

SML070CG4-TR

Hi-Eff Green

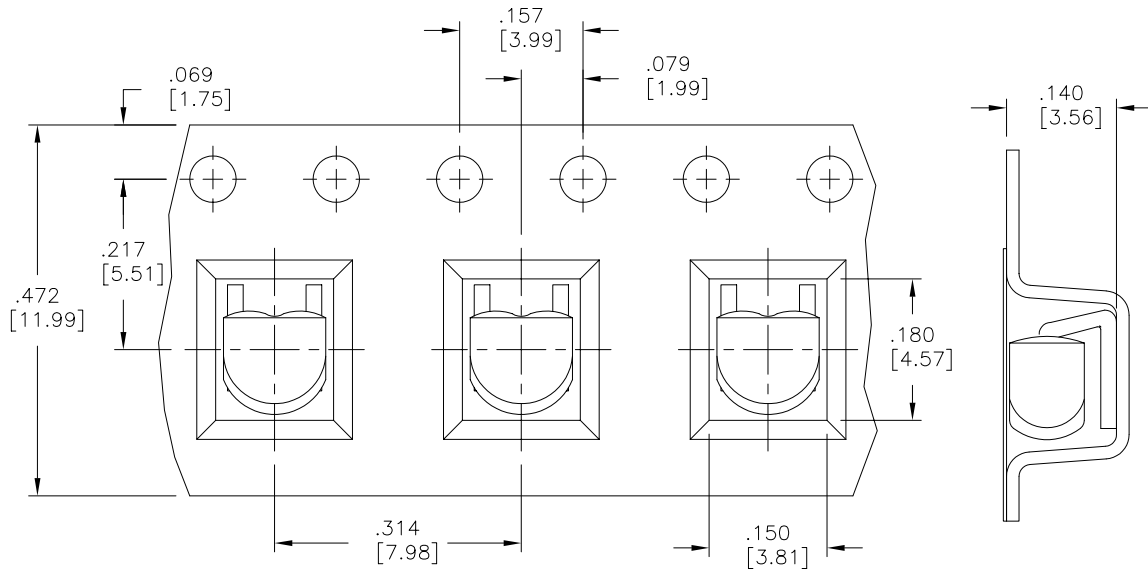
3.3×3.1×2.4mm Right-Angled SMD

100° viewing angle

DWG BY:
GP
12-22-11

CHK BY:
PL
12-22-11

REVISION LTR: -
12-22-11



● **Notes:**

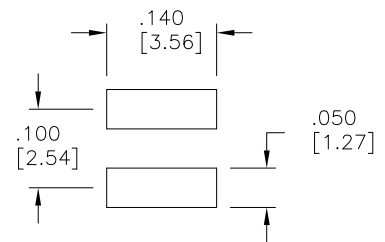
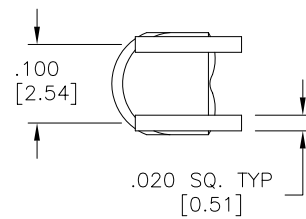
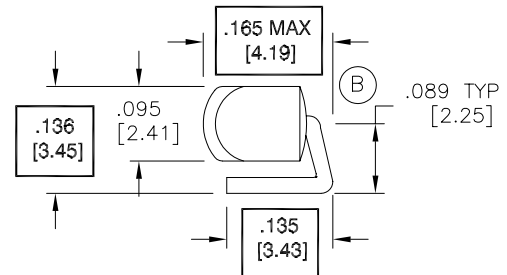
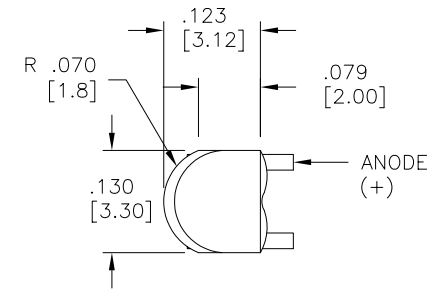
1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25\text{mm}$ (0.01") unless otherwise specified.
3. Lead spacing is measured where the leads emerge from the package.
4. Specifications are subject to change without notice.

