

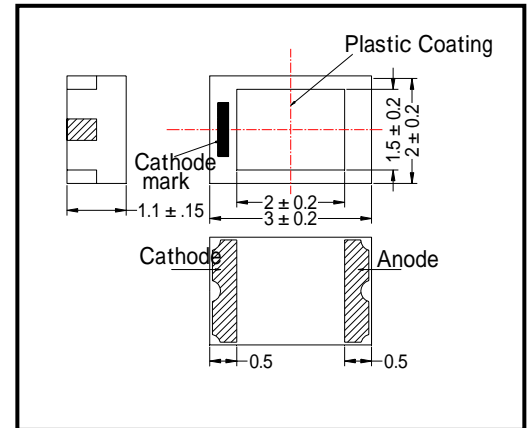
SMC1050 High Performance infrared SMD LED on ceramics

SMC1050 consists of an AlGaAs LED mounted on the ceramics package and is sealed with silicone or epoxy resin. It emits a spectral band of radiation at 1050nm.

Specifications

- 1)Product Name SMD type infrared LED
- 2)Type No. SMC1050
- 3)Chip
 - (1)Chip Material GaAs
 - (2)Peak Wavelength 1050nm typ.
- 4)Package
 - (1)Package Ceramics
 - (2)Lens Silicone or Epoxy resin

Outer dimension (Unit : mm)



Absolute Maximum Rating

Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	P _D	140	mW	T _a =25
Forward Current	I _F	100	mA	T _a =25
Pulse Forward Current	I _{FP}	500	mA	T _a =25
Reverse Voltage	V _R	5	V	T _a =25
Operating Temperature	T _{OPR}	-20 ~ +85		
Storage Temperature	T _{STG}	-30 ~ +100		
Soldering Temperature	T _{SOL}	240		

‡Pulse Forward Current condition : Duty=1% and Pulse Width=1us.

‡Soldering condition : Soldering condition must be completed within 3 seconds at 260

Electro-Optical Characteristics

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V _F	I _F =50mA		1.30	1.45	V
Reverse Current	I _R	V _R =5V			10	uA
Total Radiated Power	P _O	I _F =50mA		0.5		mW
Radiant Intensity	I _E	I _F =50mA		0.2		mW/sr
Peak Wavelength	λ _P	I _F =50mA	1000	1050	1100	nm
Half Width		I _F =50mA		70		nm
Viewing Half Angle		I _F =50mA		± 55		deg.
Rise Time	t _r	I _F =50mA				ns
Fall Time	t _f	I _F =50mA				ns

‡Total Radiated Power is measured by Photodyne #500

‡Radiant Intensity is measured by Tektronix J-6512.