100 ^{*2}	5	-40 to +110	-40 to +110		

Reflector type 0805 (20125M)

Package (mm)	Emitting Color	Part No.	Electrical and Optical Characteristics (T _a =25°C)										Absolute Maximum Ratings (T _a =25°C)							
			Dominant Wavelength λ _D / Chromaticity Coordinates (x, y)		Luminous Intensity I _v					Forward Voltage V _F		Reverse Current I _R		Power Dissipation P _D (mW)	Forward Current I _F (mA)	Peak Forward Current I _{FP} (mA)	Reverse Voltage V _R (V)	Operating Temperature T _{opr} (°C)	Storage Temperature T _{stg} (°C)	
			Typ*	I _F	Min	Typ	Max	I _F	Typ	I _F	Max	V _R								
			(nm)	(mA)	(mcd)	(mcd)	(mcd)	(mA)	(V)	(mA)	(μA)	(V)								
 2.0x1.25 (t=0.8)	Red	SML-M13VT	630	20	40	75	100	20	2.0	20	10	5	75	30	100 ^{*2}	5	-40 to +85	-40 to +100		
		SML-M13UT	620	20	63	120	160	20	2.0	20	10	5	75	30	100 ^{*2}	5	-40 to +85	-40 to +100		
	Orange	SML-M13DT	605	20	100	160	250	20	2.0	20	10	5	75	30	100 ^{*2}	5	-40 to +85	-40 to +100		
	Yellow	SML-M13YT	590	20	100	160	250	20	2.0	20	10	5	75	30	100 ^{*2}	5	-40 to +85	-40 to +100		
	Yellow Green	SML-M13MT	572	20	25	45	100	20	2.2	20	10	5	81	30	100 ^{*2}	5	-40 to +85	-40 to +100		
		SML-M13PT	560	20	6	16	25	20	2.2	20	10	5	81	30	100 ^{*2}	5	-40 to +85	-40 to +100		
	Green	SMLMN2ECT (C)	527	5	56	140	360	5	3.0	5	10	12	70	20	100 ^{*2}	12	-40 to +100	-40 to +100		
		SMLMN2BCT (C)	470	5	14	36	90	5	2.9	5	10	12	68	20	100 ^{*2}	12	-40 to +100	-40 to +100		
	Blue	SMLMN2BCT (C)	470	5	14	36	90	5	2.9	5	10	12	68	20	100 ^{*2}	12	-40 to +100	-40 to +100		
	White	SMLMN2WB1CW (C)	(x, y) (0.30, 0.28)	5	56	140	220	5	2.9	5	10	12	68	20	100 ^{*2}	12	-40 to +100	-40 to +100		

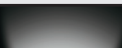
Reflector type (3020M)

Package (mm)	Emitting Color	Part No.	Electrical and Optical Characteristics (T _a =25°C)												Absolute Maximum Ratings (T _a =25°C)					
			Dominant Wavelength λ _D		Luminous Intensity I _v					Forward Voltage V _F		Reverse Current I _R		Power Dissipation P _D (mW)	Forward Current I _F (mA)	Peak Forward Current I _{FM} (mA)	Reverse Voltage V _R (V)	Operating Temperature T _{opr} (°C)	Storage Temperature T _{stg} (°C)	
			Typ (nm)	I _r (mA)	Min (mcd)	Typ (mcd)	Max (mcd)	I _r (mA)	Typ (V)	I _r (mA)	Max (μA)	V _R (V)								
	Red	SML-010VT	650 ^{*6}	20	2	6	18	20	2.0	20	10	4	70	25	60 ^{*1}	4	-30 to +85	-40 to +85		
		SML-011VT (A)	639 ^{*6}	10	14	28	56	10	2.0	10	10	5	75	30	100 ^{*2}	5	-40 to +100	-40 to +100		
		SML-011UT	630 ^{*6}	20	22	63	180	20	2.0	20	10	5	75	30	100 ^{*2}	5	-40 to +100	-40 to +100		
		SML-012VT (A)	630	20	36	71	140	20	2.0	20	10	5	75	30	100 ^{*2}	5	-40 to +100	-40 to +100		
		SML-012V8T		25	63	160	20	2.2	10		5	54	20	100 ^{*2}	5	-40 to +85	-40 to +100			
		SML-013UT	624	20	90	220	710	20	2.0	20	10	5	75	30	100 ^{*2}	5	-30 to +85	-40 to +100		
		SML-012UT		36	100	280	20	2.0	20	10	5	75	30	100 ^{*2}	5	-40 to +100	-40 to +100			
		SML-012U8T	620	20	40	100	250	20	2.2	20	10	5	54	20	100 ^{*2}	5	-40 to +85	-40 to +100		
	Orange	SML-011DT	611 ^{*6}	20	22	63	180	20	2.0	20	10	5	75	30	100 ^{*2}	5	-40 to +100	-40 to +100		
		SML-011DT (A)		45	90	10	10	5	75		30	100 ^{*2}	5	-40 to +100	-40 to +100					
		SML-010DT	610 ^{*6}	20	4	10	28	20	2.0	20	100	4	70	25	60 ^{*1}	4	-30 to +85	-40 to +85		
		SML-012DT	606	20	36	100	280	20	2.0	20	10	5	75	30	100 ^{*2}	5	-40 to +100	-40 to +100		
		SML-012D8T	605	20	63	160	400	20	2.2	20	10	5	54	20	100 ^{*2}	5	-40 to +85	-40 to +100		
		SML-012DT (A)		71	140	280	20	2.0	20	10	5	54	20	100 ^{*2}	5	-40 to +85	-40 to +100			
		SML-011YT	590 ^{*6}	20	22	63	180	20	2.0	20	10	5	75	30	100 ^{*2}	5	-40 to +100	-40 to +100		
		SML-011YT (A)		10	11	22	45	10	10		5	75	30	100 ^{*2}	5	-40 to +100	-40 to +100			
	Yellow	SML-012WT (A)	590	20	140	280	450	20	2.0	20	10	5	75	30	100 ^{*2}	5	-40 to +100	-40 to +100		
		SML-013YT		100	250	630	20	2.1	10		5	75	30	100 ^{*2}	5	-40 to +85	-40 to +100			
		SML-012YT		36	100	280	20	2.0	10		5	75	30	100 ^{*2}	5	-40 to +100	-40 to +100			
		SML-012Y8T		250	20	2.2	10	5	54		20	100 ^{*2}	5	-40 to +85	-40 to +100					
		SML-012YT (A)	587	20	56	112	224	20	2.0	20	10	5	75	30	100 ^{*2}	5	-40 to +100	-40 to +100		
		SML-010YT	585 ^{*6}	20	2	6	18	20	2.1	20	100	4	70	25	60 ^{*1}	4	-30 to +85	-40 to +85		
		SML-012M8T	572	20	16	40	100	20	2.2	20	10	5	54	20	100 ^{*2}	5	-40 to +85	-40 to +100		
		SML-010MT	570 ^{*6}	20	6	25	45	20	2.2	20	100	4	70	25	60 ^{*1}	4	-30 to +85	-40 to +85		
Green	SML-012PT (A)	560	20	9	36	20	2.1	20	10	5	62	25	60 ^{*2}	5	-40 to +100	-40 to +100				
	SML-012P8T		3	25	20	2.2	10		5	54	20	100 ^{*2}	5	-40 to +85	-40 to +100					
	SML-010PT	555 ^{*6}	20	2	6	18	20	2.2	20	100	4	70	25	60 ^{*1}	4	-30 to +85	-40 to +85			
	SML012ENT	525	20	140	360	900	20	3.3	20	100	5	84	20	100 ^{*2}	5	-30 to +85	-40 to +100			
Blue	New SML013BNT	470	20	90	250	560	20	3.2	20	100	5	78	20	100 ^{*2}	5	-30 to +85	-40 to +100			

Reflector type PLCC (3528M)

Package (mm)	Emitting Color	Part No.	Electrical and Optical Characteristics (T _a =25°C)											Absolute Maximum Ratings (T _a =25°C)					
			Dominant Wavelength λ _D /Chromaticity Coordinates (x, y)		Luminous Intensity I _v					Forward Voltage V _F		Reverse Current I _R		Power Dissipation P _D (mW)	Forward Current I _F (mA)	Peak Forward Current I _{FP} (mA)	Reverse Voltage V _R (V)	Operating Temperature T _{opr} (°C)	Storage Temperature T _{stg} (°C)
			Typ* (nm)	I _F (mA)	Min (mcd)	Typ (mcd)	Max (mcd)	I _F (mA)	Typ (V)	I _F (mA)	Max (μA)	V _R (V)							
	Red	SML-Z14V4T	630	50	140	280	560	50	2.0	50	10	12	189	70	200*2	12	-40 to 100	-40 to 100	
		SML-Z14VT (A)		20	56	112	180	20	1.9	20			168						
		SML-Z14U4T	620	50	280	560	1,120	50	2.0	50	10	12	189	70	200*2	12	-40 to 100	-40 to 100	
		SML-Z14UT (A)		20	112	224	355	20	1.9	20			168						
	Orange	SML-Z14D4T	605	50	355	710	1,400	50	2.0	50	10	12	189	70	200*2	12	-40 to 100	-40 to 100	
		SML-Z14DT (A)		20	140	280	450	20	1.9	20			168						
	Yellow	SML-Z14Y4T	590	50	355	710	1,400	50	2.1	50	10	12	189	70	200*2	12	-40 to 100	-40 to 100	
		SML-Z14YT (A)	589	20	140	280	450	20	2.0	20	10	12	175	70	200*2	12	-40 to 100	-40 to 100	
	Yellow Green	SML-Z14M4T	572	50	112	224	450	50	2.1	50	10	12	189	70	200*2	12	-40 to 100	-40 to 100	
		SML-Z14MT (A)	571	20	45	90	140	20	2.0	20	10	12	175	70	200*2	12	-40 to 100	-40 to 100	
	Green	SML-Z14F4T	565	50	56	120	180	50	2.1	50	10	12	189	70	200*2	12	-40 to 100	-40 to 100	
		SML-Z14FT (A)	564	20	22	45	71	20	2.0	20	10	12	175	70	200*2	12	-40 to 100	-40 to 100	
		SML-Z14P4T	561	50	22	56	90	50	2.1	50	10	12	189	70	200*2	12	-40 to 100	-40 to 100	
		SML-Z14PT (A)	560	20	11	22	36	20	2.0	20	10	12	175	70	200*2	12	-40 to 100	-40 to 100	
		New SMLZN4EGT (A)	528	20	900	1,500	2,200	20	3.4	20	10	5	120	30	100*2	5	-40 to 100	-40 to 100	
Blue Green	SMLZ24E2N3T (C)	505	20	900	1,140	1,800	20	3.2	20	—	—	152	40	100*2	—	-40 to 100	-40 to 100		
Blue	SMLZ24BN3T (C)	470	20	220	300	450	20	3.3	20	—	—	114	30	100*2	0.9	-40 to 100	-40 to 100		
	SMLZN4BGT (A)		140	-40 to 85															
White	SMLZN4WBGUW (A)	(x, y) (0.30, 0.28)	20	1,800	2,400	3,600	20	3.3	20	—	—	114	30	100*2	0.9	-40 to 85	-40 to 100		

Reflector type (4520M)

Package (mm)	Emitting Color	Part No.	Electrical and Optical Characteristics (T _a =25°C)											Absolute Maximum Ratings (T _a =25°C)						
			Chromaticity Coordinates* (x, y)		Luminous Intensity I _v				Luminous Flux Φ _v		Forward Voltage V _F		Reverse Current I _R		Power Dissipation P _D (mW)	Forward Current I _F (mA)	Peak Forward Current I _{FP} (mA)	Reverse Voltage V _R (V)	Operating Temperature T _{opr} (°C)	Storage Temperature T _{stg} (°C)
					Min (mcd)	Typ (mcd)	Max (mcd)	I _F (mA)	Typ (lm)	I _F (mA)	Typ (V)	I _F (mA)	Max (μA)	V _R (V)						
 4.5×2.0 (t=0.6)	White	New SMLK18WBNCW	(0.30, 0.28)	90	4,800	5,900	8,500	90	21	90	3.9	90	10	5	675	150	230*5	5	-40 to +100	-40 to +100

Side View type

Package (mm)		Emitting Color	Part No.	Electrical and Optical Characteristics (T _a =25°C)											Absolute Maximum Ratings (T _a =25°C)					
				Dominant Wavelength λ _D / Chromaticity Coordinates (x, y)		Luminous Intensity I _v					Forward Voltage V _F		Reverse Current I _R		Power Dissipation P _D (mW)	Forward Current I _F (mA)	Peak Forward Current I _{FM} (mA)	Reverse Voltage V _R (V)	Operating Temperature T _{opr} (°C)	Storage Temperature T _{stg} (°C)
				Typ* (nm)	I _F (mA)	Min (mcd)	Typ (mcd)	Max (mcd)	I _F (mA)	Typ (V)	I _F (mA)	Max (μA)	V _R (V)							
	Red	SML-A12V8T	630	20	16	40	100	20	2.2	20	10	5	54	20	100 ^{*2}	5	-40 to +85	-40 to +100		
		SML-A12UT (J)	624	20	36	100	280	20	2.0	20	10	5	75	30	100 ^{*2}	5	-40 to +85	-40 to +100		
		SML-A12U8T	620	20	25	63	160	20	2.2	20	10	5	54	20	100 ^{*2}	5	-40 to +85	-40 to +100		
	Orange	SML-A12DT (J)	606	20	36	100	280	20	2.0	20	10	5	75	30	100 ^{*2}	5	-40 to +85	-40 to +100		
		SML-A12D8T	605	20	40	100	250	20	2.2	20	10	5	54	20	100 ^{*2}	5	-40 to +85	-40 to +100		
	Yellow	SML-A12WT (J)			36		63	180		2.0				75	30					
		SML-A12Y8T	590	20	25		160	20	2.2	20	10	5	54	20	100 ^{*2}	5	-40 to +85	-40 to +100		
		SML-A15YT			180	—	280		2.1				87	35			-40 to +100			
	Yellow Green	SML-A12M8T	572	20	10	25	63	20	2.2	20	10	5	54	20	100 ^{*2}	5	-40 to +85	-40 to +100		
		SML-A12MT (J)	570	20	14	40	110	20	2.1	20	100	5	65	25	100 ^{*2}	5	-30 to +85	-40 to +85		
	Green	SML-A12P8T	560	20	3	6	16	20	2.2	20	10	5	54	20	100 ^{*2}	5	-40 to +85	-40 to +100		
		New SMLA12ENT	527	5	56	140	220	5	3.0	5	100	5	68	20	100 ^{*2}	5	-40 to +85	-40 to +100		
	Blue	New SMLA12BN8T	470	5	9	36	56	5	2.9	5	10	5	66	20	100 ^{*2}	5	-40 to +85	-40 to +100		
		New SMLA12WBN7W	(x, y) (0.30, 0.30)	5	22	56	140	5	2.9	5	10	5	33	10	50 ^{*2}	5	-40 to +85	-40 to +100		
1.6×1.15 (t=0.55)	White	New SMLA12WBN7W	(x, y) (0.30, 0.30)	5	22	56	140	5	2.9	5	10	5	33	10	50 ^{*2}	5	-40 to +85	-40 to +100		
	2.8×1.2 (t=0.8)	White	New CSL0416WBCW	(x, y) (0.30, 0.28)	20	1,400	2,200	3,600	20	3.2	20	50	5	117	30	100 ^{*2}	5	-40 to +85	-40 to +100	

