

## Transmission type Photointerrupters

Linear Phototransistor Output													
Package	Exterior	Part No.	Output type	Standard Characteristics							Packing Specifications	Positioning	Remarks
				Detection Groove Width (mm)	Slit Width (mm)	I <sub>c</sub> (mA)	V <sub>CE</sub> (V)	I <sub>F</sub> (mA)	tr, tf (μs)				
Surface Mount type		RPI-0125	Phototransistor	1.2	0.3	0.45 Min 4.95 Max	5	20	10	Taping		Ultra-Compact	
		RPI-0226		2.0	0.3	0.1 Min	5	5	50		✓	Compact	
		RPI-0352E		3.0	0.4	0.18 Min	5	10	10		✓	Wide Gap, Energy Saving, High Efficiency	
		<b>New</b> RPI-0451E		4.5	0.5	0.16 Min	5	10	10		✓	Wide Gap, Energy Saving, High Efficiency	
Lead type		RPI-122		0.8	0.25	0.18 Min 1.08 Max	0.7	3	10	Bulk		Ultra-Compact	
		RPI-121		0.8	0.4	0.7 Min	5	20	10			Ultra-Compact	
		RPI-125		1.2	0.3	0.45 Min 4.95 Max	5	20	10			Ultra-Compact	
		RPI-221		2.3	0.4	0.2 Min	5	20	10				
		RPI-222		2.0	0.2	0.18 Min 0.95 Max	5	10	10				
		RPI-243		2.0	0.4	0.5 Min	5	20	10				
		RPI-246		2.0	0.2	0.35 Min 1.2 Max	5	20	10				
		RPI-352		3.0	0.4	0.2 Min	5	20	10		✓	Wide Gap	
		RPI-441C1	4.0	0.5	0.2 Min	5	20	10	✓		Wide Gap		
	RPI-441C1E	4.0	0.5	0.2 Min	5	10	10	✓	Wide Gap, Energy Saving, High Efficiency				

## Reflective type Photosensors

Photoreflectors type												
Package	Exterior	Part No.	Output type	Standard Characteristics							Packing Specifications	Remarks
				Focal Length (mm)	LEDλ <sub>P</sub> (nm)	PTλ <sub>P</sub> (nm)	I <sub>c</sub> (mA)	V <sub>CE</sub> (V)	I <sub>F</sub> (mA)	tr, tf (μs)		
Lead type		RPR-220	Phototransistor	6.0	940	800	0.08 Min 0.8 Max	2	10	10	Bulk	
		RPR-220UC30N		6.0	630	800	0.08 Min 0.8 Max	5	10	10	Stick	Emitting Color: Red
		RPR-220PC30N		6.0	470	800	0.08 Min 0.8 Max	5	10	10		Emitting Color: Blue

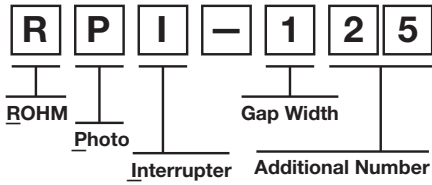
## 4 Direction Detector

4 Direction Detector												
Package	Exterior	Part No.	Output type	Standard Characteristics							Packing Specifications	Remarks
				LEDλ <sub>P</sub> (nm)	PTλ <sub>P</sub> (nm)	I <sub>c</sub> (mA)	V <sub>CE</sub> (V)	I <sub>F</sub> (mA)	tr, tf (μs)			
Surface Mount type		RPI-1035	Phototransistor	950	800	0.1 Min	5	5	10	Taping		

