

By Category PDF

Category Optical Sensors
















Opto Devices

Optical Sensors

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Optical Sensors			
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Transmission type Photointerrupters

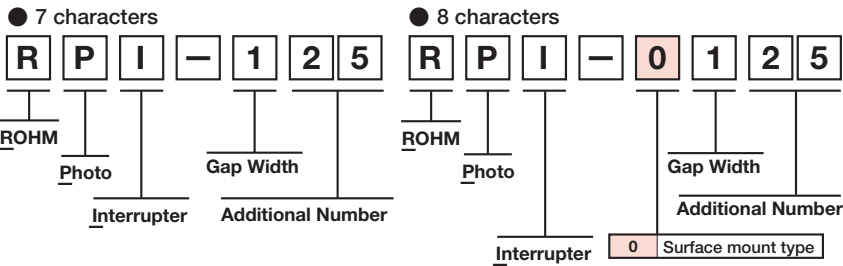
Linear Phototransistor Output												
Package	Exterior	Part No.	Output type	Standard Characteristics						Packing Specifications	Positioning	Remarks
				Detection Groove Width (mm)	Slit Width (mm)	I _c (mA)	V _{CE} (V)	I _F (mA)	tr, tf (μs)			
Surface Mount type		RPI-0125	Phototransistor	1.2	0.3	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
		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			
		<i>New</i> RPI-222G		2.0	0.2	0.18 Min 0.95 Max	5	10	10			Halogen free
		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

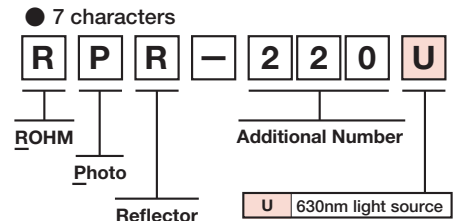
Photoreflectors type												
Package	Exterior	Part No.	Output type	Standard Characteristics								
				Focal Length (mm)	LED λ_p (nm)	PT λ_p (nm)	I _c (mA)	V _{CE} (V)	I _F (mA)	t _r , t _f (μ s)	Packing Specifications	Remarks
Lead type		RPR-220	Phototransistor	6.0	940	800	0.08 Min 0.8 Max	2	10	10	Bulk	
		RPR-220UC30N		6.0	630	800	0.08 Min 0.8 Max	5	10	10	Stick	Emitting Color: Red