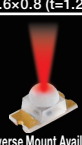
Reverse Mount type

Reverse mount type			Electrical and Optical Characteristics (T _a =25°C)											Absolute Maximum Ratings (T _a =25°C)					
Package (mm)	Emitting Color	Part No.	Dominant Wavelength λ _D /Chromaticity Coordinates (x, y)		Luminous Intensity I _v					Forward Voltage V _F		Reverse Current I _R		Power Dissipation P _D (mW)	Forward Current I _F (mA)	Peak Forward Current I _{FP} (mA)	Reverse Voltage V _R (V)	Operating Temperature T _{opr} (°C)	Storage Temperature T _{stg} (°C)
			Typ* (nm)	I _F (mA)	Min (mcd)	Typ (mcd)	Max (mcd)	I _F (mA)	Typ (V)	I _F (mA)	Max (μA)	V _R (V)							
 Mold type 3.4x1.25 (t=1.1)	Red	SML-811VT (A)	630	10	11	22	45	10	2.0	10	100	5	62	25	100 ^{*2}	5	-40 to +85	-40 to +100	
		SML-811UT (A)	620	10	11	22	45	10	2.0	10	100	5	62	25	100 ^{*2}	5	-40 to +85	-40 to +100	
	Orange	SML-811DT (A)	605	10	11	22	45	10	2.0	10	100	5	62	25	100 ^{*2}	5	-40 to +85	-40 to +100	
	Yellow	SML-811WT (A)	590	10	14	28	56	10	2.0	10	100	5	62	25	100 ^{*2}	5	-40 to +85	-40 to +100	
	Yellow Green	SML-812MT	571	20	14	40	110	20	2.1	20	100	4	65	25	60 ^{*1}	4	-30 to +85	-40 to +85	
	Blue	New SML813BNT	470	20	90	185	360	20	3.2	20	100	5	76	20	100 ^{*2}	5	-40 to +85	-40 to +85	
	White	New SML811WBCN1W	(x, y) (0.272, 0.279)	2	9	22	45	2	2.8	2	10	5	35	10	50 ^{*2}	5	-40 to +85	-40 to +100	
 2 Color type 3.4x1.25 (t=1.1)	Yellow Green	SML-822MV8W	572	20	16	25	40	20	2.2	20	100	5	54	20	100 ^{*2}	5	-40 to +85	-40 to +100	
	Red		630	20	16	30	63	20	2.2	20	100	5	54	20	100 ^{*2}	5	-40 to +85	-40 to +100	
	Yellow Green	SML-825MVW	572	20	40	63	100	20	2.1	20	100	5	80	30	100 ^{*2}	5	-40 to +85	-40 to +100	
	Red		630	20	40	63	100	20	2.0	20	100	5	80	30	100 ^{*2}	5	-40 to +85	-40 to +100	

*1 Duty≤1/5, 200Hz *2 Duty≤1/10, 1kHz *3 Duty≤1/20, 1ms *4 Duty≤1/5, 1kHz *5 Duty≤1/10, pulse width 10ms Max
 *Luminous intensity for white color is noted with chromaticity coordinate (x, y).

SMD LEDs

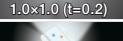
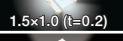
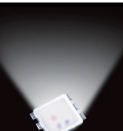
Surface Mount Circular type

Package (mm)	Emitting Color	Part No.	Electrical and Optical Characteristics (T _a =25°C)										Absolute Maximum Ratings (T _a =25°C)						
			Dominant Wavelength λ _D		Luminous Intensity I _v					Forward Voltage V _F		Reverse Current I _R		Power Dissipation P _D (mW)	Forward Current I _F (mA)	Peak Forward Current I _{FP} (mA)	Reverse Voltage V _R (V)	Operating Temperature T _{opr} (°C)	Storage Temperature T _{stg} (°C)
			Typ (nm)	I _F (mA)	Min (mcd)	Typ (mcd)	Max (mcd)	I _F (mA)	Typ (V)	I _F (mA)	Max (μA)	V _R (V)							
 1.6×0.8 (t=1.24)	Red	CSL0903VT	630	20	560	800	1,400	20	2.1	20	10	12	87	35	100*2	12	-40 to +100	-40 to +100	
		CSL0902VT			180	280	450						62.5	25					
		CSL0901VT			112	180	355						25						
		CSL0903UT	620	20	710	1,200	1,800	20	2.1	20	10	12	87	35	100*2	12	-40 to +100	-40 to +100	
		CSL0902UT			224	355	560						62.5	25					
	Orange	CSL0901UT	140	280	450	605	20	20	2.1	20	10	12	87	35	100*2	12	-40 to +100	-40 to +100	
	CSL0903DT	900	1,400	2,240	62.5								25						
	CSL0902DT	355	560	900	87								35						
	Yellow	CSL0901DT	224	400	710	587	20	20	2.1	20	10	12	62.5	25	100*2	12	-40 to +100	-40 to +100	
	CSL0903YT	560	800	1,400	87								35						
	CSL0902YT	355	560	900	62.5								25						
	Yellow Green	CSL0901YT	180	320	560	571	20	20	2.1	20	10	12	62.5	25	100*2	12	-40 to +100	-40 to +100	
	CSL0901WT	180	280	560	62.5								25						
	CSL0902MT	112	180	280	87								35						
	Green	CSL0901MT	56	100	180	560	20	2.1	20	10	12	62.5	25	100*2	12	-40 to +100	-40 to +100		
CSL0901PT		20	14	30	45							62.5	25						
CSL0902ET		20	710	1,100	1,800							20	3.4					20	95
CSL0901ET		527	5	220	360	560	5	3.0	5	70	20	100*2	5	-40 to +100	-40 to +100				
Blue		CSL0902BT	470	20	220	360	560	20	3.3	20	95	25	100*2	5	-40 to +100	-40 to +100			
CSL0901BT		5	36	56	90	5	2.9	5	68	20									
 Reverse Mount Available 3.2×1.6 (t=1.85)		Red	SML-S13VT	630	20	160	450	630	20	1.9	20	10	5	75	30	100*2	5	-40 to +85	-40 to +100
	Orange	SML-S13UT	620	20	400	700	1,600	20	1.9	20	10	5	75	30	100*2	5	-40 to +85	-40 to +100	
	Yellow	SML-S13DT	605	20	630	1,400	2,500	20	1.9	20	10	5	75	30	100*2	5	-40 to +85	-40 to +100	
	Yellow Green	SML-S13YT	590	20	630	1,400	2,500	20	2.0	20	10	5	78	30	100*2	5	-40 to +85	-40 to +100	
	Green	SML-S13MT	572	20	160	400	630	20	2.0	20	10	5	78	30	100*2	5	-40 to +85	-40 to +100	
	Green	SML-S13PT	560	20	63	160	400	20	2.0	20	10	5	78	30	100*2	5	-40 to +85	-40 to +100	
	Blue	New SMLS14ENT	527	20	1,800	3,000	4,500	20	3.3	20	10	5	117	30	100*2	5	-40 to +85	-40 to +100	
	Blue	New SMLS14BNT	470	20	450	800	1,400	20	3.2	20	10	5	117	30	100*2	5	-40 to +85	-40 to +100	
 2.9×2.4 (t=3.1)	Red	CSL0701UT	624	20	9,000	18,000	25,000	20	2.1	20	10	5	120	50	150*2	5	-40 to +85	-40 to +100	
	Orange	CSL0701DT	605	20	20,000	35,000	50,000	20	2.1	20	10	5	120	50	150*2	5	-40 to +85	-40 to +100	

2 Colors type

Package (mm)	Emitting Color	Part No.	Electrical and Optical Characteristics (T _a =25°C)											Absolute Maximum Ratings (T _a =25°C)					
			Dominant Wavelength λ _D		Luminous Intensity I _v					Forward Voltage V _F		Reverse Current I _R		Power Dissipation P _D (mW)	Forward Current I _F (mA)	Peak Forward Current I _{FP} (mA)	Reverse Voltage V _R (V)	Operating Temperature T _{opr} (°C)	Storage Temperature T _{stg} (°C)
			Typ (nm)	I _F (mA)	Min (mcd)	Typ (mcd)	Max (mcd)	I _F (mA)	Typ (V)	I _F (mA)	Max (μA)	V _R (V)							
 PICOLED™ Duo 1.0x1.0 (t=0.2)	Yellow Green	SML-P24MUW (R)	572	20	10	21	40	20	2.2	20	10	5	54	20	100*2	5	-40 to +85	-40 to +100	
	Red		620	20	25	52	100	20	2.1	20	10	5	52	20	100*2	5	-40 to +85	-40 to +100	
 1.6x0.8 (t=0.55)	Yellow Green	SML-D22MUW	570	5	6	10	16	5	2.0	5	10	5	67	25	100*2	5	-40 to +105	-40 to +110	
	Red		620	5	10	16	25	5	1.9	5	10	5	65	25	100*2	5	-40 to +105	-40 to +110	
	Yellow	SML-D22YVW	588	5	16	25	40	5	2.0	5	10	5	67	25	100*2	5	-40 to +105	-40 to +110	
	Red		629	5	10	16	25	5	1.9	5	10	5	65	25	100*2	5	-40 to +105	-40 to +110	
	Blue	New SML522BUNW	470	5	9	22	36	5	2.9	5	10	5	66	20	60*2	5	-40 to +85	-40 to +100	
	Red		624	5	10	21	40	5	1.9	5	10	5	50	20	60*2	5	-40 to +85	-40 to +100	
 1.3x1.5 (t=0.6)	Yellow Green	SML-522MUW	570	20	14	40	71	20	2.1	20	100	4	52	20	60*2	4	-30 to +85	-40 to +85	
	Red		630	20	22	63	110	20	1.9	20	100	4	50	20	60*2	4	-30 to +85	-40 to +85	
	Yellow Green	SML-522MU8W	572	20	16	40	63	20	2.2	20	100	4	54	20	100*2	4	-40 to +85	-40 to +100	
	Red		620	20	25	63	100	20	2.2	20	100	4	54	20	100*2	4	-40 to +85	-40 to +100	
	Yellow Green	SML-522MD8W	572	20	10	25	40	20	2.2	20	100	4	54	20	100*2	4	-40 to +85	-40 to +100	
	Orange		605	20	40	100	160	20	2.2	20	100	4	54	20	100*2	4	-40 to +85	-40 to +100	
	Yellow Green	SML-522MY8W	572	20	16	40	63	20	2.2	20	100	4	54	20	100*2	4	-40 to +85	-40 to +100	
	Yellow		590	20	40	63	160	20	2.2	20	100	4	54	20	100*2	4	-40 to +85	-40 to +100	
	 3.0x2.5 (t=1.3)	Yellow Green	SML-020MDT	570*10	20	9	20	45	20	2.2	20	100	4	60	25	60*1	4	-30 to +85	-40 to +85
		Orange		610*10	20	6	10	18	20	2.0	20	100	4	60	25	60*1	4	-30 to +85	-40 to +85
Yellow Green		SML-020MVT	570*10	20	9	20	45	20	2.2	20	100	4	60	25	60*1	4	-30 to +85	-40 to +85	
Red			650*10	20	4	6	11	20	2.0	20	100	4	60	25	60*1	4	-30 to +85	-40 to +85	
Yellow Green		SML-020MYT	570*10	20	9	21	45	20	2.2	20	100	4	60	25	60*1	4	-30 to +85	-40 to +85	
Yellow			585*10	20	6	10	18	20	2.1	20	100	4	60	25	60*1	4	-30 to +85	-40 to +85	

3 Colors type

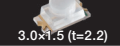
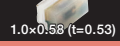
Package (mm)	Emitting Color	Part No.	Electrical and Optical Characteristics (T _a =25°C)											Absolute Maximum Ratings (T _a =25°C)						
			Dominant Wavelength λ _D		Luminous Intensity I _v				Forward Voltage V _F		Reverse Current I _R		Power Dissipation P _D	Forward Current I _F	Peak Forward Current I _{FM}	Reverse Voltage V _R	Operating Temperature T _{opr}	Storage Temperature T _{stg}		
			Typ (nm)	I _F (mA)	Min (mcd)	Typ (mcd)	Max (mcd)	I _F (mA)	Typ (V)	I _F (mA)	Max (μA)	V _R (V)	(mW)	(mA)	(mA)	(V)	(°C)	(°C)		
 1.0×1.0 (t=0.2)	Red	SMLP34RGBN1W	624	5	36	80	140	5	2.1	5	10	5	35	10	50 ³	5	-40 to +85	-40 to +100		
	Green		527	5	140	220	360	5	3.1	5	10	5	35	10	50 ³	5	-40 to +85	-40 to +100		
	Blue		470	5	36	60	140	5	3.0	5	10	5	35	10	50 ³	5	-40 to +85	-40 to +100		
 1.5×1.0 (t=0.2)	Red	New SMLP36RGBNW	624	5	36	80	140	5	1.9	5	10	5	35	10	50 ³	5	-40 to +85	-40 to +100		
	Green		527	5	140	220	360	5	2.9	5	10	5	35	10	50 ³	5	-40 to +85	-40 to +100		
	Blue		470	5	36	60	140	5	2.95	5	10	5	35	10	50 ³	5	-40 to +85	-40 to +100		
 1.8×1.6 (t=0.5)	Red	MSL0402RGBU*8	624	20	220	400	560	20	2.1	20	10	5	180 ³	30	100	5	-40 to +85	-40 to +100		
	Green		527	20	360	550	900	20	3.5	20	100	5	180 ³	30	100	5	-40 to +85	-40 to +100		
	Blue		470	20	90	180	360	20	3.3	20	100	5	180 ³	30	100	5	-40 to +85	-40 to +100		
 3.5×2.8 (t=0.6)	Red	SMLVN6RGB1U*9	624	20	450	700	1,100	20	2.1	20	10	5	400 ³	50	100	5	-40 to +85	-40 to +100		
	Green		527	20	710	1,200	1,800	20	3.3	20	—	—	400 ³	40	100	—	-40 to +85	-40 to +100		
	Blue		470	20	220	400	560	20	3.3	20	—	—	400 ³	40	100	—	-40 to +85	-40 to +100		
	Red	SMLVN6RGB1W*8	624	20	450	700	1,100	20	2.1	20	10	5	400 ³	50	100	5	-40 to +85	-40 to +100		
	Green		527	20	710	1,200	1,800	20	3.3	20	—	—	400 ³	40	100	—	-40 to +85	-40 to +100		
	Blue		470	20	220	400	560	20	3.3	20	—	—	400 ³	40	100	—	-40 to +85	-40 to +100		
	Red	SMLVN6RGB7W	624	20	280	500	900	20	2.1	20	10	5	180 ³	30	100	5	-40 to +85	-40 to +100		
	Green		527	20	560	1,000	1,800	20	3.5	20	—	—	180 ³	30	100	—	-40 to +85	-40 to +100		
	Blue		470	20	140	300	560	20	3.3	20	—	—	180 ³	30	100	—	-40 to +85	-40 to +100		