● **Product No. Explanation**

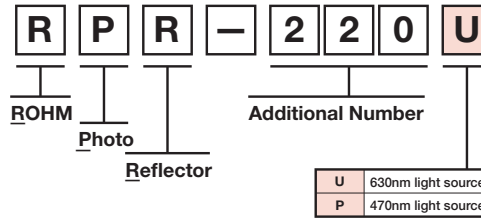
● **Transmission type**

7 characters

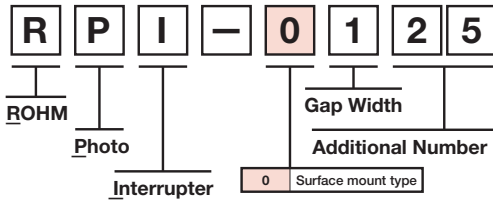


● **Reflective type**

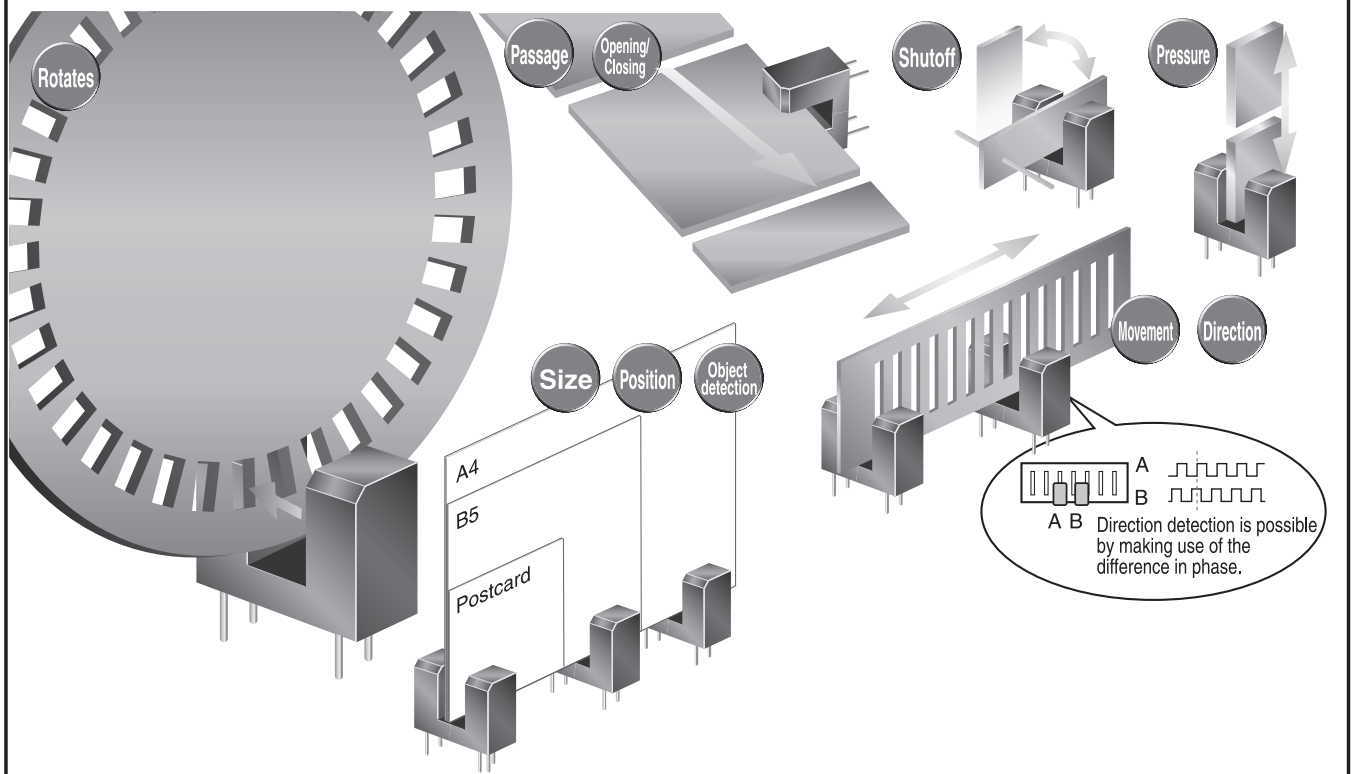
7 characters



8 characters




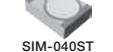


**Detection of all movements**

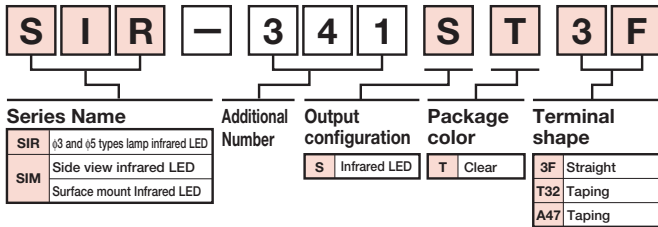


# Infrared Light Emitting Diodes

These Ir-LEDs can be used for various remote control applications.



Infrared Light Emitting Diodes 1											
Package	Exterior	Part No.	Features	Absolute Maximum Rating	Standard Characteristics						
				I <sub>F</sub> (mA)	I <sub>E</sub> (mW/sr)	I <sub>F</sub> (mA)	V <sub>F</sub> (V)	I <sub>F</sub> (mA)	λ <sub>P</sub> (nm)	tr, tf (μs)	θ1/2 (deg)
φ3 resin		SIR-34ST3F	Optimized for remote controls	100	10.5	50	1.3	100	950	1	27
		SIR-341ST3F	Compact, high power	75	18.1	50	1.3	50	940	1	16
φ5 resin		SIR-56ST3F	Optimized for remote controls	100	15	50	1.3	100	950	1	15
		SIR-563ST3F	High output, Optimized for remote controls	100	21	50	1.34	50	940	1	15
		SIR-568ST3F	High speed LED for optical communications	100	38	50	1.6	50	850	fc=50MHz	13
Resin Side View type		SIM-20ST	General purpose molded type	50	7.5	50	1.3	50	950	1	15
		SIM-22ST	General purpose molded type	50	0.8	10	1.3	50	950	1	30
Surface Mount type (Top View)		SIM-030ST	Low Profile (0.9mm)	100	25	100	1.7	100	870	0.1	20
		SIM-040ST	High power	100	40	100	1.7	100	870	0.1	20