Product No. Explanation

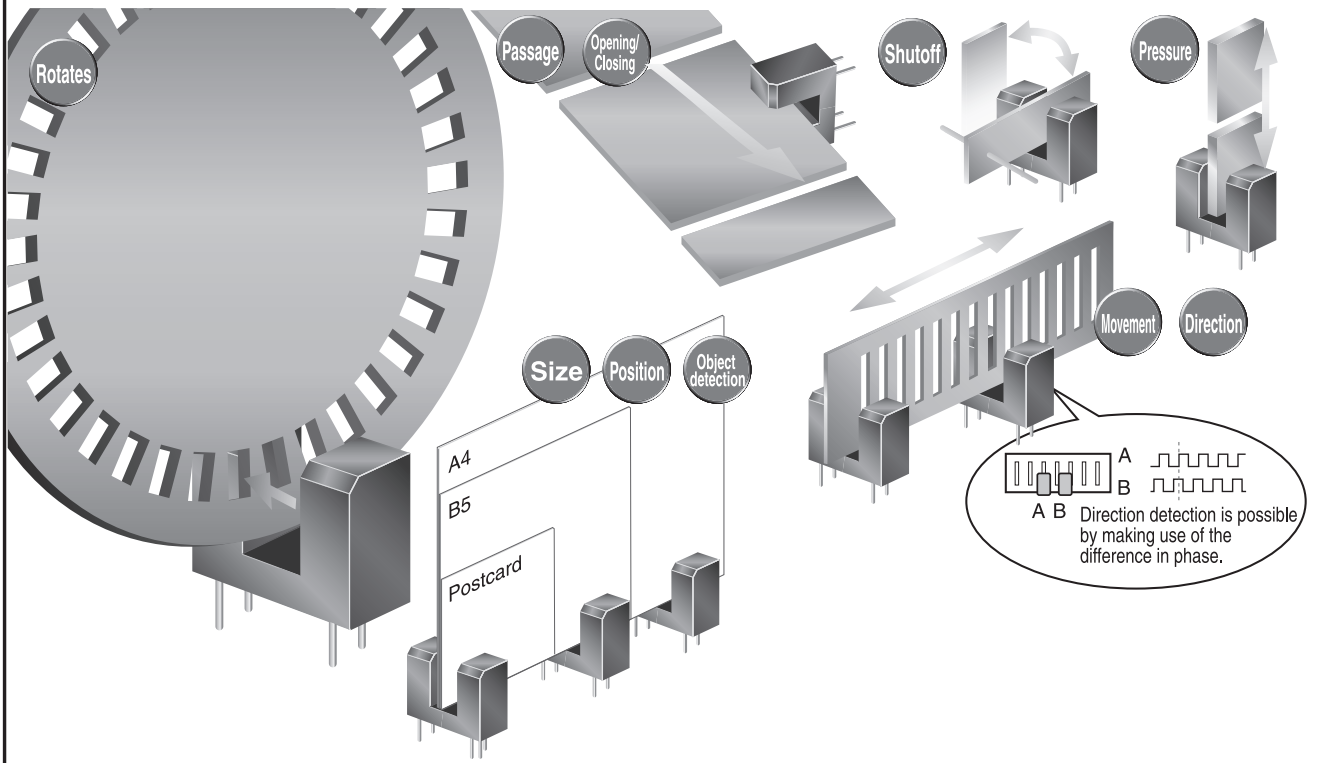
Transmission type



Reflective type





Detection of all movements

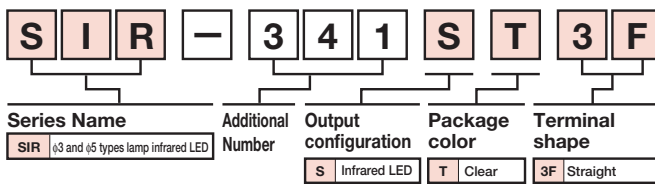


Infrared Light Emitting Diodes

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 _F (mA)	I _E (mW/sr)	I _F (mA)	V _F (V)	I _F (mA)	λ _P (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

● Product No. Explanation

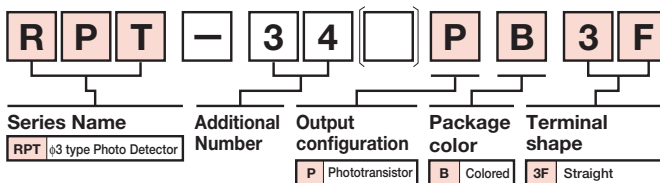


Phototransistors


ROHM phototransistors have high reliability and large collector currents, side view packages, and φ3 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 (μA)	V _{CE} (V)	I _C (mA)	λ _P (nm)	tr, tf (μs)	θ1/2 (deg)
φ3 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

● Product No. Explanation



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 _{leda} Max (V)	PS Sensor Out (Count)	λ _P (nm)
Surface Mount type		RPR-0521RS	Proximity Sensor and Ambient Light Sensor	Built-in Noise Cancellation Function	I ² C	4.5	7	80	940



Packages

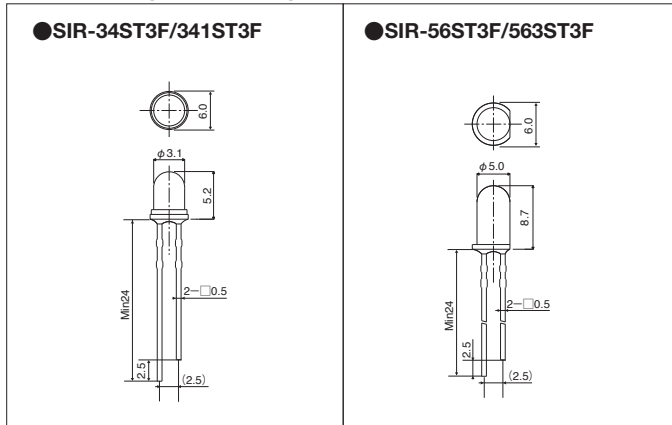
● Dimensions (Unit: mm)

