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ICs

Discrete Semiconductors

Opto Electronics

LEDs

LED Displays

Laser Diodes

Optical Sensors

Transmission type

Photointerrupters

Reflective type Photosensors

Infrared Light Emitting Diodes

Phototransistors

4-Direction Detector

IrDA Infrared Communication Modules

Remote Control Receiver Modules

Passive Components

Modules (Sub Systems)



Photointerrupter Double Mold Type

RPI-151 **NEW**[Inquiries concerning our products](#)[Data Sheet](#)

[Product description]

ROHM's optical sensors serve as eyes to monitor changes of any motions, and comply with customers' day-to-day diversifying requests.

Features

- Gap width 1.5mm
- 2-phase Output type

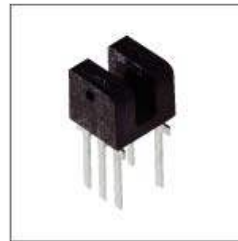
Product specifications

Absolute maximum ratings (Tc=25°C)		
Rated parameters	Standard value	Conditions
Input(LED)		
Forward current I_F (mA)	50	
Reverse voltage V_R (V)	5	
Power dissipation P_D (mW)	70	
Collector-Emitter voltage V_{CEO} (V)	30	
Output(Photo-toransistor)		
Emitter-Collector voltage V_{ECO} (V)	4.5	
Collector current I_C (mA)	30	
Power dissipation P_C (mW)	80	
Temperature Characteristics		
Operating temperature T_{opr} (°C)	-25 to 85	
Storage temperature T_{stg} (°C)	-30 to 85	

Electro-optical characteristics (Ta=25°C)		
Parameters	Value	Conditions
Input Characteristics		
Input Characteristics Forward voltage V_F (V)	1.20	$I_F=10\text{mA}$
Input Characteristics Reverse current I_R (μA)	10	$V_R=10\text{V}$
Output Characteristics		
Output Characteristics Dark current-Max. I_{CEO} (μA)	0.5	$V_{CE}=10\text{V}$
Output Characteristics Peak sensitivity wavelength λP (nm)	800	
Transfer Characteristics		
Transfer Characteristics Collector current-Max. I_C (mA)	0.25	$V_{CE}=5\text{V}, I_F=5\text{mA}$
Transfer Characteristics Collector-Emitter saturation voltage-Max. $V_{CE}(\text{sat})$ (V)	0.4	$I_F=10\text{mA}, I_C=0.1\text{mA}$
Transfer Characteristics Response time t_{r+tf} (μs)	10	$V_{CC}=5\text{V}, I_F=5\text{mA}, R_L=100\Omega$
Infrared Light Emitting Diode		
Infrared Light Emitting Diode Cut-	-	$I_F=50\text{mA}$

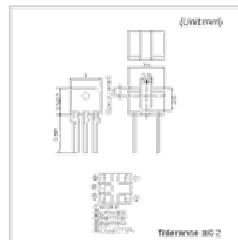
[Print out](#) Part No. explanation Notes on mounting Soldering conditions FAQ ROHM Internet Direct Shopping RoHS directive compliance Contact us What is a Optical Sensors?

Outline



2-phase Output Type

Dimensions



* Click to enlarge.

[Optical Sensors](#)

2008.07.23

Industry's thinnest ! 4 Direction Detection Sensor RPI-1040 !

off frequency F_C		* Non-coherent Infrared light emitting diode used.
Infrared Light Emitting Diode Peak light emitting wavelength λP (nm)	950	$I_F=50mA$ * Non-coherent Infrared light emitting diode used.
Phototransistor		
Phototransistor Response time t_{r-f} (μs)	10	$V_{CC}=5V, I_F=1mA, R_L=100\Omega$ * This product is not designed to be protected against electromagnetic wave.
Phototransistor Maximum sensitivity wavelength λP (nm)	800	-

*The contents described here are just outline for introduction.

Please obtain the specification sheets from us for thorough check before use.

Status Product

Part No.	Status *1	RoHS	Packing style	Package quantity	Samples *2	Sales
RPI-151	Active	Yes	Plastic bag	1000	Purchase	Inquiry

*1 Active: Production or current type Preparation: Preliminary type Preview: Development type

*2 Available only as free rank.

Others

Please check the details on "[Product List](#)" for Others.

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