

## SMC880

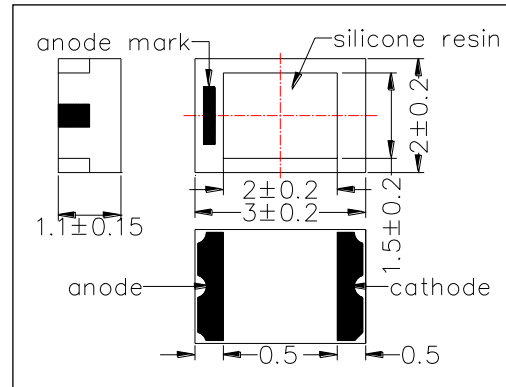
### High Performance Infrared SMD LED on Ceramics

SMC880 consists of an AlGaAs LED mounted on the ceramics package and is 40mW typical of output power. It emits a spectral band of radiation at 880nm and is sealed with silicone or epoxy resin.

<Specifications>

1. Product Name: SMD type Infrared LED
2. Type Number: SMC880
3. Chip:
  - Chip Material: AlGaAs(DDH)
  - Chip Demension: 0.4mm x 0.4mm
  - Peak Wavelength: 885nm type
4. Package
  - Package: Ceramics
  - Lens: Silicone or Epoxy Resin

Outer Dimension (Unit:mm)



Absolute Maximum Ratings				
Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	PD	160	mW	Ta=25°C
Forward Current	IF	100	mA	Ta=25°C
Pulse Forward Current*	IFP	1000	mA	Ta=25°C
Reverse Voltage	VR	5	V	Ta=25°C
Operating Temperature	TOPR	-20 ~ +80	°C	
Storage Temperature	TSTG	-30 ~ +80	°C	
Soldering Temperature**	TSOL	250	°C	

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

\*\* Soldering condition must be completed within 5 seconds at 250 °C

Electro-Optical Characteristics[Ta=25°C]						
Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=50mA DC		1.45	1.60	V
		IF=100mA, tp=20ms		1.50	1.8	
Reverse Current	IR	VR=5V			10	uA
Radiated Power*	PO	IF=50mA DC	15.0	20.0		mW
		IF=100mA, tp=20ms		40.0		
Radiant Intensity**	IE	IF=50mA DC		11		mW/sr
		IF=100mA, tp=20ms		22		
Peak Wavelength	λP	IF=50mA DC	875	885	895	nm
Half Width	Δλ	IF=50mA DC		40		nm
Viewing Half Angle	θ1/2	IF=50mA DC		±55		deg
Rise Time	tr	IF=50mA DC		15		ns
Fall Time	tf	IF=50mA DC		10		ns

\* Measured by Photodyne #500

\*\* Measured by Tektronix J-6512

