

Photointerrupters(Transmissive)

SG 233

The SG 233 photointerrupter high - performance standard type,combines high - output GaAs IRED with high sensitive phototransistor.

FEATURES

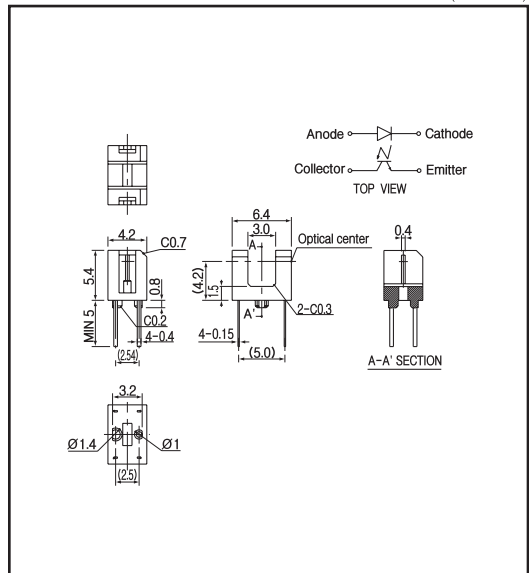
- PWB direct mount type
- GAP : 3.0mm
- With the installation positioning boss
- Compact

APPLICATIONS

- VTR
- Cassette mecha
- Car stereo
- Printers

DIMENSIONS

(Unit : mm)



MAXIMUM RATINGS

(Ta=25°C)

	Item	Symbol	Rating	Unit
Input	Power dissipation	P _D	75	mW
	Forward current	I _F	50	mA
	Reverse voltage	V _R	5	V
	Pulse forward current ^{*1}	I _{FP}	0.5	A
Output	Collector power dissipation	P _C	75	mW
	Collector current	I _C	20	mA
	C - E voltage	V _{CEO}	30	V
	E - C voltage	V _{ECO}	5	V
	Operating temp. ^{*2}	Topr.	-20~+85	°C
	Storage temp. ^{*2}	Tstg.	-30~+100	°C
	Soldering temp. ^{*3}	Tsol.	260	°C

*1. pulse width : t_w ≤ 100 μsec, period : T = 10msec.

*2. No icebound or dew *3. For MAX.5 seconds at the position of 1mm from the package

ELECTRO-OPTICAL CHARACTERISTICS

(Ta=25°C)

	Item	Symbol	Conditions	Min.	Typ.	Max.	Unit.
Input	Forward voltage	V _F	I _F = 20mA		1.2	1.4	V
	Reverse current	I _R	V _R = 5V			10	μA
	Peak wavelength	λ _p	I _F = 20mA		940		nm
Output	Collector dark current	I _{CEO}	V _{CE} = 10V		1	100	nA
	Light current	I _L	I _F = 20mA, V _E = 5V, (Nonshading)	0.2		5	mA
Transmissio	leakage current	I _{CEO}	I _F = 20mA, V _E = 5V, (shading)		0.5	10	μA
	C - E saturation voltage	V _{CE(sat)}	I _F = 20mA, I _C = 0.05mA		0.15	0.4	V
	Rise time	t _r	V _{CC} = 5V, I _C = 0.1mA, R = 1KΩ		50		μsec.
	Fall time	t _f			50		μsec.