3 Colors Side View type

Package (mm)	Emitting Color	Part No.	Electrical and Optical Characteristics (T _a =25°C)											Absolute Maximum Ratings (T _a =25°C)				
			Dominant Wavelength λ _D		Luminous Intensity I _v				Forward Voltage V _F		Reverse Current I _R		Power Dissipation P _D (mW)	Forward Current I _F (mA)	Peak Forward Current I _{FP} (mA)	Reverse Voltage V _R (V)	Operating Temperature T _{opr} (°C)	Storage Temperature T _{stg} (°C)
			Typ (nm)	I _F (mA)	Min (mcd)	Typ (mcd)	Max (mcd)	I _F (mA)	Typ (V)	I _F (mA)	Max (μA)	V _R (V)						
 6.9×2.2 (t=2.15)	Red	MSL0104RGBU*9	624	20	450	700	1,100	20	2.1	20	10	5	400 ^{*6} ₋₇	50	100	5	-40 to +85	-40 to +100
	Green		527	20	710	1,200	1,800	20	3.3	20	—	—	400 ^{*6} ₋₇	40	100	—	-40 to +85	-40 to +100
	Blue		470	20	220	400	560	20	3.2	20	—	—	400 ^{*6} ₋₇	40	100	—	-40 to +85	-40 to +100
	Red	MSL0104RGBW*8	624	20	450	700	1,100	20	2.1	20	10	5	400 ^{*6} ₋₇	50	100	5	-40 to +85	-40 to +100
	Green		527	20	710	1,200	1,800	20	3.3	20	—	—	400 ^{*6} ₋₇	40	100	—	-40 to +85	-40 to +100
	Blue		470	20	220	400	560	20	3.2	20	—	—	400 ^{*6} ₋₇	40	100	—	-40 to +85	-40 to +100
 2.9×1.35 (t=1.0)	Red	MSL0601RGBU	624	20	600	700	830	20	2.1	20	10	5	300 ^{*6} ₋₇	40	100	5	-40 to +85	-40 to +100
	Green		527	20	1,100	1,250	1,500	20	3.3	20	10	5	300 ^{*6} ₋₇	30	100	5	-40 to +85	-40 to +100
	Blue		470	20	290	360	500	20	3.2	20	10	5	300 ^{*6} ₋₇	30	100	5	-40 to +85	-40 to +100

*1 Duty:1/5, 200Hz *2 Duty:1/10, 1kHz *3 Duty:1/20, 1ms *4 Duty:1/5, 1kHz *5 Duty:1/10, pulse width 10ms Max
*6 Total power dissipation in case of lighting three colors. (when lighting three colors, it will be reduced down to 30% of it.)
*7 50mm×50mm, Substrate: FR4; t=1.6mm Cu foil: t=0.07mm
*8 Epoxy resin *9 Silicon resin *10 Peak wavelength

Surface Mount type Infrared LEDs

Package (mm)	Part No.	LED Chip	Emitting Color	Electrical and Optical Characteristics (T _a =25°C)											Absolute Maximum Rating (T _a =25°C)				
				Light Wavelength λ _P		Radiant Intensity				Forward Voltage V _F		Reverse Current I _R		Power Dissipation P _D (mW)	Forward Current I _F (mA)	Peak Forward Current I _{FP} (mA)	Reverse Voltage V _R (V)	Operating Temperature T _{opr} (°C)	Storage Temperature T _{stg} (°C)
				Typ (nm)	I _F (mA)	Min (mW/sr)	Typ (mW/sr)	Max (mW/sr)	I _F (mA)	Typ (V)	I _F (mA)	Typ (μA)	V _R (V)						
 2.0×1.25 (t=0.8)	SML-M13RT	AlGaAs	Infrared	870	20	0.5	1.7	3.5	20	1.4	20	10	5	60	30	100 ^{*1}	5	-40 to +85	-40 to +100
 3.2×1.6 (t=1.85)	SML-S13RT	AlGaAs	Infrared	850	20	1.5	2.5	3.6	20	1.4	20	10	5	60	30	300 ^{*1}	5	-40 to +85	-40 to +100
 Reverse Mount Available 3.2×1.6 (t=1.85)	SML-S15R2T	AlGaAs	Infrared	870	20	5.6	12	22	20	1.4	20	10	5	100	50	300 ^{*1}	5	-40 to +85	-40 to +100
 3.0×1.5 (t=2.2)	SCM-013RT	AlGaAs	Infrared	850	20	0.5	2.0	5.0	20	1.4	20	10	5	57	30	300 ^{*1}	5	-40 to +85	-40 to +100
 1.0×0.58 (t=0.53)	New CSL1501RW	AlGaAs	Infrared	(860)	30	(1.2)	(1.6)	(2.2)	20	(1.4)	20	10	5	100	50	200 ^{*1}	5	-40 to +85	-40 to +100

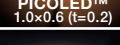
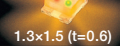
Surface Mount photo transistor

Package (mm)	Part No.	LED Chip	Electrical and Optical Characteristics (T _a =25°C)										Absolute Maximum Ratings (T _a =25°C)					
			Light Current			Dark Current		Sensitivity Wavelength	Collector-Emitter Saturation Voltage				Collector-Emitter Voltage (V)	Emitter-Collector Voltage (V)	Collector Current (mA)	Collector Power Dissipation (mW)	Operating Temperature T _{opr} (°C)	Storage Temperature T _{stg} (°C)
			Min (mA)	Max (mA)	V _{CE} (V) / I _E (Lx)	Max (μA)	V _{CE} (V)	λ _p Typ (nm)	Min (V)	Typ (V)	Max (V)	I _C (mA) / I _E (Lx)						
 2.0×1.25 (t=0.8)	SML-H10TB	Si	2.0	4.0	5/500	0.5	10	800	—	—	0.4	0.1/500	32	5	30	80	-30 to +85	-30 to +100
 3.0×1.5 (t=2.2)	SCM-014TB	Si	0.3	3.8	5/500	0.5	10	800	—	—	0.4	0.1/500	32	5	30	100	-30 to +85	-30 to +100
 Reverse Mount Available 3.4×1.25 (t=1.1)	SML-810TB	Si	2.3	3.8	5/500	0.5	10	800	—	—	0.4	0.1/500	32	5	30	80	-30 to +85	-30 to +100

*1 Duty:1/10, 1kHz

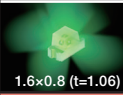
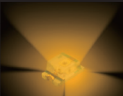
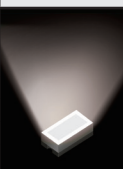
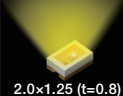
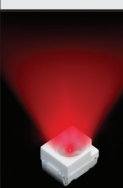
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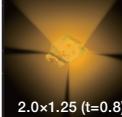
Low Current Type

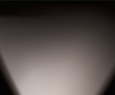
Package (mm)	Emitting Color	Part No.	Electrical and Optical Characteristics (T _a =25°C)											Absolute Maximum Ratings (T _a =25°C)				
			Dominant Wavelength λ _D / Chromaticity Coordinates (x, y)		Luminous Intensity I _v				Forward Voltage V _F		Reverse Current I _R		Power Dissipation P _D (mW)	Forward Current I _F (mA)	Peak Forward Current I _{FP} (mA)	Reverse Voltage V _R (V)	Operating Temperature T _{opr} (°C)	Storage Temperature T _{stg} (°C)
			Typ (nm)	I _F (mA)	Min (mcd)	Typ (mcd)	Max (mcd)	I _F (mA)	Typ (V)	I _F (mA)	Max (μA)	V _R (V)						
 1.0×0.6 (t=0.2)	Red	SML-P11VT (R)	626	1	2	4	6	1	1.8	1	10	5	50	20	100 ^{*2}	5	-40 to +85	-40 to +100
	Orange	SML-P11UT (R)	621	1	1	3	6	1	1.8	1	10	5	50	20	100 ^{*2}	5	-40 to +85	-40 to +100
	Yellow	SML-P11DT (R)	605	1	4	7	16	1	1.9	1	10	5	52	20	100 ^{*2}	5	-40 to +85	-40 to +100
	Yellow Green	SML-P11YT (R)	586	1	4	8	16	1	1.9	1	10	5	52	20	100 ^{*2}	5	-40 to +85	-40 to +100
	Yellow Green	SML-P11MT (R)	569	1	1	2	4	1	1.9	1	10	5	54	20	100 ^{*2}	5	-40 to +85	-40 to +100
 1.0×0.6 (t=0.2)	Green	New SMLP14ECNW	527	5	56	110	220	5	3.0	5	100	5	34	10	50 ^{*2}	5	-40 to +85	-40 to +100
	Blue	New SMLP14BCNW	470	5	9	25	56	5	2.9	5	100	5	33	10	50 ^{*2}	5	-40 to +85	-40 to +100
	White	SMLP14WBCN1W	(x, y) (0.30, 0.30)	5	90	180	360	5	2.9	5	100	5	33	10	50 ^{*2}	5	-40 to +85	-40 to +100
	Red	New CSL1901VW	630	2	1.6	4.8	6.3	2	1.8	2	10	5	44	20	100 ^{*2}	5	-40 to +85	-40 to +100
	Orange	New CSL1901UW	620	2	2.5	6	10	2	1.8	2	10	5	44	20	100 ^{*2}	5	-40 to +85	-40 to +100
 1.6×0.8 (t=0.55)	Yellow	New CSL1901DW	605	2	6.3	9.4	25	2	1.8	2	10	5	44	20	100 ^{*2}	5	-40 to +85	-40 to +100
	Yellow	New CSL1901YW	590	2	6.3	9.4	25	2	1.8	2	10	5	44	20	100 ^{*2}	5	-40 to +85	-40 to +100
	Yellow Green	New CSL1901MW	570	2	1	3	4	2	1.8	2	10	5	44	20	100 ^{*2}	5	-40 to +85	-40 to +100
	Green	SMLD12EN1W	527	5	56	140	220	5	3.0	5	10	5	70	20	100 ^{*2}	5	-40 to +100	-40 to +100
	Blue Green	SMLD12E2N1W	505	5	56	120	140	5	2.9	5	10	5	66	20	100 ^{*2}	5	-40 to +100	-40 to +100
	Blue	SMLD12E3N1W	496	5	56	85	140	5	2.9	5	10	5	66	20	100 ^{*2}	5	-40 to +100	-40 to +100
	Blue	SMLD12BN1W	470	5	14	40	56	5	2.9	5	10	5	66	20	100 ^{*2}	5	-40 to +100	-40 to +100
	White	SMLD12WBN1W	(x, y) (0.295, 0.280)	5	56	120	220	5	2.9	5	10	5	66	20	100 ^{*2}	5	-40 to +100	-40 to +100
	Yellow Green	SML-D22MUW	570	5	6	10	16	5	2.0	5	10	5	67	25	100 ^{*2}	5	-40 to +105	-40 to +110
	Red	SML-D22YVW	620	5	10	16	25	5	1.9	5	10	5	65	25	100 ^{*2}	5	-40 to +105	-40 to +110
 1.6×0.8 (t=0.55)	Yellow	SML-D22YVW	588	5	16	25	40	5	2.0	5	10	5	67	25	100 ^{*2}	5	-40 to +105	-40 to +110
	Red	SML-D22YVW	629	5	10	16	25	5	1.9	5	10	5	65	25	100 ^{*2}	5	-40 to +105	-40 to +110
	Blue	New SML522BUNW	470	5	9	22	36	5	2.9	5	10	5	66	20	60 ^{*2}	5	-40 to +85	-40 to +100
 1.3×1.5 (t=0.6)	Red	New SML522BUNW	624	5	10	21	40	5	1.9	5	10	5	50	20	60 ^{*2}	5	-40 to +85	-40 to +100

*1 Duty:1/5, 200Hz *2 Duty:1/10, 1kHz *3 Duty:1/20, 1ms *4 Duty:1/5, 1kHz *5 Duty:1/10, pulse width 10ms Max
*Luminous intensity for white color is noted with chromaticity coordinate (x, y).
Note: PICOLED™ is a trademark or a registered trademark of ROHM Co., Ltd.

SMD LEDs (Automotive Grade)

