

# SG215

The SG215 photo interrupter high-performance standard type, combines high-output GaAs IRED with high sensitive phototransistor.

**Features**

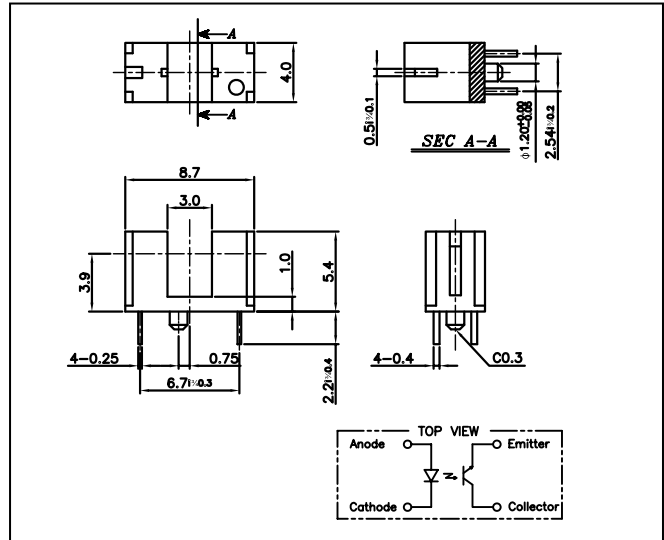
- PWB direct mount type
- High performance
- High speed response
- 3.0mm gap
- Widely applicable

**Applications**

- VTR
- Cassette mecha
- Printers
- Copiers

**Dimensions**

(Unit : mm)



**Absolute Maximum Ratings**

[Ta = 25°C ]

Description		Symbol	Ratings	Unit
Input	Power dissipation	$P_D$	75	mW
	Forward current	$I_F$	50	mA
	Reverse voltage	$V_R$	5	V
	Pulse forward current *1	$I_{FP}$	-	A
Output	Collector power dissipation	$P_C$	75	mW
	Collector current	$I_C$	20	mA
	Collector-Emitter voltage	$V_{CEO}$	30	V
	Emitter-Collector voltage	$V_{ECO}$	5	V
Operating temp.		Topr.	-20~+75	°C
Storage temp.		Tstg.	-40~+75	°C
Soldering temp. *2		Tsol.	270	°C

\*1. Input current with 10 $\mu$ s, T=10ms.

\*2. Distance from end of the package = 2.0mm, time=5sec, MAX.

**Electro-Optical Characteristics**

[Ta = 25°C]

Parameter		Symbol	Conditions	Min.	Typ.	Max.	Unit.
Input	Forward voltage	$V_F$	$I_F=30mA$	-	1.2	1.5	V
	Reverse current	$I_R$	$V_R=5V$	-	-	10	$\mu A$
	Peak wavelength	$\lambda_p$		-	940	-	nm
Output	Collector dark current	$I_{CEO}$	$V_{CE}=10V, 0 I_x$	-	-	0.1	$\mu A$
Transmission	Collector current	$I_C$	$V_{CE}=5V, I_F=20mA$ (Non-Shading)	0.7	-	14	mA
	Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_F=20mA, I_C=0.1mA$	-	-	0.4	V
Response Time	Rise time	$t_r$	$V_{CC}=10V, I_C=0.5mA$	-	10	-	$\mu s$
	Fall time	$t_f$	$R_L=100\Omega$	-	15	-	$\mu s$