

**SMC1300**

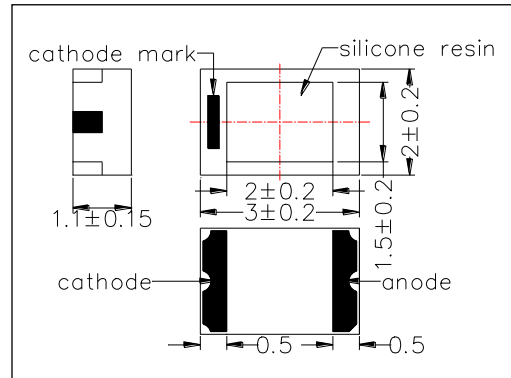
High Performance Infrared SMD LED on Ceramics

SMC1300 consists of an InGaAsP LED mounted on the ceramics package and is sealed with silicone or epoxy resin. It emits a spectral band of radiation at 1300nm.

Outer Dimension (Unit:mm)

<Specifications>

1. Product Name: SMD type Infrared LED
2. Type Number: SMC1300
3. Chip:
  - Chip Material: InGaAsP
  - Peak Wavelength: 1300nm type
4. Package
  - Package: Ceramics
  - Lens: Silicone or Epoxy Resin



Absolute Maximum Ratings				
Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	PD	120	mW	Ta=25°C
Forward Current	IF	100	mA	Ta=25°C
Pulse Forward Current*	IFP	1	mA	Ta=25°C
Reverse Voltage	VR	5	V	Ta=25°C
Operating Temperature	TOPR	-20 ~ +85	°C	
Storage Temperature	TSTG	-30 ~ +100	°C	
Soldering Temperature**	TSOL	240	°C	

\* Duty=1% and Pulse Width=10us

\*\* Soldering condition must be completed within 3 seconds at 240 °C

Electro-Optical Characteristics [Ta=25°C typ.]						
Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=50mA		1.0	1.5	V
Reverse Current	IR	VR=5V			10	uA
Radiated Power*	PO	IF=50mA		0.5		mW
Radiant Intensity	IE	IF=50mA				mW/sr
Peak Wavelength	λP	IF=50mA	1250	1300	1350	nm
Half Width	Δλ	IF=50mA		100		nm
Viewing Half Angle	θ1/2	IF=50mA		±55		deg
Rise Time	tr	IF=50mA		10		ns
Fall Time	tf	IF=50mA		10		ns

\* Measured by Ando AQ2140/2742