Automotive mold type 0603 (1608M)																										
Package (mm)	Emitting Color	Part No.	Electrical and Optical Characteristics (T _a =25°C)										Absolute Maximum Ratings (T _a =25°C)					Automotive Grade AEC-Q101/ AEC-Q102								
			Dominant Wavelength λ _d / Chromaticity Coordinates (x, y)		Luminous Intensity I _v				Forward Voltage V _F		Reverse Current I _R		Power Dissipation P _D (mW)	Forward Current I _F (mA)	Peak Forward Current I _{FP} (mA)	Reverse Voltage V _R (V)	Operating Temperature T _{opr} (°C)		Storage Temperature T _{stg} (°C)							
			Typ* (nm)	I _F (mA)	Min (mcd)	Typ (mcd)	Max (mcd)	I _R (mA)	Typ (V)	I _F (mA)	Max (μA)	V _R (V)														
	Red	SML-D15VW (C)	630	20	71	90	112	20	2.0	20	10	12	84	35	100*1	12	-40 to +100	YES								
		SML-D13VW (C)			35.5	55	90		2.2				72	30												
		SML-D12V8W (C)			16	40	100		2.2				5	54					20							
		SML-D15UW (C)	620	20	90	112	140	20	2.0	20	10	12	84	35	100*1	12	-40 to +100	YES								
		SML-D13UW (C)			56	85	140		2.2				72	30												
		SML-D12U8W (C)			25	63	160		2.2				5	54					20							
	SML-D15U2W (C)	615	20	112	140	180	20	2.0	20	10	12	84	35	100*1	12	-40 to +100	YES									
	SML-D15DW (C)			180	224	280		2.0				84	35													
	SML-D13DW (C)			71	120	180		2.2				72	30													
	Orange	SML-D12D8W (C)	605	20	40	100	250	20	2.2	20	10	12	5	54	20	5	-40 to +100	-40 to +100	YES							
		SML-D15YW (C)			180	224	280		2.1				87	35	12	5				54	20	100*1	5	-40 to +100	-40 to +100	YES
		SML-D12Y8W (C)			25	63	160		2.2				5	54	20	100*1				5	54	20	100*1	12	-40 to +100	-40 to +100
	Yellow	SML-D12W8W (C)	587.5	20	4.5	7.1	11.2	20	2.0	20	10	12	52	20	100*1	12	-40 to +100	-40 to +100	YES							
		SML-D13WW (C)			71	110	180		2.1				75	30	100*1	12	-40 to +100	-40 to +100	YES							
		SML-D12M8W (C)			572	20	10		25				63	20	2.2	20	10	5	54	20	100*1	5	-40 to +100	-40 to +100	YES	
	Yellow Green	SML-D15MW (C)	571	20	56	71	90	20	2.1	20	10	12	87	35	100*1	12	-40 to +100	-40 to +100	YES							
		SML-D13MW (C)			28	45	71		75				30	YES												
		SML-D13FW (C)			564	20	14		22				35.5	20						2.1	20	10	12	75	30	100*1
Green	SML-D12P8W (C)	560	20	2.5	6.3	16	20	2.2	20	10	5	54	20	100*1	5	-40 to +100	-40 to +100	YES								
	SMLD12BN1W (C)			470	5	14		40				56	5	2.9	5	10	12	66	20	100*1	12	-40 to +100	-40 to +100	YES		
	SMLD12WBN1W (C)			(x, y) (0.295, 0.28)	5	56		120				220	5	2.9	5	10	12	66	20	100*1	12	-40 to +100	-40 to +100	YES		
	White	CSL1001ET (C)	527	5	90	140	224	5	3.0	5	10	5	35	10	50*1	5	-40 to +100	-40 to +100	YES							
	Blue	CSL1001BT (C)	470	1	4	6	8	1	2.8	1	10	5	33	10	50*1	5	-40 to +100	-40 to +100	YES							
Automotive Mold type 0805 (20125M)																										
Package (mm)	Emitting Color	Part No.	Electrical and Optical Characteristics (T _a =25°C)										Absolute Maximum Ratings (T _a =25°C)					Automotive Grade AEC-Q101/ AEC-Q102								
			Dominant Wavelength λ _d / Chromaticity Coordinates (x, y)		Luminous Intensity I _v				Forward Voltage V _F		Reverse Current I _R		Power Dissipation P _D (mW)	Forward Current I _F (mA)	Peak Forward Current I _{FP} (mA)	Reverse Voltage V _R (V)	Operating Temperature T _{opr} (°C)		Storage Temperature T _{stg} (°C)							
			Typ* (nm)	I _F (mA)	Min (mcd)	Typ (mcd)	Max (mcd)	I _R (mA)	Typ (V)	I _F (mA)	Max (μA)	V _R (V)														
	Red	SML-H12V8T (C)	630	20	16	25	63	20	2.2	20	10	5	54	20	100*2	5	-40 to +85	-40 to +100	YES							
		SML-H12U8T (C)	620	20	25	40	100	20	2.2	20	10	5	54	20	100*2	5	-40 to +85	-40 to +100	YES							
	Orange	SML-H12D8T (C)	605	20	40	63	160	20	2.2	20	10	5	54	20	100*2	5	-40 to +85	-40 to +100	YES							
	Yellow	SML-H12Y8T (C)	590	20	40	63	160	20	2.2	20	10	5	54	20	100*2	5	-40 to +85	-40 to +100	YES							
	Yellow Green	SML-H12M8T (C)	572	20	10	25	40	20	2.2	20	10	5	54	20	100*2	5	-40 to +85	-40 to +100	YES							
	Green	SML-H12P8T (C)	560	20	2.5	4	10	20	2.2	20	10	5	54	20	100*2	5	-40 to +85	-40 to +100	YES							
Automotive reflector type 0603 (1608M)																										
Package (mm)	Emitting Color	Part No.	Electrical and Optical Characteristics (T _a =25°C)										Absolute Maximum Ratings (T _a =25°C)					Automotive Grade AEC-Q101/ AEC-Q102								
			Dominant Wavelength λ _d / Chromaticity Coordinates (x, y)		Luminous Intensity I _v				Forward Voltage V _F		Reverse Current I _R		Power Dissipation P _D (mW)	Forward Current I _F (mA)	Peak Forward Current I _{FP} (mA)	Reverse Voltage V _R (V)	Operating Temperature T _{opr} (°C)		Storage Temperature T _{stg} (°C)							
			Typ* (nm)	I _F (mA)	Min (mcd)	Typ (mcd)	Max (mcd)	I _R (mA)	Typ (V)	I _F (mA)	Max (μA)	V _R (V)														
	White	CSL1101WBAW (C)	(x, y) (0.282, 0.249)	5	90	140	220	5	2.9	5	10	5	68	20	100*1	12	-40 to +110	-40 to +110	YES							
		CSL1101WBBW (C)	(x, y) (0.261, 0.261)	5	90	140	220	5	2.9	5	10	5	68	20	100*1	12	-40 to +110	-40 to +110	YES							
		CSL1101WBCW (C)	(x, y) (0.303, 0.294)	5	90	140	220	5	2.9	5	10	5	68	20	100*1	12	-40 to +110	-40 to +110	YES							
		CSL1101WBDW (C)	(x, y) (0.284, 0.303)	5	90	140	220	5	2.9	5	10	5	68	20	100*1	12	-40 to +110	-40 to +110	YES							
		CSL1102WBAW (C)	(x, y) (0.282, 0.249)	20	710	1,000	1,400	20	3.2	20	10	5	152	40	100*1	12	-40 to +110	-40 to +110	YES							
		CSL1102WBBW (C)	(x, y) (0.261, 0.261)	20	710	1,000	1,400	20	3.2	20	10	5	152	40	100*1	12	-40 to +110	-40 to +110	YES							
		CSL1102WBCW (C)	(x, y) (0.303, 0.294)	20	710	1,000	1,400	20	3.2	20	10	5	152	40	100*1	12	-40 to +110	-40 to +110	YES							
		CSL1102WBDW (C)	(x, y) (0.284, 0.303)	20	710	1,000	1,400	20	3.2	20	10	5	152	40	100*1	12	-40 to +110	-40 to +110	YES							
Automotive reflector type 0805 (201258M)																										
Package (mm)	Emitting Color	Part No.	Electrical and Optical Characteristics (T _a =25°C)										Absolute Maximum Ratings (T _a =25°C)					Automotive Grade AEC-Q101/ AEC-Q102								
			Dominant Wavelength λ _d / Chromaticity Coordinates (x, y)		Luminous Intensity I _v				Forward Voltage V _F		Reverse Current I _R		Power Dissipation P _D (mW)	Forward Current I _F (mA)	Peak Forward Current I _{FP} (mA)	Reverse Voltage V _R (V)	Operating Temperature T _{opr} (°C)		Storage Temperature T _{stg} (°C)							
			Typ* (nm)	I _F (mA)	Min (mcd)	Typ (mcd)	Max (mcd)	I _R (mA)	Typ (V)	I _F (mA)	Max (μA)	V _R (V)														
	Green	SMLMN2ECT (C)	527	5	56	140	360	5	3.0	5	10	12	70	20	100*2	12	-40 to +100	-40 to +100	YES							
	Blue	SMLMN2BCT (C)	470	5	14	36	90	5	2.9	5	10	12	68	20	100*2	12	-40 to +100	-40 to +100	YES							
	White	SMLMN2WB1CW (C)	(x, y) (0.30, 0.28)	5	56	140	220	5	2.9	5	10	12	68	20	100*2	12	-40 to +100	-40 to +100	YES							
Automotive reflector type PLCC (3528M)																										
Package (mm)	Emitting Color	Part No.	Electrical and Optical Characteristics (T _a =25°C)										Absolute Maximum Ratings (T _a =25°C)					Automotive Grade AEC-Q101/ AEC-Q102								
			Dominant Wavelength λ _d		Luminous Intensity I _v				Forward Voltage V _F		Reverse Current I _R		Power Dissipation P _D (mW)	Forward Current I _F (mA)	Peak Forward Current I _{FP} (mA)	Reverse Voltage V _R (V)	Operating Temperature T _{opr} (°C)		Storage Temperature T _{stg} (°C)							
			Typ (nm)	I _F (mA)	Min (mcd)	Typ (mcd)	Max (mcd)	I _R (mA)	Typ (V)	I _F (mA)	Max (μA)	V _R (V)														
	Red	SML-Z14VT (C)	630	20	56	112	180	20	1.9	20	10	12	168	70	200*2	12	-40 to +100	-40 to +100	YES							
		SML-Z14UT (C)	620	20	112	224	355	20	1.9	20	10	12	168	70	200*2	12	-40 to +100	-40 to +100	YES							
	Orange	SML-Z14DT (C)	605	20	140	280	450	20	1.9	20	10	12	168	70	200*2	12	-40 to +100	-40 to +100	YES							
	Yellow	SML-Z14YT (C)	589	20	140	280	450	20	2.0	20	10	12	175	70	200*2	12	-40 to +100	-40 to +100	YES							
	Yellow Green	SML-Z14MT (C)	571	20	45	90	140	20	2.0	20	10	12	175	70	200*2	12	-40 to +100	-40 to +100	YES							
	Green	SML-Z14FT (C)	564	20	22.4	45	71	20	2.0	20	10	12	175	70	200*2	12	-40 to +100	-40 to +100	YES							
		SML-Z14PT (C)	560	20	11.2	22.4	35.5	20	2.0	20	10	12	175	70	200*2	12	-40 to +100	-40 to +100	YES							
	Blue Green	SMLZ24E2N3T (C)	505	20	900	1,140	1,800	20	3.2	20	—	—	152	40	100*2	—	-40 to +100	-40 to +100	YES							
	Blue	SMLZ24BN3T (C)	470	20	220	300	450	20	3.3	20	—	—	114	30	100*2	—	-40 to +100	-40 to +100	YES							

Automotive Mold type 0805 (20125M)																			
Package (mm)	Emitting Color	Part No.	Electrical and Optical Characteristics (T _a =25°C)										Absolute Maximum Ratings (T _a =25°C)					Automotive Grade AEC-Q101/ AEC-Q102	
			Dominant Wavelength λ _d / Chromaticity Coordinates (x, y)		Luminous Intensity I _v				Forward Voltage V _F		Reverse Current I _R		Power Dissipation P _D	Forward Current I _F	Peak Forward Current I _{FP}	Reverse Voltage V _R	Operating Temperature T _{opr}		Storage Temperature T _{stg}
			Typ (nm)	I _F (mA)	Min (mcd)	Typ (mcd)	Max (mcd)	I _R (mA)	Typ (V)	I _F (mA)	Max (μA)	V _R (V)	(mW)	(mA)	(mA)	(V)	(°C)		(°C)
 2.0x1.25 (t=0.8)	Red	SML-H12V8T (C)	630	20	16	25	63	20	2.2	20	10	5	54	20	100 ^{*2}	5	-40 to +85	-40 to +100	YES
		SML-H12U8T (C)	620	20	25	40	100	20	2.2	20	10	5	54	20	100 ^{*2}	5	-40 to +85	-40 to +100	YES
	Orange	SML-H12D8T (C)	605	20	40	63	160	20	2.2	20	10	5	54	20	100 ^{*2}	5	-40 to +85	-40 to +100	YES
	Yellow	SML-H12Y8T (C)	590	20	40	63	160	20	2.2	20	10	5	54	20	100 ^{*2}	5	-40 to +85	-40 to +100	YES
	Yellow Green	SML-H12M8T (C)	572	20	10	25	40	20	2.2	20	10	5	54	20	100 ^{*2}	5	-40 to +85	-40 to +100	YES
	Green	SML-H12P8T (C)	560	20	2.5	4	10	20	2.2	20	10	5	54	20	100 ^{*2}	5	-40 to +85	-40 to +100	YES

Automotive reflector type 0603 (1608M)																			
Package (mm)	Emitting Color	Part No.	Electrical and Optical Characteristics (T _a =25°C)										Absolute Maximum Ratings (T _a =25°C)					Automotive Grade AEC-Q101/ AEC-Q102	
			Dominant Wavelength λ _d / Chromaticity Coordinates (x, y)		Luminous Intensity I _v				Forward Voltage V _F		Reverse Current I _R		Power Dissipation P _D	Forward Current I _F	Peak Forward Current I _{FP}	Reverse Voltage V _R	Operating Temperature T _{opr}		Storage Temperature T _{stg}
			Typ* (nm)	I _F (mA)	Min (mcd)	Typ (mcd)	Max (mcd)	I _R (mA)	Typ (V)	I _F (mA)	Max (μA)	V _R (V)	(mW)	(mA)	(mA)	(V)	(°C)		(°C)
 1.6×0.8 (t=0.55)	White	CSL1101WBAW (C)	(x, y) (0.282, 0.249)	5	90	140	220	5	2.9	5	10	5	68	20	100 ^{*1}	12	-40 to +110	-40 to +110	YES
		CSL1101WBBW (C)	(x, y) (0.261, 0.261)	5	90	140	220	5	2.9	5	10	5	68	20	100 ^{*1}	12	-40 to +110	-40 to +110	YES
		CSL1101WBCW (C)	(x, y) (0.303, 0.294)	5	90	140	220	5	2.9	5	10	5	68	20	100 ^{*1}	12	-40 to +110	-40 to +110	YES
		CSL1101WBDW (C)	(x, y) (0.284, 0.303)	5	90	140	220	5	2.9	5	10	5	68	20	100 ^{*1}	12	-40 to +110	-40 to +110	YES
		CSL1102WBAW (C)	(x, y) (0.282, 0.249)	20	710	1,000	1,400	20	3.2	20	10	5	152	40	100 ^{*1}	12	-40 to +110	-40 to +110	YES
		CSL1102WBBW (C)	(x, y) (0.261, 0.261)	20	710	1,000	1,400	20	3.2	20	10	5	152	40	100 ^{*1}	12	-40 to +110	-40 to +110	YES
		CSL1102WBCW (C)	(x, y) (0.303, 0.294)	20	710	1,000	1,400	20	3.2	20	10	5	152	40	100 ^{*1}	12	-40 to +110	-40 to +110	YES
		CSL1102WBDW (C)	(x, y) (0.284, 0.303)	20	710	1,000	1,400	20	3.2	20	10	5	152	40	100 ^{*1}	12	-40 to +110	-40 to +110	YES

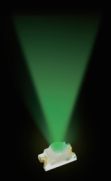
Automotive reflector type 0805 (201258M)																			
Package (mm)	Emitting Color	Part No.	Electrical and Optical Characteristics (T _a =25°C)										Absolute Maximum Ratings (T _a =25°C)					Automotive Grade AEC-Q101/ AEC-Q102	
			Dominant Wavelength λ _d / Chromaticity Coordinates (x, y)		Luminous Intensity I _v				Forward Voltage V _F		Reverse Current I _R		Power Dissipation P _D	Forward Current I _F	Peak Forward Current I _{FP}	Reverse Voltage V _R	Operating Temperature T _{opr}		Storage Temperature T _{stg}
			Typ* (nm)	I _F (mA)	Min (mcd)	Typ (mcd)	Max (mcd)	I _F (mA)	Typ (V)	I _F (mA)	Max (μA)	V _R (V)	(mW)	(mA)	(mA)	(V)	(°C)		(°C)
 2.0×1.25 (t=0.8)	Green	SMLMN2ECT (C)	527	5	56	140	360	5	3.0	5	10	12	70	20	100*2	12	-40 to +100	-40 to +100	YES
	Blue	SMLMN2BCT (C)	470	5	14	36	90	5	2.9	5	10	12	68	20	100*2	12	-40 to +100	-40 to +100	YES
	White	SMLMN2WB1CW (C)	(x, y) (0.30, 0.28)	5	56	140	220	5	2.9	5	10	12	68	20	100*2	12	-40 to +100	-40 to +100	YES