## ●Product No. Explanation

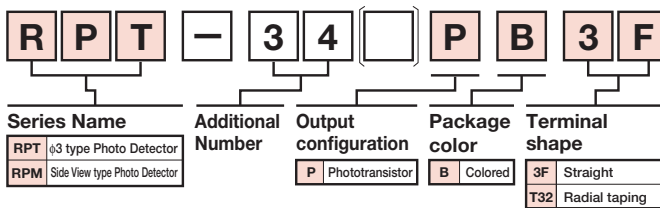


# Phototransistors

ROHM phototransistors have high reliability and large collector currents, side view packages, and  $\phi 3$  mm lamp packages are available.


Phototransistors 1												
Package	Exterior	Part No.	Feature	Visible Light Filter	Visible Light Filter		Standard Characteristics					
					$V_{CE0}$ (V)	$P_C$ Max (mW)	$I_{CE0}$ Max ( $\mu$ A)	$V_{CE}$ (V)	$I_C$ (mA)	$\lambda_P$ (nm)	$t_r, t_f$ ( $\mu$ s)	$\theta_{1/2}$ (deg)
$\phi 3$ resin		RPT-34PB3F	Visible light filter	✓	32	150	0.5	10	2.0 Min	800	10	36
		RPT-37PB3F	Visible light filter, Polarity discrimination	✓	32	150	0.5	10	2.0 Min	800	10	36
		RPT-38PB3F	Visible light filter	✓	32	150	0.5	10	2.0 Min	800	10	36
Resin Side View type		RPM-20PB	Visible light filter	✓	32	100	0.5	10	0.5 Min	800	10	14
		RPM-22PB	Visible light filter, Wide viewing angle	✓	32	100	0.5	10	0.48 Min	800	10	32

## ● Product No. Explanation




# Photodiode

ROHM photodiode have been used Compact accurate instrument. Surface mount type, top view packages are available.

Photodiode										
Package	Exterior	Part No.	Features	Absolute Maximum Rating	Transform Efficiency (A/W)		Dark Current (nA)	$\lambda_P$ (Reference Value)	$\theta_{1/2}$ (deg) (Reference Value)	Packaging Specifications
				$V_R$ (V)	$\lambda=940$ nm	$\lambda=525$ nm				
Surface Mount type (Top View)		<b>New</b> RPMD-0132	High sensitivity to green light Thin package	3.0	0.57	0.38	Max 20	940	60	Embossed taping 2,000pcs / reel

