

RPI-579

Photointerrupter, General type



Absolute maximum ratings (Ta=25°C)

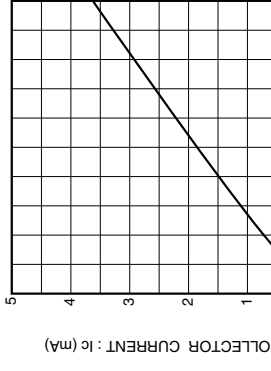
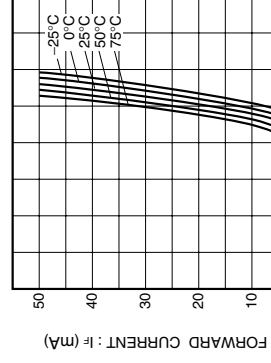
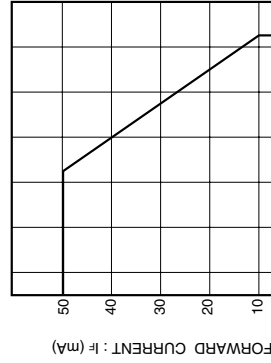
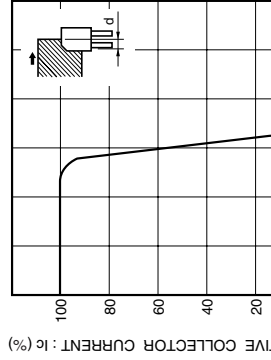
Parameter	Symbol	Limits	Unit
Forward current	I_F	50	mA
Reverse voltage	V_R	5	V
Power dissipation	P_b	80	mW
Collector-emitter voltage	V_{CEO}	30	V
Emitter-collector voltage	V_{ECO}	4.5	V
Collector current	I_c	30	mA
Collector power dissipation	P_c	80	mW
Operating temperature	T_{opr}	-25 to +85	°C
Storage temperature	T_{stg}	-40 to +85	°C
Soldering temperature	T_{sol}	260 / 3 *	°C / s

* 1mm from the body bottom.

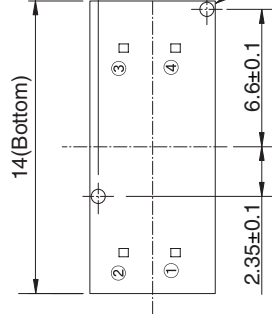
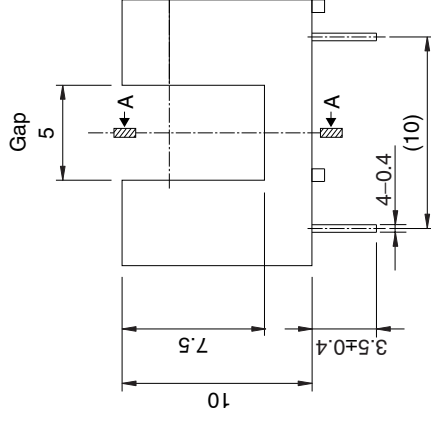
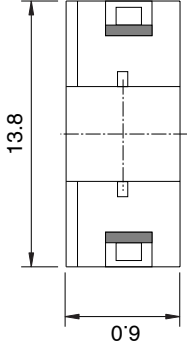
Electrical and optical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	-	1.3	1.6	V	$I_F=50mA$
Reverse current	I_R	-	-	10	μA	$V_R=10V$
Dark current	I_{cEO}	-	-	0.5	μA	$V_{CE}=10V$
Peak sensitivity wavelength	λ_p	-	800	-	nm	-
Collector current	I_c	0.5	-	-	mA	$V_{CE}=5V, I_F=20mA$
Collector-emitter saturation voltage	$V_{CE(sat)}$	-	0.1	0.5	V	$I_F=20mA, I_c=0.1mA$
Response time	Rise time	-	10	-	μs	$V_{CC}=5V, I_F=20mA, R_L=100\Omega$
	Fall time	-	10	-	μs	
Cut-off frequency	f_c	-	1	-	MHz	$I_F=50mA$
Peak light emitting wavelength	λ_p	-	950	-	nm	* Non-coherent infrared light emitting diode used.
Response time	$tr \cdot tf$	-	10	-	μs	$V_{CC}=5V, I_c=1mA, R_L=100\Omega$ * This product is not designed to be protected against electromagnetic wave.
Maximum sensitivity wavelength	λ_p	-	800	-	nm	-

Electrical and optical characteristics curves



External dimensions (Unit : mm)



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