Automotive reflector type PLCC (3528M)																			
Package (mm)	Emitting Color	Part No.	Electrical and Optical Characteristics (T _a =25°C)										Absolute Maximum Ratings (T _a =25°C)						Automotive Grade AEC-Q101/ AEC-Q102
			Dominant Wavelength λ _D		Luminous Intensity I _v				Forward Voltage V _F		Reverse Current I _R		Power Dissipation P _D	Forward Current I _F	Peak Forward Current I _{FM}	Reverse Voltage V _R	Operating Temperature T _{opr}	Storage Temperature T _{stg}	
			Typ (nm)	I _F (mA)	Min (mcd)	Typ (mcd)	Max (mcd)	I _F (mA)	Typ (V)	I _F (mA)	Max (μA)	V _R (V)		I _F (mA)	I _{FM} (mA)	V _R (V)	(°C)	(°C)	
 3.5×2.8 (t=1.9)	Red	SML-Z14VT (C)	630	20	56	112	180	20	1.9	20	10	12	168	70	200 ⁺²	12	-40 to +100	-40 to +100	YES
		SML-Z14UT (C)	620	20	112	224	355	20	1.9	20	10	12	168	70	200 ⁺²	12	-40 to +100	-40 to +100	YES
	Orange	SML-Z14DT (C)	605	20	140	280	450	20	1.9	20	10	12	168	70	200 ⁺²	12	-40 to +100	-40 to +100	YES
	Yellow	SML-Z14YT (C)	589	20	140	280	450	20	2.0	20	10	12	175	70	200 ⁺²	12	-40 to +100	-40 to +100	YES
	Yellow Green	SML-Z14MT (C)	571	20	45	90	140	20	2.0	20	10	12	175	70	200 ⁺²	12	-40 to +100	-40 to +100	YES
	Green	SML-Z14FT (C)	564	20	22.4	45	71	20	2.0	20	10	12	175	70	200 ⁺²	12	-40 to +100	-40 to +100	YES
		SML-Z14PT (C)	560	20	11.2	22.4	35.5	20	2.0	20	10	12	175	70	200 ⁺²	12	-40 to +100	-40 to +100	YES
	Blue Green	SMLZ24E2N3T (C)	505	20	900	1,140	1,800	20	3.2	20	—	—	152	40	100 ⁺²	—	-40 to +100	-40 to +100	YES
Blue	SMLZ24BN3T (C)	470	20	220	300	450	20	3.3	20	—	—	114	30	100 ⁺²	—	-40 to +100	-40 to +100	YES	

Automotive Reverse Mount type

Package (mm)	Emitting Color	Part No.	Electrical and Optical Characteristics (T _a =25°C)										Absolute Maximum Ratings (T _a =25°C)						Automotive Grade AEC-Q101/ AEC-Q102
			Dominant Wavelength λ _D		Luminous Intensity I _v				Forward Voltage V _F		Reverse Current I _R		Power Dissipation P _D (mW)	Forward Current I _F (mA)	Peak Forward Current I _{FP} (mA)	Reverse Voltage V _R (V)	Operating Temperature T _{opr} (°C)	Storage Temperature T _{stg} (°C)	
			Typ (nm)	I _F (mA)	Min (mcd)	Typ (mcd)	Max (mcd)	I _R (mA)	Typ (V)	I _F (mA)	Max (μA)	V _R (V)							
 3.4x1.25 (t=1.1)	Red	SML-811VT (C)	630	10	11.2	22.4	45	10	1.95	10	100	5	62	25	100*2	5	-40 to +85	-40 to +100	YES
		SML-811UT (C)	620	10	11.2	22.4	45	10	1.95	10	100	5	62	25	100*2	5	-40 to +85	-40 to +100	YES
	Orange	SML-811DT (C)	605	10	11	22	45	10	2.0	10	100	5	62	25	100*2	5	-40 to +85	-40 to +100	YES
	Yellow	SML-811WT (C)	590	10	14	28	56	10	1.95	10	100	5	62	25	100*2	5	-40 to +85	-40 to +100	YES

Automotive Reverse Surface Mount Circular type

Package (mm)	Emitting Color	Part No.	Electrical and Optical Characteristics (T _a =25°C)										Absolute Maximum Ratings (T _a =25°C)							Automotive Grade AEC-Q101/ AEC-Q102
			Dominant Wavelength λ _D		Luminous Intensity I _v				Forward Voltage V _F		Reverse Current I _R		Power Dissipation P _D (mW)	Forward Current I _F (mA)	Peak Forward Current I _{FP} (mA)	Reverse Voltage V _R (V)	Operating Temperature T _{opr} (°C)	Storage Temperature T _{stg} (°C)		
			Typ (nm)	I _r (mA)	Min (mcd)	Typ (mcd)	Max (mcd)	I _r (mA)	Typ (V)	I _r (mA)	Max (μA)	V _R (V)								
	Red	New CSL0903VT (C)	630	20	560	800	1,120	20	2.1	20	10	12	87	35	100*1	12	-40 to +110	-40 to +110	YES	
		New CSL0902VT (C)			180	280	355						75	30					YES	
		New CSL0901VT (C)			140	180	280						75	30					YES	
		New CSL0903UT (C)	620	20	900	1,200	1,800	20	2.1	20	10	12	87	35	100*1	12	-40 to +110	-40 to +110	YES	
		New CSL0902UT (C)			280	450	560						75	30					YES	
		New CSL0901UT (C)			180	280	355						75	30					YES	
	Orange	New CSL0903DT (C)	605	20	900	1,400	1,800	20	2.1	20	10	12	87	35	100*1	12	-40 to +110	-40 to +110	YES	
		New CSL0902DT (C)			450	710	900						75	30					YES	
		New CSL0901DT (C)			280	400	560						75	30					YES	
	Yellow	New CSL0903YT (C)	590	20	560	800	1,120	20	2.1	20	10	12	87	35	100*1	12	-40 to +110	-40 to +110	YES	
		New CSL0902YT (C)			355	560	710						75	30					YES	
		New CSL0901YT (C)			224	320	450						75	30					YES	
	Yellow Green	New CSL0901WT (C)	587	20	180	280	355	20	2.1	20	10	12	75	30	100*1	12	-40 to +110	-40 to +110	YES	
		New CSL0901MT (C)	571	20	90	120	180	20	2.1	20	10	12	75	30	100*1	12	-40 to +110	-40 to +110	YES	
		New CSL0902MT (C)	570	20	112	150	224	20	2.1	20	10	12	87	35	100*1	12	-40 to +110	-40 to +110	YES	
	Green	New CSL0901PT (C)	560	20	14	25	35.5	20	2.1	20	10	12	75	30	100*1	12	-40 to +110	-40 to +110	YES	
New CSL0902ET (C)		527	20	900	1,200	1,800	20	3.4	20	10	5	114	30	100*1	5	-40 to +110	-40 to +110	YES		
New CSL0901ET (C)			5	220	360	450	5	3.0	5			70	20					YES		
Blue	New CSL0902BT (C)	470	20	220	360	450	20	3.3	20	10	5	114	30	100*1	5	-40 to +110	-40 to +110	YES		
	New CSL0901BT (C)		5	45	56	90	5	2.9	5			68	20					YES		

Automotive 3color type

Automotive 3color type																			
Package (mm)	Emitting Color	Part No.	Electrical and Optical Characteristics (T _a =25°C)										Absolute Maximum Ratings (T _a =25°C)						Automotive Grade AEC-Q101/ AEC-Q102
			Dominant Wavelength λ _D		Luminous Intensity I _v				Forward Voltage V _F		Reverse Current I _R		Power Dissipation P _D (mW)	Forward Current I _F (mA)	Peak Forward Current I _{FP} (mA)	Reverse Voltage V _R (V)	Operating Temperature T _{opr} (°C)	Storage Temperature T _{stg} (°C)	
			Typ (nm)	I _F (mA)	Min (mcd)	Typ (mcd)	Max (mcd)	I _R (mA)	Typ (V)	I _F (mA)	Max (μA)	V _R (V)							
 3.5×2.8 (t=0.6)	Red		621	20	600	750	900	20	2.1	20	10	5	400	50	100	5	-40 to +100	-40 to +100	
	Green	New SMLVN6RGBFU1 (C)	525	20	1,440	1,800	2,160	20	3.3	20	—	—	400	40	100	—	-40 to +100	-40 to +100	YES
	Blue		470	20	320	430	540	20	3.3	20	—	—	400	40	100	—	-40 to +100	-40 to +100	

*1 Duty:1/10, 1kHz *2 Duty:1/10, 1kHz

SMD LEDs

●Product No. Configuration

◁Chip LEDs▷

[SML series/SCM series]

■Exclude Mono-color (Blue (B), Green (E), White (WB), RGB, 2 Colors Blue/Red

			Chip control symbol		Remarks	Special control symbol		
Series name	Package shape	Type of Element	Color	Resin color	Packaging type	Luminous intensity rank		
SML chip LED series	P1 1.0×0.6 t=0.2mm E1 1.6×0.8 t=0.36mm D1/02 1.6×0.8 t=0.55mm H1 2.0×1.25 t=0.8mm M1 2.0×1.25 t=0.8mm 01/02 3.0×2.0 t=1.3mm Z1/Y1 3.5×2.8 t=1.9mm A1 1.6×1.15 t=0.55mm 81/82 3.4×1.25 t=1.1mm S1 3.2×1.6 t=1.85mm P2 1.0×1.0 t=0.2mm 52 1.5×1.3 t=0.6mm	0 Low current type 1 High luminous intensity type 2 High luminous intensity type 3 Ultra high luminous intensity type 4 Ultra high luminous intensity type 5 8	L Red V Red U Red D Orange Y3 Yellow Y Yellow W Yellow Y2 Yellow M2 Yellow green M Yellow green F Green P Green MV Yellow green/Red MU Yellow green/Red MD Yellow green/Orange MY Yellow green/Yellow YV Yellow/Red R Infrared T Phototransistor	T Transparent colorless W Milky white B Black	T86 Cathode at sprocket hole side (the top) (in case of S1 series) T86 Cathode at sprocket hole side (the back) T68 Cathode at sprocket hole side (the top)	Refer to specification		
SCM chip LED series	01 3.0×1.5 t=2.2mm							

[SML series/SCM series]

■Mono-color (Blue (B), Green (E), White (WB), RGB, 2 Colors Blue/Red

			Chip control symbol		Remarks	Special control symbol		
Series name	Package shape	Type of Element	Color	Resin color	Packaging type	Luminous intensity rank		
SML chip LED series SCM chip LED series	P1 1.0×0.6 t=0.2mm EN 1.6×0.8 t=0.36mm D1 1.6×0.8 t=0.55mm MN/M2 2.0×1.25 t=0.8mm Z1/ZN 3.5×2.8 t=1.9mm A1 1.6×1.15 t=0.55mm S1 3.4×1.25 t=1.1mm S1 3.2×1.6 t=1.85mm 52 1.5×1.3 t=0.6mm P34 1.0×1.0 t=0.2mm P36 1.5×1.0 t=0.2mm VN 3.5×2.8 t=0.6mm 01 3.0×2.0 t=1.3mm K1/K2 4.5×2.0 t=0.6mm	2 High luminous intensity type 3 4 Ultra high luminous intensity type 8	E Green E2/E3 Blue Green B Blue PB Green SB Sapphire blue WB White BU Blue/Red RGB Red/Green/Blue	T Transparent Colorless W Milky white Resin (in case of VN6 series) U Silicone W Epoxy	T86 Cathode at sprocket hole side (the top) (in case of white, RGB) 1 Cathode at sprocket hole side (the top) 3 Cathode at sprocket hole side (the top 2mm pitch) (in case of S1 and 81 series) T86 Cathode at sprocket hole side (the back) T68 Cathode at sprocket hole side (the top) *81 series is nothing "T68".	Refer to specification		

[CSL series]

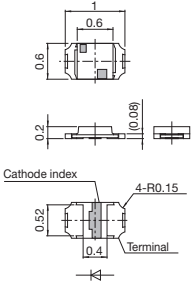
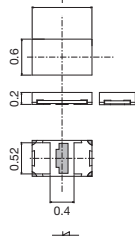
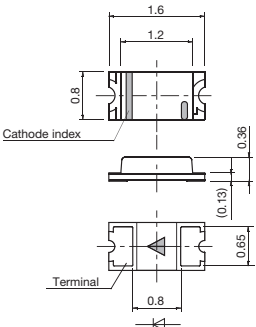
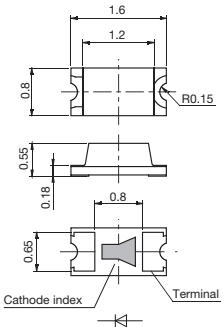
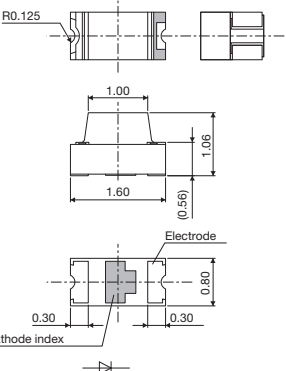
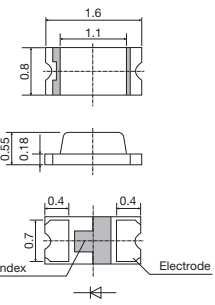
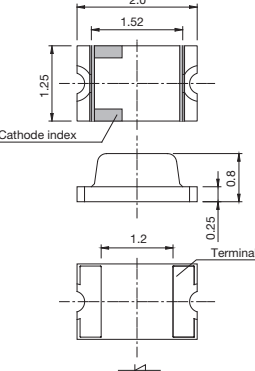
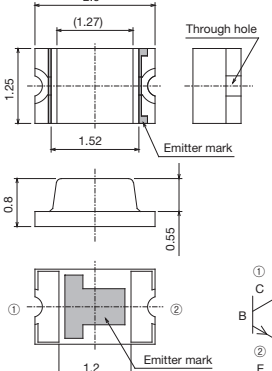
[CSL series]		Chip control symbol				Remarks	Chromaticity rank (for white LED)			Special control symbol	
C	S	L	0	7	0 1 D	T	5				
Series name		Package shape		Color		Resin color	Packaging type	Luminous intensity rank			
[CSL chip LED series]		04 2.8×1.15 t=0.8mm 07 2.9×2.4 t=3.1mm 09 1.6×0.8 t=1.24mm 10 1.6×0.8 t=1.06mm 11 1.6×0.8 t=0.55mm 19 1.6×0.8 t=0.55mm		V Red U Red D Orange Y Yellow W Yellow M Yellow green P Green E Green B Blue WB White SB Sapphire blue		T Transparent Colorless W Milky white	1 Cathode at sprocket hole side (the top) 5 Cathode at sprocket hole side (big reel)	Refer to specification			