● **Features:**

1. Chip material: GaP/GaP
2. Emitted color : Hi-Eff Green
3. Lens Appearance : Green Transparent

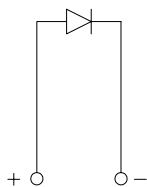
● **Tape & Reel Specifications:**

1. Reel Size: 13" Dia.
2. Parts per Reel: 2500



RECOMMENDED PAD LAYOUT

CIRCUIT DIAGRAM



● Absolute maximum ratings(Ta=25°C)

Parameter	Symbol	Rating	Unit
Power Dissipation	Pd	80	mW
Forward Current	I _F	30	mA
Peak Forward Current* ¹	I _{FP}	150	mA
Reverse Voltage	V _R	5	V
Operating Temperature	Topr	-40°C~85°C	
Storage Temperature	Tstg	-40°C~100°C	
Soldering Temperature	Tsol	260°C max (for 5 seconds)	
Hand Soldering Temperature	Tsol	350°C max(for 3 seconds)	

*¹Condition for I_{FP} is pulse of 1/10 duty and 0.1msec width.

● Electrical and optical characteristics(Ta=25°C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V _F	I _F =2mA	-	1.9	2.4	V
Luminous Intensity	I _v	I _F =2mA	-	2.3	-	mcd

● Electrical and optical characteristics(Ta=25°C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V _F	I _F =20mA	-	2.2	2.6	V
Luminous Intensity	I _v	I _F =20mA	-	30	-	mcd
Reverse Current	I _R	V _R =5V	-	-	100	μA
Peak Wave Length	λ _p	I _F =20mA	560	565	570	nm
Dominant Wave Length	λ _d	I _F =20mA	565	570	574	nm
Spectral Line Half-width	Δλ	I _F =20mA	-	29	-	nm
Viewing Angle	2θ _{1/2}	I _F =20mA	-	100	-	deg
Chromaticity Coordinates	X	I _F =20mA	-	0.45	-	
	Y		-	0.55	-	

● **Typical electro-optical characteristics curves**

Fig.1 Relative intensity vs. Wavelength

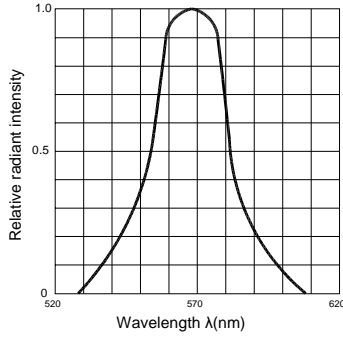


Fig.2 Forward current derating curve vs. Ambient temperature

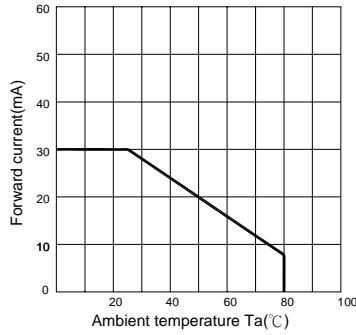


Fig.3 Forward current vs. Forward voltage

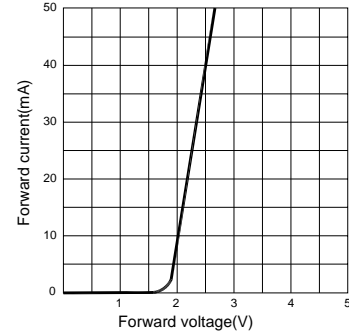


Fig.4 Relative luminous intensity vs. Ambient temperature

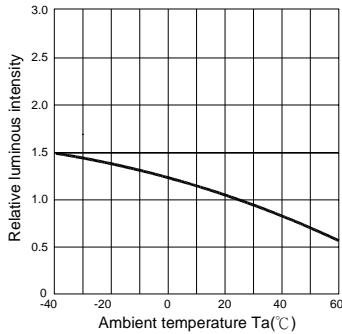


Fig.5 Relative luminous intensity vs. Forward current

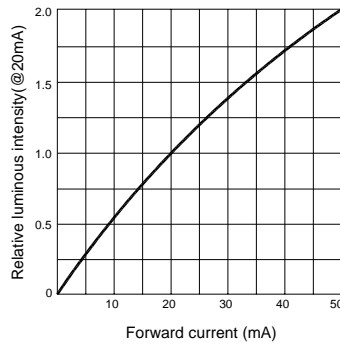
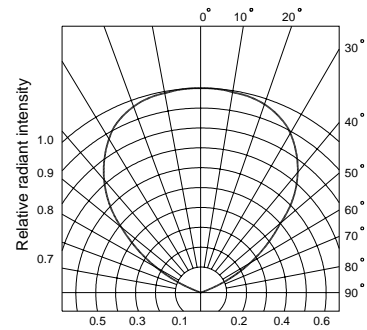


Fig.6 Radiation diagram



● **DIP soldering (Wave Soldering)**

Preheating : 120°C, within 120~180 sec.
 Operation heating : 255°C ±5°C within 5 sec. 260°C (Max)
 Gradual Cooling (Avoid quenching).