[Photointerrupter]

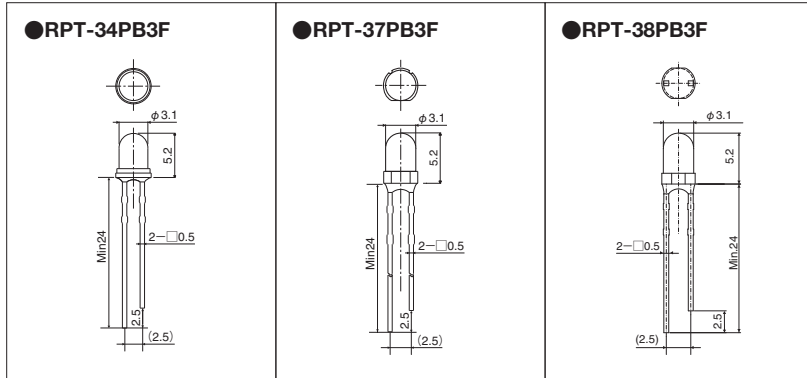
<p>● RPI-0125</p> <p>Technical drawing showing top, side, and cross-sectional views of the RPI-0125 package. Dimensions include a total width of 3.3, a gap of 1.2, and a package height of 2.8. A lead length of 0.75 is shown. Cross-section A-A' shows a lead diameter of 0.3 and a lead thickness of 0.4. A bottom view shows a lead diameter of 1.28 and a lead length of 2.9.</p>	<p>● RPI-0226</p> <p>Technical drawing showing top, side, and cross-sectional views of the RPI-0226 package. Dimensions include a total width of 4.4, a gap of 2.0, and a package height of 2.7. A lead length of 0.75 is shown. Cross-section A-A' shows a lead diameter of 0.3 and a lead thickness of 0.4. A bottom view shows a lead diameter of 1.7 and a lead length of 2.0. A detail shows a lead diameter of 0.6 and a lead length of 0.6. A note indicates 'B area close up (Lead point section)'.</p>	<p>● RPI-122</p> <p>Technical drawing showing top, side, and cross-sectional views of the RPI-122 package. Dimensions include a total width of 4.4, a gap of 3.6, and a package height of 3.4. A lead length of 0.25 is shown. Cross-section B-B' shows a lead diameter of 0.4 and a lead thickness of 0.4. A bottom view shows a lead diameter of 2.7 and a lead length of 2.3.</p>	<p>● RPI-121</p> <p>Technical drawing showing top, side, and cross-sectional views of the RPI-121 package. Dimensions include a total width of 3.6, a gap of 1.0, and a package height of 2.6. A lead length of 0.8 is shown. Cross-section A-A' shows a lead diameter of 0.4 and a lead thickness of 0.4. A bottom view shows a lead diameter of 2.65 and a lead length of 2.0.</p>
<p>● RPI-125</p> <p>Technical drawing showing top, side, and cross-sectional views of the RPI-125 package. Dimensions include a total width of 3.3, a gap of 1.2, and a package height of 2.8. A lead length of 0.75 is shown. Cross-section A-A' shows a lead diameter of 0.3 and a lead thickness of 0.4. A bottom view shows a lead diameter of 2.75 and a lead length of 1.5.</p>	<p>● RPI-221</p> <p>Technical drawing showing top, side, and cross-sectional views of the RPI-221 package. Dimensions include a total width of 4.9, a gap of 2.3, and a package height of 3.3. A lead length of 1.5 is shown. Cross-section A-A' shows a lead diameter of 0.4 and a lead thickness of 0.4. A bottom view shows a lead diameter of 4.0 and a lead length of 4.0.</p>	<p>● RPI-222, RPI-222G</p> <p>Technical drawing showing top, side, and cross-sectional views of the RPI-222, RPI-222G package. Dimensions include a total width of 4.9, a gap of 2.0, and a package height of 2.6. A lead length of 0.4 is shown. Cross-section A-A' shows a lead diameter of 0.2 and a lead thickness of 0.4. A bottom view shows a lead diameter of 4.0 and a lead length of 4.0.</p>	<p>● RPI-243</p> <p>Technical drawing showing top, side, and cross-sectional views of the RPI-243 package. Dimensions include a total width of 5.0, a gap of 2.0, and a package height of 4.2. A lead length of 2.8 is shown. Cross-section A-A' shows a lead diameter of 0.4 and a lead thickness of 0.4. A bottom view shows a lead diameter of 4.0 and a lead length of 4.0.</p>