[MSL series]

[MSL series]					Chip control symbol		Remarks		Chromaticity rank (for RGB LED) *MSL0601RGBU is not applied.			Special control symbol					
M	S	L	0	1	0	4	R	G	B		U	1					
Series name		Package shape			Color			Resin color		Packaging type			Luminous intensity rank				
MSL Multi color series		01 6.9×2.2 t=2.15mm 04 1.8×1.6 t=0.5mm 06 2.9×1.35 t=1.0mm			RGB Red/Green/Blue			U Silicone W Epoxy		1 Cathode at sprocket hole side (the top)			Refer to specification				

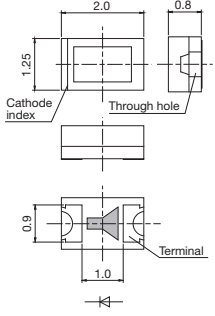
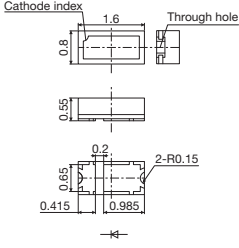
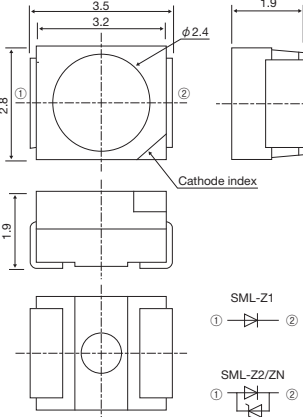
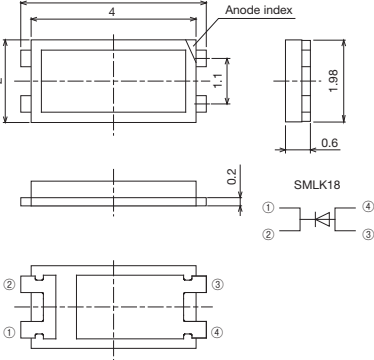
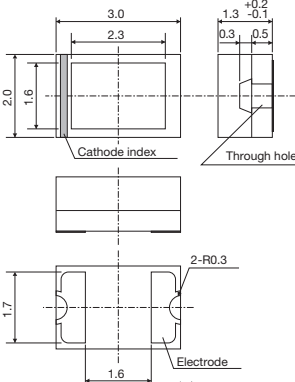
●Dimensions (Unit: mm)

〈Mold type〉

● SML-P1 series (PICOLED™) 	● SMLP14 series (PICOLED™) 	● SML-E1/EN series 	● SML-D1 series 
● CSL10 series 	● CSL19 series 	● SML-H1 series 	● SML-H10TB 

Note: PICOLED™ is a trademark or a registered trademark of ROHM Co., Ltd.

〈Reflector type〉

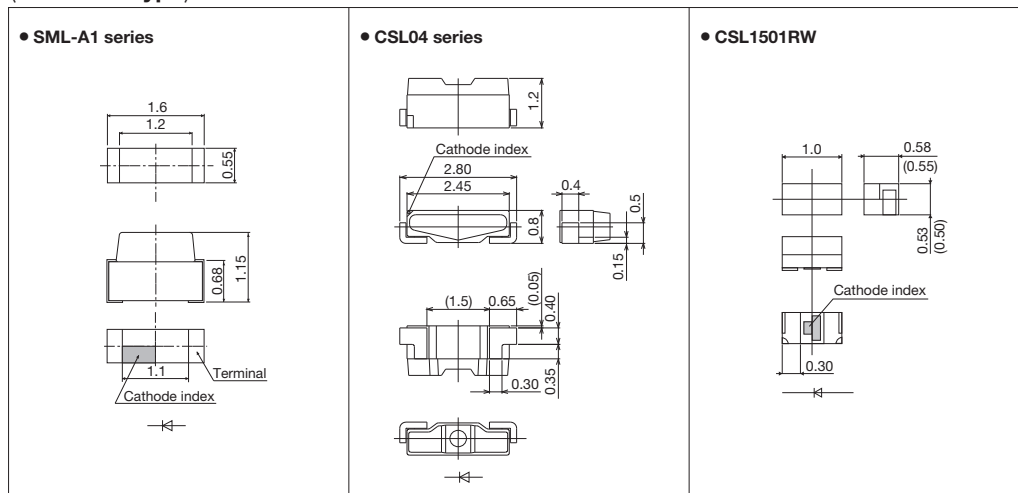
● SML-M1/MN series 	● CSL11 series 	● SML-Z1/Z2/ZN series 
● SMLK1 series 	● SML-01 series 	

*For further information, please refer to the data sheets.

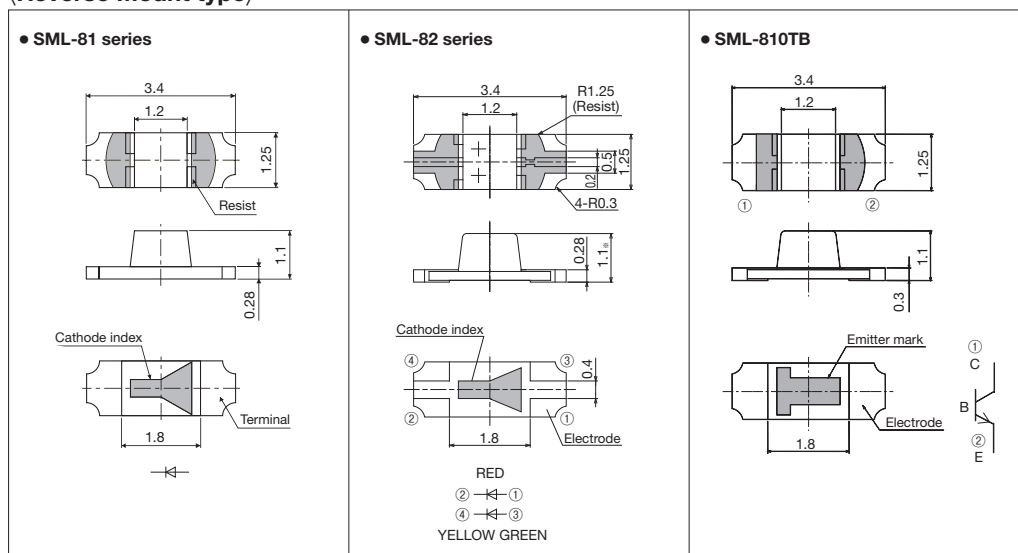
SMD LEDs

●Dimensions (Unit: mm)

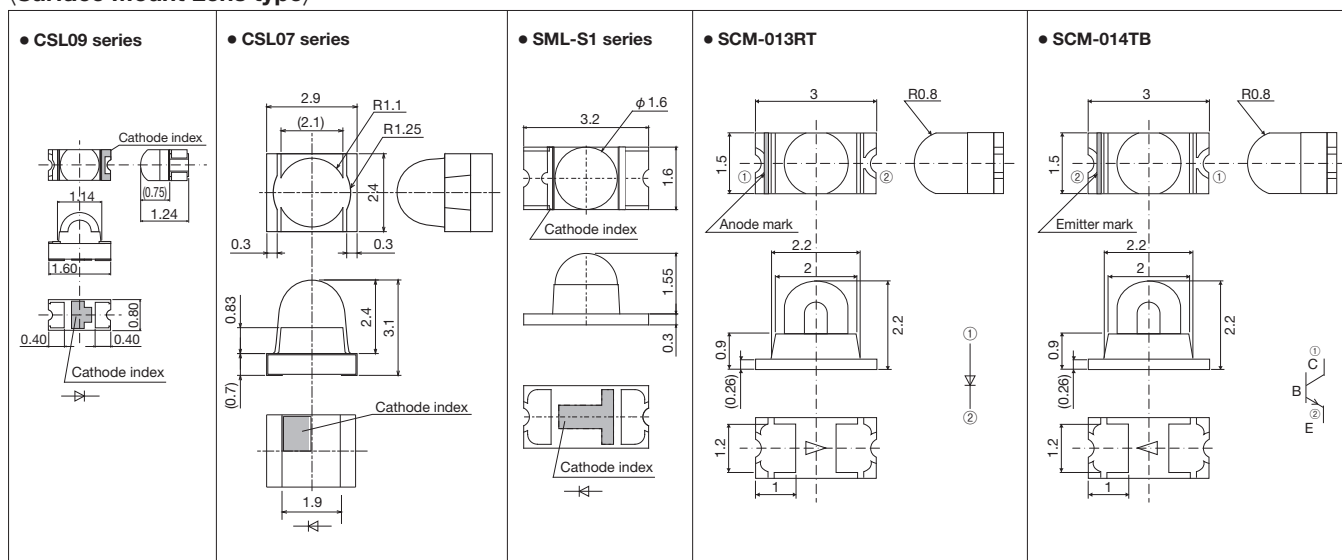
〈Side View type〉



〈Reverse Mount type〉



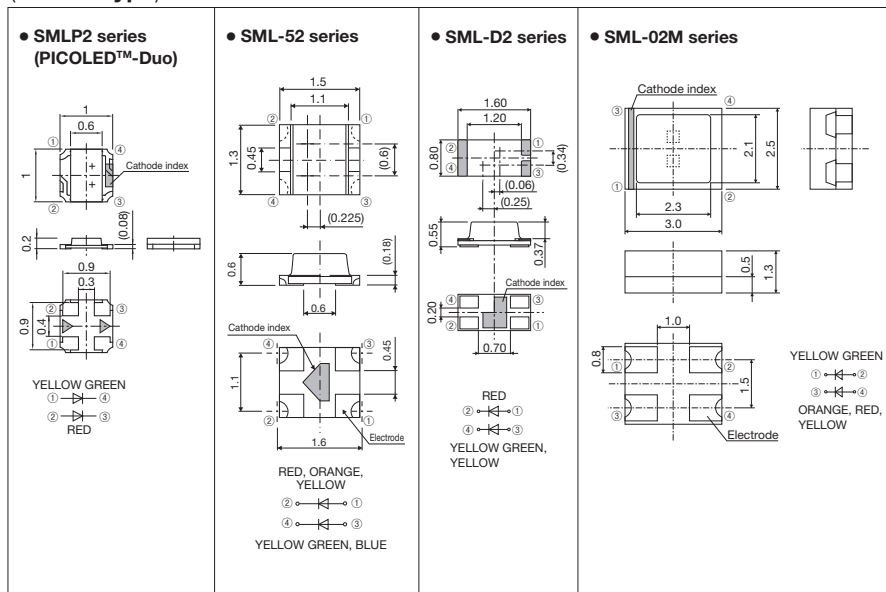
〈Surface Mount Lens type〉



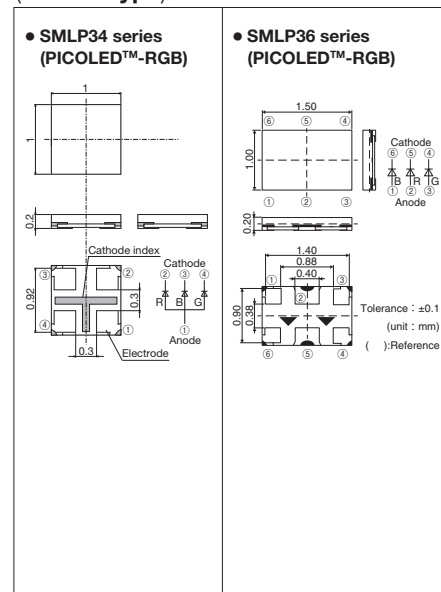
*For further information, please refer to the data sheets.

● Dimensions (Unit: mm)

〈2 Color type〉

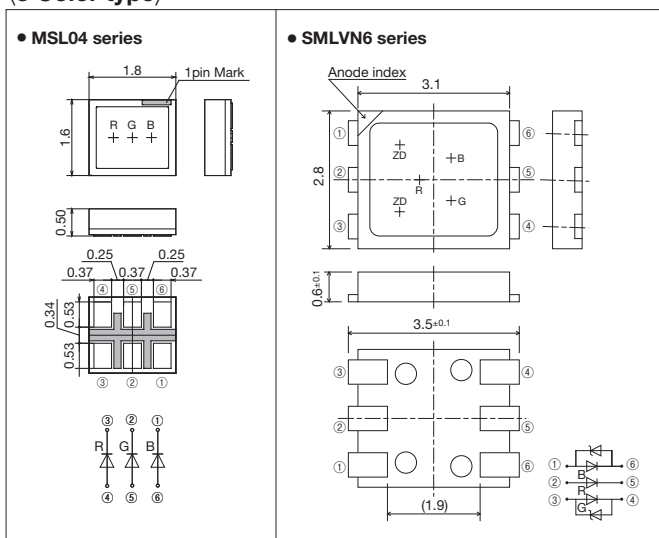


〈3 Color type〉

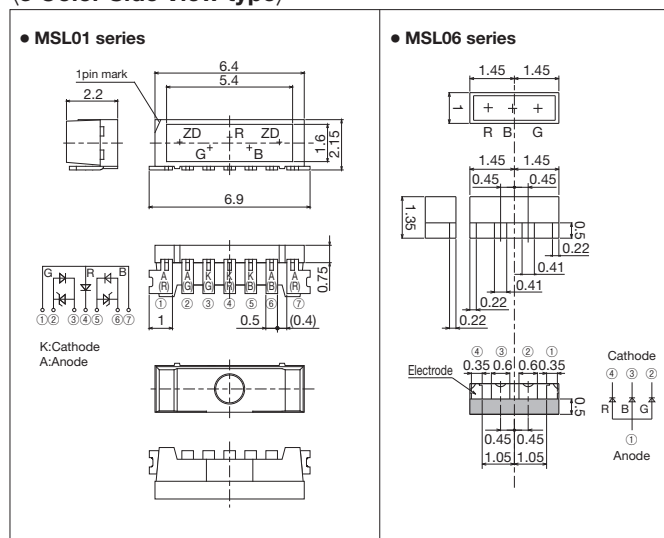


Note: PICOLED™ is a trademark or a registered trademark of ROHM Co., Ltd.

〈3 Color type〉



〈3 Color Side View type〉



*For further information, please refer to the data sheets.

Through-hole LEDs

ROHM offers a wide variety of through-hole LEDs, including lamps that can be automatically mounted onto the PCB as well as high luminous intensity units suitable for public outdoor displays.