# Ambient Light and Proximity Sensor

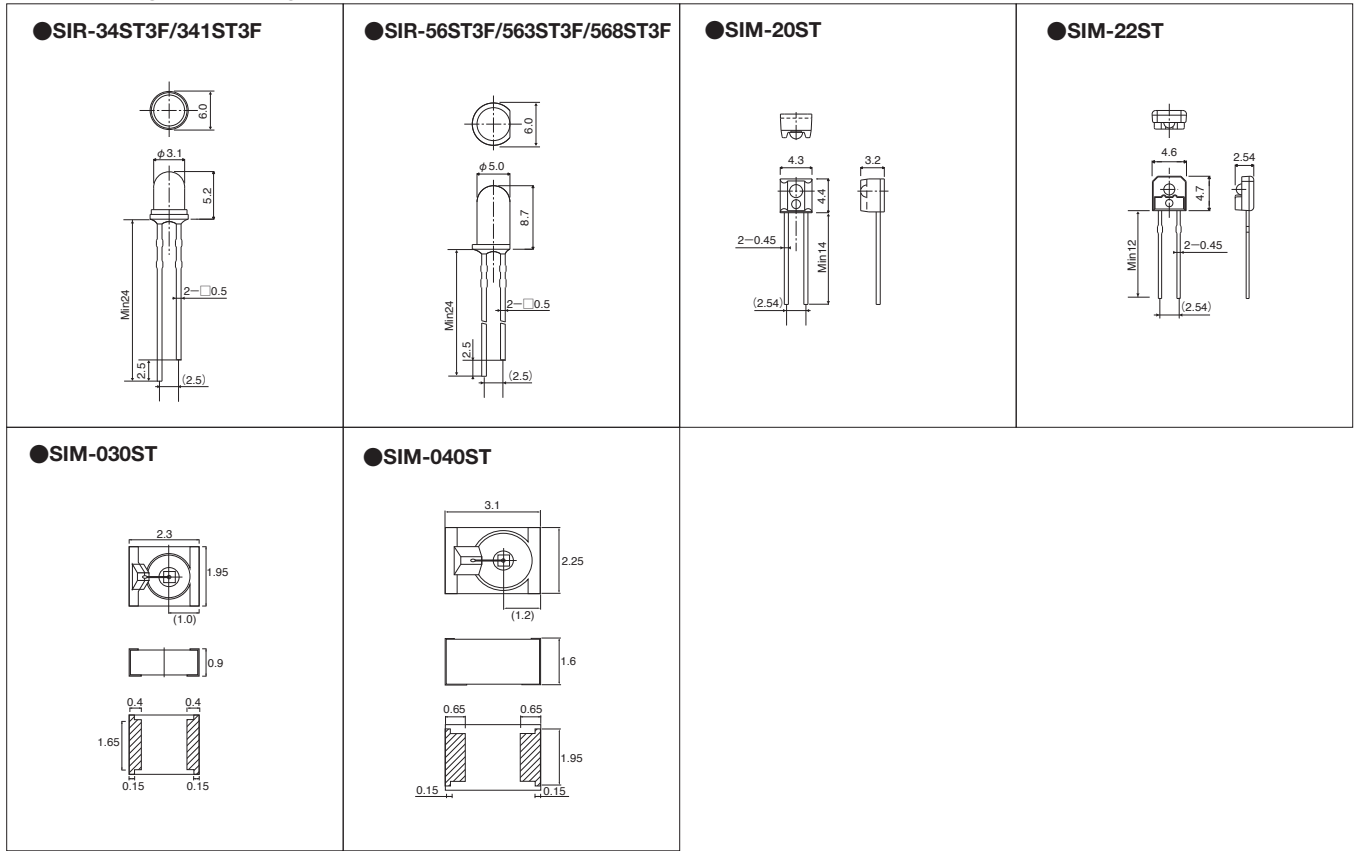
Ambient Light and Proximity Sensor										
Package	Exterior	Part No.	Features	Visible Light Filter	Interface	Absolute Maximum Rating		Standard Characteristics		
						$V_{DD}$ Max (V)	$V_{LED}$ Max (V)	PS Sensor Out (Count)	$\lambda_P$ (nm)	
Surface Mount type		RPR-0521RS	Proximity Sensor and Ambient Light Sensor	Built-in Noise Cancellation Function	I <sup>2</sup> C	4.5	7	80	940	



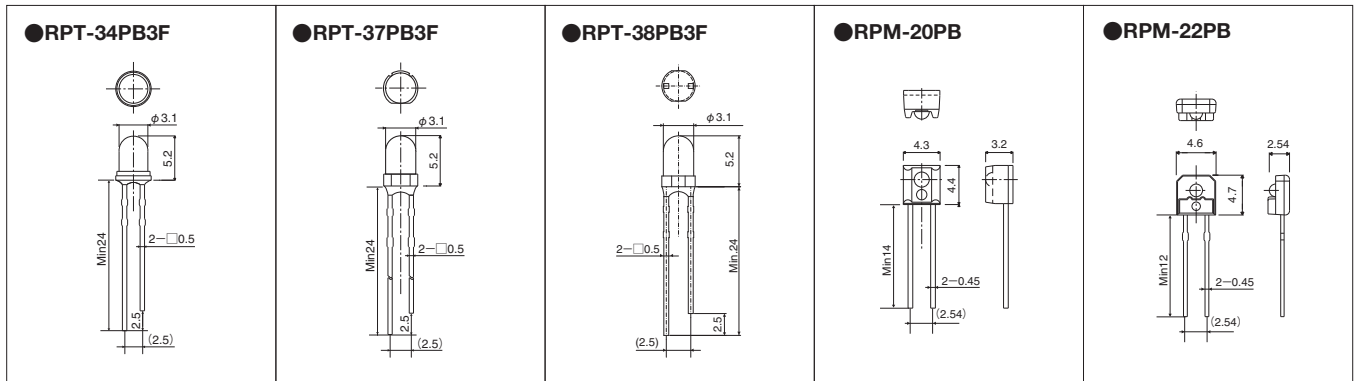
# Packages

## ● Dimensions (Unit: mm)

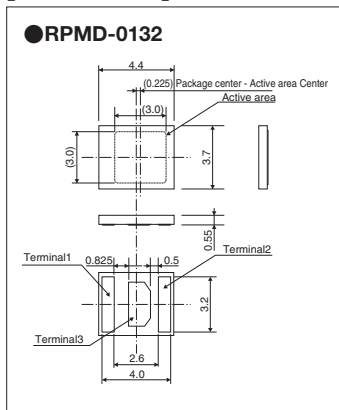
### [Infrared Light Emitting Diodes]



### [Phototransistors]



### [Photodiode]



### [Ambient Light and Proximity Sensor]

