

# RPI-579N1

## Photointerrupter, General type



External dimensions (Unit : mm)

### Absolute maximum ratings (Ta=25°C)

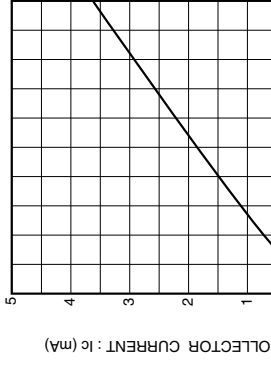
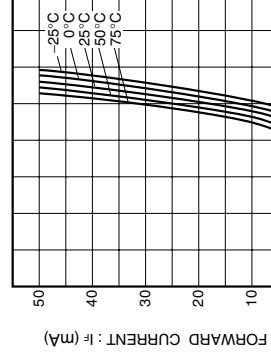
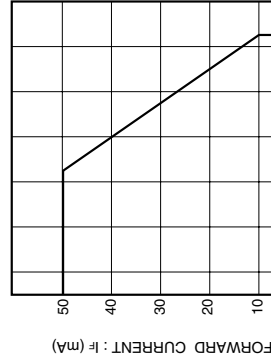
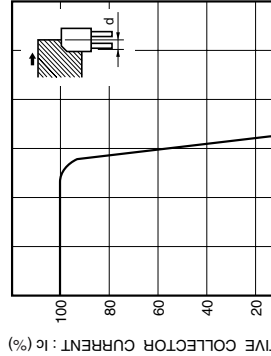
Parameter	Symbol	Limits	Unit
Forward current	$I_F$	50	mA
Reverse voltage	$V_R$	5	V
Power dissipation	$P_b$	80	mW
Collector-emitter voltage	$V_{CE0}$	30	V
Emitter-collector voltage	$V_{ECO}$	4.5	V
Collector current	$I_c$	30	mA
Collector power dissipation	$P_c$	80	mW
Operating temperature	$T_{opr}$	-25 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	$I_F=50\text{mA}$
Reverse current	$I_R$	-	-	10	$\mu\text{A}$	$V_R=10\text{V}$
Dark current	$I_{CEO}$	-	-	0.5	$\mu\text{A}$	$V_{CE}=10\text{V}$
Peak sensitivity wavelength	$\lambda_P$	-	800	-	nm	-
Collector current	$I_c$	0.5	-	-	mA	$V_{CE}=5\text{V}, I_F=20\text{mA}$
Collector-emitter saturation voltage	$V_{CE(sat)}$	-	0.1	0.5	V	$I_F=20\text{mA}, I_c=0.1\text{mA}$
Response time	Rise time	$t_r$	10	-	$\mu\text{s}$	$V_{CC}=5\text{V}, I_F=20\text{mA}, R_L=100\Omega$
	Fall time	$t_f$	10	-	$\mu\text{s}$	
Cut-off frequency	$f_c$	-	1	-	MHz	$I_F=50\text{mA}$
Peak light emitting wavelength	$\lambda_P$	-	950	-	nm	* Non-coherent infrared light emitting diode used.
Response time	$t_r \cdot t_f$	-	10	-	$\mu\text{s}$	$V_{CC}=5\text{V}, I_c=1\text{mA}, R_L=100\Omega$ * This product is not designed to be protected against electromagnetic wave.
Maximum sensitivity wavelength	$\lambda_P$	-	800	-	nm	-

### Electrical and optical characteristics curves

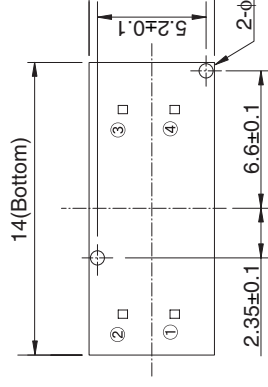
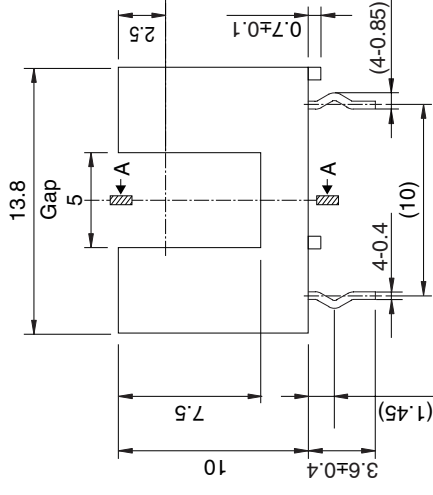
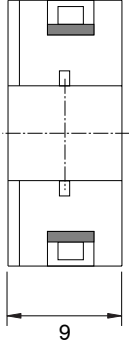


### Applications

Printers  
Facsimiles  
AV equipment

### Features

- 1) Heat resistance (170°C).
- 2) Small gap (0.5mm) and good accuracy.
- 3) Quick response time.
- 4) Filter against visible ray is built-in.
- 5) Kinked forming.



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