Red (V, U) Quick Reference of Luminous intensity

<High Luminous intensity Rank Table1>

XE	XF	XG	XH	XJ	XK	XL	XM	XN	XP	XQ	XR	XS	XT	XU
47 to 68	68 to 100	100 to 150	150 to 220	220 to 330	330 to 470	470 to 680	680 to 1000	1000 to 1500	1500 to 2200	2200 to 3300	3300 to 4700	4700 to 6800	6800 to 10000	10000 to 15000

<High Luminous intensity Rank Table2>

XA	XB	XC	XD	XE	XF	XG	XH	XJ	XK	XL	XM	XN	XP	XQ	XR	XS	XT	XU
9.0 to 16.5	13.5 to 24	20 to 36	30 to 52	42 to 75	61 to 110	90 to 165	135 to 240	200 to 360	300 to 520	420 to 750	600 to 1100	900 to 1650	1350 to 2400	2000 to 3600	3000 to 5200	4200 to 7500	6100 to 11000	9000 to 16500

	Viewing angle (2θ1/2)	Resin Color	Luminous intensity Rank Luminous intensity (mcd) If (mA)	K	L	M	N	P	Q	R	S	T	U	V
				3.6 to 7.1	5.6 to 11	9 to 18	14 to 28	22 to 45	36 to 71	56 to 110	90 to 180	140 to 280	220 to 450	360 to 710
φ3 Circular type	40°	Transparent Colored	20						SLI-343V8RC*1					
			10						SLI-343V8RC*1					
		Diffused Colored	20						SLI-343U8RC*1					
			10						SLI-343URC (W)*					
	85°	Transparent Colored	20						SLR-343VC*					
		Diffused Colored	10						SLR-343VR*					
φ3 Circular type (Direct mount 5mm pitch type)	40°	Transparent Colored	20						SLI-325V8R*1					
			10						SLI-325U8R*1					
		Diffused Colored	20						SLI-325URC (W)*					
			10						SLI-325UR (W)*					
	35°	Transparent Colored	20						SLR-325VC*					
		Diffused Colored	10						SLR-325VR*					
φ3 Flat disc type	50°	Transparent Colored	20						SLR-322VC*					
			10						SLR-322VR*					
	140°	Transparent Colored	20						SLI-430U2R*1					
		Diffused Colored	10						SLI-430U2R*1					
φ4 Oval type	20°	Transparent Colorless	20											
			10											
	40°	Transparent Colored	20											
		Diffused Colored	10											
φ5 Circular type	20°	Transparent Colorless	20											
			10											
	40°	Transparent Colored	20											
		Diffused Colored	10											

<High Luminous intensity Rank Table1>

XE	XF	XG	XH	XJ	XK	XL	XM	XN	XP	XQ	XR	XS	XT	XU
47 to 68	68 to 100	100 to 150	150 to 220	220 to 330	330 to 470	470 to 680	680 to 1000	1000 to 1500	1500 to 2200	2200 to 3300	3300 to 4700	4700 to 6800	6800 to 10000	10000 to 15000

<High Luminous intensity Rank Table2>

XA	XB	XC	XD	XE	XF	XG	XH	XJ	XK	XL	XM	XN	XP	XQ	XR	XS	XT	XU
9.0 to 16.5	13.5 to 24	20 to 36	30 to 52	42 to 75	61 to 110	90 to 165	135 to 240	200 to 360	300 to 520	420 to 750	600 to 1100	900 to 1650	1350 to 2400	2000 to 3600	3000 to 5200	4200 to 7500	6100 to 11000	9000 to 16500

Orange (D) Quick Reference of Luminous intensity

	Viewing angle (2θ1/2)	Resin Color	Luminous intensity Rank Luminous intensity (mcd) If (mA)	J	K	L	M	N	P	Q	R	S	T	U	V
				2.2 to 4.5	3.6 to 7.1	5.6 to 11	9 to 18	14 to 28	22 to 45	36 to 71	56 to 110	90 to 180	140 to 280	220 to 450	360 to 710
φ3 Circular type	40°	Transparent Colored	20												
			10												
		Diffused Colored	20												
			10												
	85°	Transparent Colored	20												
		Diffused Colored	10												
φ3 Circular type (Direct mount 5mm pitch type)	40°	Transparent Colored	20												
			10												
		Diffused Colored	20												
			10												
	35°	Transparent Colored	20												
		Diffused Colored	10												
φ3 Flat disc type	50°	Transparent Colored	20												
			10												
	140°	Transparent Colored	20												
		Diffused Colored	10												
φ4 Oval type	20°	Transparent Colorless	20												
			10												
	40°	Transparent Colored	20												
		Diffused Colored	10												

<High Luminous intensity Rank Table1>

XE	XF	XG	XH	XJ	XK	XL	XM	XN	XP	XQ	XR	XS	XT	XU
47 to 68	68 to 100	100 to 150	150 to 220	220 to 330	330 to 470	470 to 680	680 to 1000	1000 to 1500	1500 to 2200	2200 to 3300	3300 to 4700	4700 to 6800	6800 to 10000	10000 to 15000

<High Luminous intensity Rank Table2>

XA	XB	XC	XD	XE	XF	XG	XH	XJ	XK	XL	XM	XN	XP	XQ	XR	XS	XT	XU
9.0 to 16.5	13.5 to 24	20 to 36	30 to 52	42 to 75	61 to 110	90 to 165	135 to 240	200 to 360	300 to 520	420 to 750	600 to 1100	900 to 1650	1350 to 2400	2000 to 3600	3000 to 5200	4200 to 7500	6100 to 11000	9000 to 16500

Yellow (Y) Quick Reference of Luminous intensity

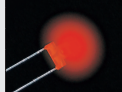
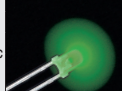
	Viewing angle (2θ1/2)	Resin Color	Luminous intensity Rank Luminous intensity (mcd) If (mA)	J	K	L	M	N	P	Q	R	S	T	U	V
				2.2 to 4.5	3.6 to 7.1	5.6 to 11	9 to 18	14 to 28	22 to 45	36 to 71	56 to 110	90 to 180	140 to 280	220 to 450	360 to 710
φ3 Circular type	40°	Transparent Colored	20												
			10												
		Diffused Colored	20												
			10												
	85°	Transparent Colored	20												
		Diffused Colored	10												
φ3 Circular type (Direct mount 5mm pitch type)	40°	Transparent Colored	20												
			10												
		Diffused Colored	20												
			10												
	35°	Transparent Colored	20												
		Diffused Colored	10												
φ3 Flat disc type	50°	Transparent Colored	20												
			10												
	140°	Transparent Colored	20												
		Diffused Colored	10												
φ4 Oval type	20°	Transparent Colorless	20												
			10												
	40°	Transparent Colored	20												
		Diffused Colored	10												

*Luminous intensity on specification sheet include tolerance of within ±10%. *1 This product refer to high luminous intensity rank table1. *2 This product refer to high luminous intensity rank table2.

LEDs

Through-hole LEDs

φ3 type																								
Shape	Package Image	Viewing Angle 2θ1/2 (Element type)	Emitting Color	Part No.	Electrical and Optical Characteristics (T _a =25°C)										Absolute Maximum Ratings (T _a =25°C)									
					Dominant Wavelength λ _d / Chromaticity Coordinates (x, y)		Luminous Intensity I _v				Forward Voltage V _F		Reverse Current I _R		Power Dissipation P _D (mW)	Forward Current I _F (mA)	Peak Forward Current I _{FP} (mA)	Reverse Voltage V _R (V)	Operating Temperature T _{opr} (°C)	Storage Temperature T _{stg} (°C)				
					Typ* (nm)	I _F (mA)	Min (mcd)	Typ (mcd)	Max (mcd)	I _F (mA)	Typ (V)	I _F (mA)	Max (μA)	V _R (V)										
 φ3 Circular type		40°	Standard	Red	SLI-343V8RC			150	330	(680)	20	2.2	20	10	9	54	20	100*2	9	-30 to +85	-40 to +100			
					SLI-343V8R	639	20	100	220	(470)														
					SLI-343U8RC			150	330	(680)	20	2.2	20	10	9	54	20	100*2	9	-30 to +85	-40 to +100			
				SLI-343U8R	630	20	100	220	(470)															
				SLI-343D8C			330	680	(1,500)	20	2.2	20	10	9	54	20	100*2	9	-30 to +85	-40 to +100				
				SLI-343D8U	611	20	220	470	(1,000)															
			Yellow	SLI-343Y8C			330	680	(1,500)	20	2.2	20	10	9	54	20	100*2	9	-30 to +85	-40 to +100				
				SLI-343Y8Y	593	20	220	470	(1,000)															
				SLI-343M8C			68	150	(330)	20	2.2	20	10	9	54	20	100*2	9	-30 to +85	-40 to +100				
			Yellow Green	SLI-343M8G	572	20																		
				SLI-343P8C			10	22	(47)	20	2.2	20	10	9	54	20	100*2	9	-30 to +85	-40 to +100				
			Green	SLI-343P8G	560	20																		
		SLI-343URC				90	450	(710)	20	1.9	20	100	9	125	50	200*2	9	-25 to +85	-30 to +100					
		High Luminous intensity		40°	Red	SLI-343UR	630	20	350				20	1.9	20	100	9	125	50	200*2	9	-25 to +85	-30 to +100	
						SLI-343DC			500	(710)	20	1.9	20	100	9	125	50	200*2	9	-25 to +85	-30 to +100			
						SLI-343DU	611	20	350															
				Orange	SLI-343YC			350	(710)	20	1.9	20	100	9	125	50	200*2	9	-25 to +85	-30 to +100				
					SLI-343YY	591	20	300																
					SLI-343MC			56	200		20	2.1	20	100	9	62	25	100*2	9	-25 to +80	-30 to +100			
				Yellow Green	SLI-343MG	572	20	180																
					SLR343BN2T	470	20	470	1,000	2,200	20	3.2	20	10	5	126	30	100*2	5	-20 to +80	-30 to +100			
					SLR343WBN2PT	(x, y) (0.31, 0.31)	20	1,500	3,300	—	20	3.2	20	10	5	126	30	100*2	5	-20 to +80	-30 to +100			
				Standard		40°	Red	SLR-343VC			9	25	(71)	10	2.0	10	10	3	60	20	60*1	3	-25 to +85	-30 to +100
								SLR-343VR	650	10	6	16	(45)											
								SLR-343DC			9	25	(71)	10	2.0	10	10	3	60	20	60*1	3	-25 to +85	-30 to +100
		Orange	SLR-343DU			610	10	6	16	(45)	10	2.0	10	10	3	60	20	60*1	3	-25 to +85	-30 to +100			
			SLR-343YC					6	16	(45)	10	2.1	10	10	3	60	20	60*1	3	-25 to +85	-30 to +100			
			SLR-343YY			585	10	4	10	(28)														
		Yellow	SLR-343MC					9	25	(71)	10	2.1	10	10	3	75	25	60*1	3	-25 to +85	-30 to +100			
			SLR-343MG			563	10	6	16	(45)														
			SLR-343PC					2	6	(18)	10	2.1	10	10	3	75	25	60*1	3	-25 to +85	-30 to +100			
		Green	SLR-343PG			555	10																	
			New SLR343EN4T			523	20	900	2,200	—	20	3.2	20	100	5	120	30	100*2	5	-20 to +80	-30 to +100			
			New SLR343BN4T			468	20	300	680	—	20	3.2	20	100	5	120	30	100*2	5	-20 to +80	-30 to +100			
		Low Current		40°	Red	SLI-343URC (W)	630	20	36	200	(280)	20	1.9	20	100	9	125	50	200*2	9	-25 to +85	-30 to +100		
						SLI-343UR (W)			160															
						SLI-343DC (W)			300	(450)	20	1.9	20	100	9	125	50	200*2	9	-25 to +85	-30 to +100			
				Orange	SLI-343DU (W)	611	20	56	250		20	1.9	20	100	9	125	50	200*2	9	-25 to +85	-30 to +100			
					SLI-343YC (W)			200	(280)	20	1.9	20	100	9	125	50	200*2	9	-25 to +85	-30 to +100				
					SLI-343YY (W)	591	20	36	160															
		Standard		85°	Red	SLR-332VC			4	10	(28)	10	2.0	10	10	3	60	20	60*1	3	-25 to +85	-30 to +100		
						SLR-332VR	650	10	6	16	(45)													
						SLR-332DC			4	10	(28)	10	2.0	10	10	3	60	20	60*1	3	-25 to +85	-30 to +100		
				Orange	SLR-332DU	610	10	4	10	(28)	10	2.0	10	10	3	60	20	60*1	3	-25 to +85	-30 to +100			
					SLR-332YC			4	10	(28)	10	2.1	10	10	3	60	20	60*1	3	-25 to +85	-30 to +100			
					SLR-332YY	585	10	2	6	(18)														
				Yellow	SLR-332MC			6	16	(45)	10	2.1	10	10	3	75	25	60*1	3	-25 to +85	-30 to +100			
					SLR-332MG	563	10																	
40°	High Luminous intensity				Red	SLI-580UT	630	20	2,000	5,000	(11,000)	20	1.9	20	100	9	125	50	200*2	9	-30 to +85	-40 to +100		
				SLI-580DT		611	20	1,350	5,000	(7,500)	20	1.9	20	100	9	125	50	200*2	9	-30 to +85	-40 to +100			
				SLI-580YT		591	20	1,350	5,000	(7,500)	20	1.9	20	100	9	125	50	200*2	9	-30 to +85	-40 to +100			
				Yellow Green	SLA-580MT	563	20	200	470	(1,100)	20	2.3	20	10	4	75	25	60*1	4	-25 to +85	-30 to +100			
		New SLA580ENT	523		20	6,100	27,000	—	20	3.2	20	100	5	120	30	100*2	5	-20 to +80	-30 to +100					
		New SLA580BNT	468		20	1,350	4,000	—	20	3.3	20	100	5	120	30	100*2	5	-20 to +80	-30 to +100					
Standard		20°	High Luminous intensity	Red	SLI-570UT			900	3,000	(5,200)	20	1.9	20	100	9	125	50	200*2	9	-30 to +85	-40 to +100			
					SLI-570U2T	630	20	2,200	4,000	(10,000)														
					SLI-570DT	611	20	900	3,000	(5,200)	20	1.9	20	100	9	125	50	200*2	9	-30 to +85	-40 to +100			
		Yellow	SLI-570YT			610	2,500	(3,600)	20	1.9	20	100	9	125	50	200*2	9	-30 to +85	-40 to +100					
			SLI-570Y2T	591	20	2,200	5,200	(10,000)																
			Yellow Green SLA-570MT	563	20	200	470	(1,100)	20	2.3	20	10	4	75	25	60*1	4	-25 to +85	-30 to +100					
		40°	High Luminous intensity	Red	SLI-560UT	630	20	300	1,000	(1,650)	20	1.9	20	100	9	125	50	200*2	9	-30 to +85	-40 to +100			
					SLI-560DT	611	20	300	1,000	(1,650)	20	1.9	20	100	9	125	50	200*2	9	-30 to +85	-40 to +100			
					SLI-560YT	591	20	300	1,000	(1,650)	20	1.9	20	100	9	125	50	200*2	9	-30 to +85	-40 to +100			
				Yellow Green	SLA-560MT	563	20	42	100	(240)	20	2.3	20	10	4	75	25	60*1	4	-25 to +85	-30 to +100			
					New SLA560BN2T	470*3	20	1,000	2,200	4,700	20	3.2	20	10	5	126	30	100*2	5	-20 to +80	-30 to +100			
					New SLA560WBN2PT	(x, y) (0.31, 0.31)	20	1,500	3,300	(6,800)	20	3.2	20	10	5	126	30	100*2	5	-20 to +80	-30 to +100			
Standard		40°	Red	SLR-56VC			9	25	(71)	10	2.0	10	10	3	60	20	60*1	3	-25 to +85	-30 to +100				
				SLR-56VR	650	10	4	10	(28)															
				SLR-56DC			9	25	(71)	10	2.0	10	10	3	60	20	60*1	3	-25 to +85	-30 to +100				
		Orange	SLR-56DU	610	10	4	10	(28)	10	2.0	10	10	3	60	20	60*1	3	-25 to +85	-30 to +100					
			SLR-56YC			9	25	(71)	10	2.1	10	10	3	60	20	60*1	3	-25 to +85	-30 to +100					
			SLR-56YY			6	16	(45)																
		Yellow Green	SLR-56MC			14	40	(110)	10	2.1	10	10	3	75	25	60*1	3	-25 to +85	-30 to +100					
			SLR-56MG	563	10	6	16	(45)																
			New SLA560EN4T	525	20	1,350	3,000	—	20	3.2	20	100	5	120	30	100*2	5	-20 to +80	-30 to +100					
		New SLA560BN4T	468	20	300	680	—	20	3.2	20	100	5	120	30	100*2	5	-20 to +80	-30 to +100						

