

SMC890

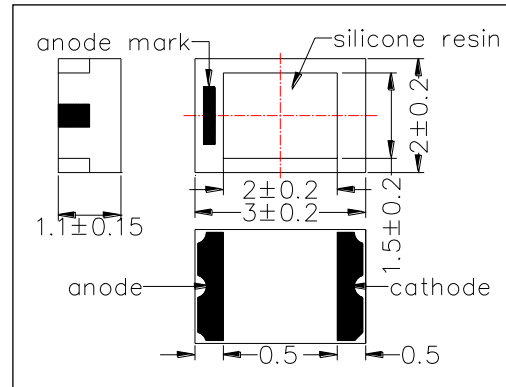
High Performance Infrared SMD LED on Ceramics

SMC890 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 885nm.

<Specifications>

1. Product Name: SMD type Infrared LED
2. Type Number: SMC890
3. Chip:
 - Chip Material: AlGaAs
 - Chip Dimension: 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	150	mW	Ta=25°C
Forward Current	IF	100	mA	Ta=25°C
Pulse Forward Current*	IFP	500	mA	Ta=25°C
Reverse Voltage	VR	5	V	Ta=25°C
Operating Temperature	TOPR	-40 ~ +80	°C	
Storage Temperature	TSTG	-40 ~ +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 typ.]						
Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=50mA		1.45	1.70	V
Reverse Current	IR	VR=5V			10	uA
Radiated Power*	PO	IF=50mA	4.0	8.0		mW
Radiant Intensity**	IE	IF=50mA	2.0	4.0		mW/sr
Peak Wavelength	λP	IF=50mA	875	885	895	nm
Half Width	Δλ	IF=50mA		75		nm
Viewing Half Angle	θ1/2	IF=50mA		±55		deg
Rise Time	tr	IF=50mA		800		ns
Fall Time	tf	IF=50mA		400		ns

* Measured by Photodyne #500

** Measured by Tektronix J-6512