<p>● RPI-246</p> <p>Technical drawing showing top, side, and cross-sectional views of the RPI-246 package. Dimensions include a total width of 5.0, a gap of 2.0, and a package height of 4.2. A lead length of 2.8 is shown. Cross-section A-A' shows a lead diameter of 1.6 and a lead thickness of 0.4. A bottom view shows a lead diameter of 4.0 and a lead length of 4.0.</p>	<p>● RPI-0352E</p> <p>Technical drawing showing top, side, and cross-sectional views of the RPI-0352E package. Dimensions include a total width of 6.4, a gap of 3.0, and a package height of 4.2. A lead length of 1.2 is shown. Cross-section A-A' shows a lead diameter of 0.4 and a lead thickness of 0.4. A bottom view shows a lead diameter of 3.9 and a lead length of 5.4.</p>	<p>● RPI-352</p> <p>Technical drawing showing top, side, and cross-sectional views of the RPI-352 package. Dimensions include a total width of 6.4, a gap of 3.0, and a package height of 4.2. A lead length of 1.2 is shown. Cross-section A-A' shows a lead diameter of 0.4 and a lead thickness of 0.4. A bottom view shows a lead diameter of 4.0 and a lead length of 4.0.</p>	<p>● RPI-441C1, RPI-441C1E</p> <p>Technical drawing showing top, side, and cross-sectional views of the RPI-441C1, RPI-441C1E package. Dimensions include a total width of 8.0, a gap of 4.0, and a package height of 4.2. A lead length of 0.5 is shown. Cross-section A-A' shows a lead diameter of 0.4 and a lead thickness of 0.4. A bottom view shows a lead diameter of 3.6 and a lead length of 6.7.</p>
<p>● RPI-0451E</p> <p>Technical drawing showing top, side, and cross-sectional views of the RPI-0451E package. Dimensions include a total width of 7.8, a gap of 4.5, and a package height of 4.2. A lead length of 1.2 is shown. Cross-section A-A' shows a lead diameter of 0.5 and a lead thickness of 0.4. A bottom view shows a lead diameter of 1.45 and a lead length of 2.5.</p>	<p>● RPR-220</p> <p>Technical drawing showing top, side, and cross-sectional views of the RPR-220 package. Dimensions include a total width of 6.4, a gap of 2.8, and a package height of 4.9. A lead length of 2.0 is shown. Cross-section A-A' shows a lead diameter of 1.4 and a lead thickness of 0.4. A bottom view shows a lead diameter of 2.8 and a lead length of 2.5.</p>	<p>● RPR-220UC30N</p> <p>Technical drawing showing top, side, and cross-sectional views of the RPR-220UC30N package. Dimensions include a total width of 6.4, a gap of 2.8, and a package height of 4.9. A lead length of 2.0 is shown. Cross-section A-A' shows a lead diameter of 1.4 and a lead thickness of 0.4. A bottom view shows a lead diameter of 2.8 and a lead length of 2.5.</p>	

● **Dimensions** (Unit: mm)

[Infrared Light Emitting Diodes]



[Phototransistors]



[Ambient Light and Proximity Sensor]