Oval type																																
Shape	Package Image	Viewing Angle 2θ1/2 (Element type)	Emitting Color	Part No.	Electrical and Optical Characteristics (T _a =25°C)										Absolute Maximum Ratings (T _a =25°C)																	
					Dominant Wavelength λ _D			Luminous Intensity I _v			Forward Voltage V _F		Reverse Current I _R		Power Dissipation P _D (mW)	Forward Current I _F (mA)	Peak Forward Current I _{FP} (mA)	Reverse Voltage V _R (V)	Operating Temperature T _{opr} (°C)	Storage Temperature T _{stg} (°C)												
					Typ (nm)	I _F (mA)	Min (mcd)	Typ (mcd)	Max (mcd)	I _F (mA)	Typ (V)	I _F (mA)	Max (μA)	V _R (V)																		
Oval type φ4		140°	Red	SLI-430U2R	620*±3	20	220	400	(680)	20	2.0	20	10	9	75	30	100*±2	9	-40 to +85	-40 to +100												
			Orange	SLI-430DU	605*±3	20	220	470	(680)	20	2.1	20	10	9	75	30	100*±2	9	-40 to +85	-40 to +100												
			Yellow	SLI-430Y2U	590*±3	20	330	500	(900)	20	2.1	20	10	9	75	30	100*±2	9	-40 to +85	-40 to +100												
			Yellow Green	SLI-430MG	570*±3	20	68	120	(220)	20	2.1	20	10	9	75	30	100*±2	9	-40 to +85	-40 to +100												
Other																																
Shape	Package Image	Viewing Angle 2θ1/2 (Element type)	Emitting Color	Part No.	Electrical and Optical Characteristics (T _a =25°C)										Absolute Maximum Ratings (T _a =25°C)																	
					Dominant Wavelength λ _D			Luminous Intensity I _v			Forward Voltage V _F		Reverse Current I _R		Power Dissipation P _D (mW)	Forward Current I _F (mA)	Peak Forward Current I _{FP} (mA)	Reverse Voltage V _R (V)	Operating Temperature T _{opr} (°C)	Storage Temperature T _{stg} (°C)												
					Typ (nm)	I _F (mA)	Min (mcd)	Typ (mcd)	Max (mcd)	I _F (mA)	Typ (V)	I _F (mA)	Max (μA)	V _R (V)																		
φ3.2 Circular type Direct Mount 5mm Pitch type		40°	Red	SLI-325URC (W)*1	630	20	36	160	(280)	20	1.9	20	100	4	48	20	60*1	4	-25 to +85	-30 to +100												
				SLI-325UR (W)*1				100																								
				SLI-325DC (W)*1				160																								
			Orange	SLI-325DU (W)*1	611	20	36	160	(280)	20	1.9	20	100	4	48	20	60*1	4	-25 to +85	-30 to +100												
				SLI-325DU (W)*1				100																								
				SLI-325YC (W)*1				160																								
		40°	Red	SLI-325YY (W)*1	591	20	36	160	(280)	20	1.9	20	100	4	48	20	60*1	4	-25 to +85	-30 to +100												
				SLR-325VC*1				6													16	(45)	10	2.0	10	3	60	20	60*1	3	-25 to +85	-30 to +100
				SLR-325VR*1				4													10	(28)										
			Orange	SLR-325DC*1	610	10	6	16	(45)	10	2.0	10	10	3	60	20	60*1	3	-25 to +85	-30 to +100												
				SLR-325DU*1			4	10	(28)																							
				Yellow			SLR-325YC*1	585	10	6	16	(45)	10	2.1	10	10	3	60	20	60*1	3	-25 to +85	-30 to +100									
SLR-325YY*1	2	6	(18)																													
Yellow Green	SLR-325MC*1	563	10	9	25	(71)	10	2.1	10	10	3	75	25	60*1	3	-25 to +85	-30 to +100															
	SLR-325MG*1			6	16	(45)																										
φ3 Flat Disc type		35°	Red	SLR-322VC	650	10	6	16	(45)	10	2.0	10	10	3	60	20	60*1	3	-25 to +85	-30 to +100												
			Orange	SLR-322DC	610	10	6	16	(45)	10	2.0	10	10	3	60	20	60*1	3	-25 to +85	-30 to +100												
			Yellow	SLR-322YC	585	10	4	10	(28)	10	2.1	10	10	3	60	20	60*1	3	-25 to +85	-30 to +100												
			Yellow Green	SLR-322MC	563	10	9	25	(71)	10	2.1	10	10	3	75	25	60*1	3	-25 to +85	-30 to +100												
			Red	SLR-322VR	650	10	4	10	(45)	10	2.0	10	10	3	60	20	60*1	3	-25 to +85	-30 to +100												
		50°	Orange	SLR-322DU	610	10	2	6	(18)	10	2.0	10	10	3	60	20	60*1	3	-25 to +85	-30 to +100												
			Yellow	SLR-322YY	585	10	4	10	(28)	10	2.1	10	10	3	60	20	60*1	3	-25 to +85	-30 to +100												
			Yellow Green	SLR-322MG	563	10	6	16	(45)	10	2.1	10	10	3	75	25	60*1	3	-25 to +85	-30 to +100												

*SLI-325/SLR-325 series: straight taping only.

*1 Duty≤1/5, 200Hz *2 Duty≤1/10, 1kHz *3 Dominant Wavelength

() Reference

●Product No. Configuration (Through-hole LEDs)

■Exclude Mono-color (Blue (B), Green (E), White (WB))

Chip control symbol														
Remarks														
Special control symbol														
S	L	I	—	3	4	3	V		8	R	C	3	F	
Series name				Package shape			Color		Resin color			Packaging type		
SLA 1-Die Circular type High Luminous intensity LED Lamps				343	φ3 Circular type		V	Red	R	<Red>Diffused colored		3F	1-Die straight bulk	
SLI 1-Die Circular type Low Current High Luminous intensity LED Lamps				56	φ5 Circular type		U	Red	U	<Orange>Diffused colored		T31	Refer to taping specification	
SLR 1-Die Circular type LED Lamp				560	φ5 Circular type		U2	Red	Y	<Yellow>Diffused colored		T32		
				570	φ5 Circular type		D	Orange	G	<Yellowish green> Diffused colored				
				580	φ5 Circular type		Y	Yellow	C	Transparent colored				
				430	Oval type φ4		Y2	Yellow	T	Transparent colorless				
				325	φ3.2 Circular type		M	Yellowish green						
				322	φ3 Flat disc type		P	Green						

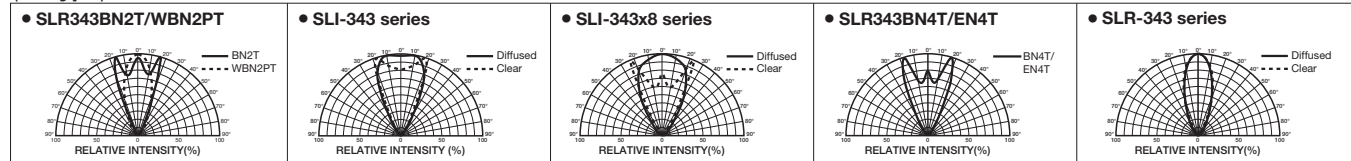
■Mono-color (Blue (B), Green (E), White (WB))

Chip control symbol														
Remarks														
Special control symbol														
S	L	R	3	4	3	W	B	N	2	P	T	2		
Series name				Package shape			Color		Resin color			Packaging type		
SLA 1-Die Circular type High Luminous intensity LED Lamps				343	φ3 Circular type		BN	Blue	T	Transparent colorless		3F	1-Die straight bulk	
SLR 1-Die Circular type LED Lamps				580	φ5 Circular type		EN	Green	W	Milky white		T31	Refer to specification	
				580	φ5 Circular type		WBN	White				T32		
(in case of white)														

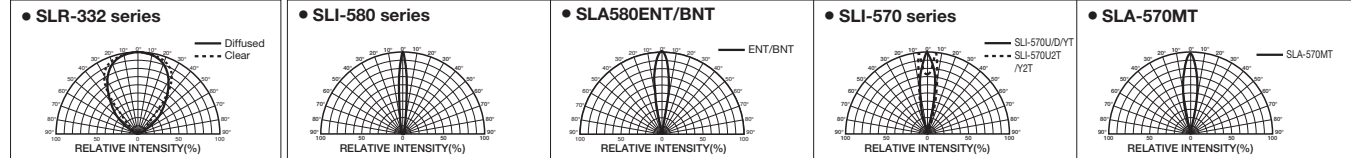
Through-hole LEDs

● Viewing Angle (Unit: deg)

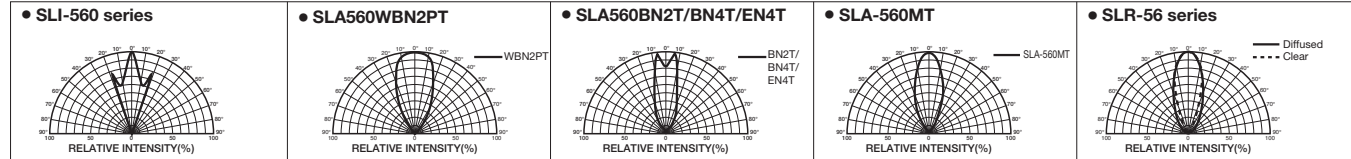
〈φ3 type〉



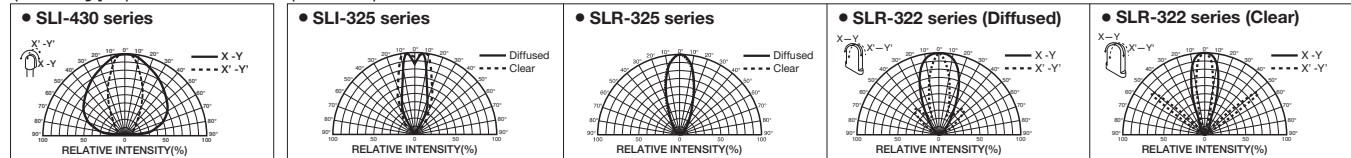
〈φ3 type〉



〈φ5 type〉



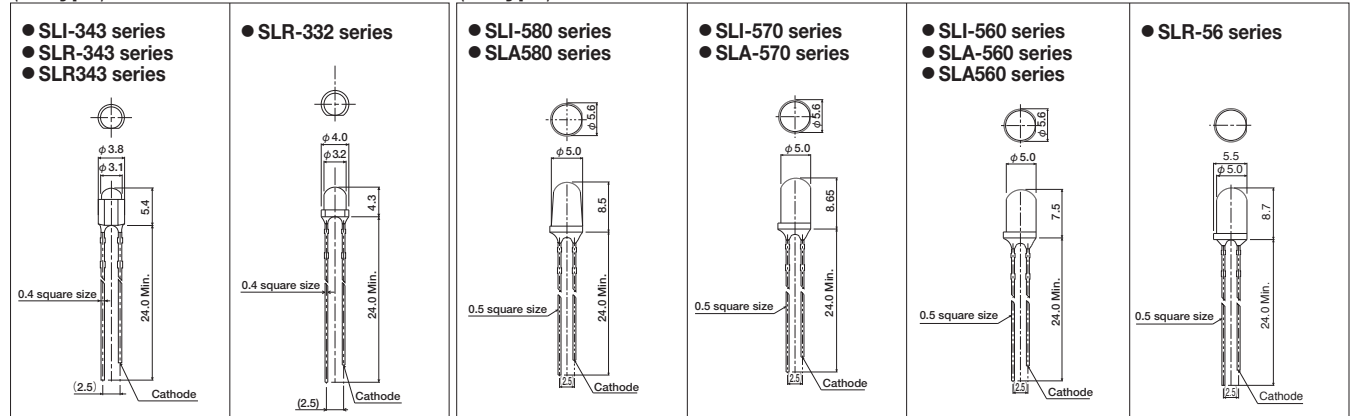
〈Oval type〉



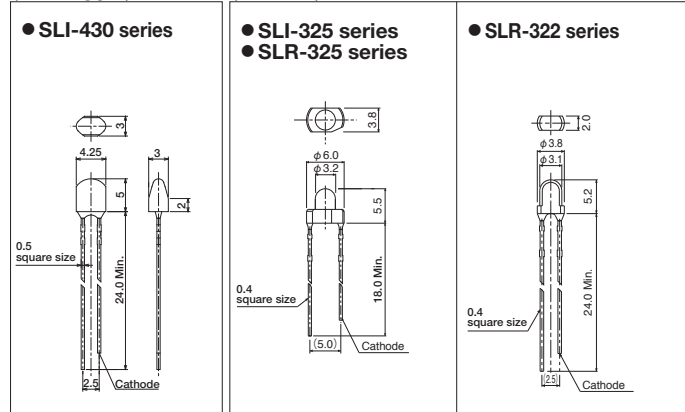
Note: Viewing Angle shown above are the reference data from standard product. For the part numbers other than the above, please contact us.

● Dimensions (Unit: mm)

〈φ3 type〉



〈Oval type〉



*For further information, please refer to specification.