

SMC830

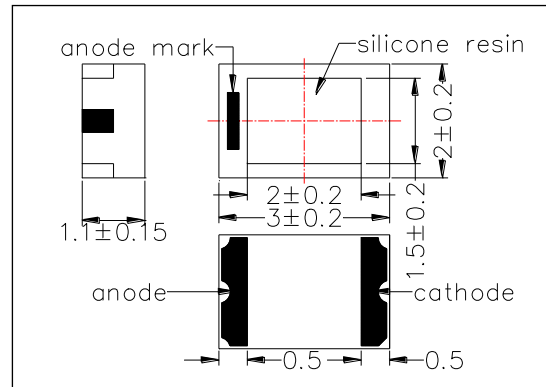
High Performance Infrared SMD LED on Ceramics

SMC830 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 830nm.

<Specifications>

1. Product Name: SMD type Infrared LED
2. Type Number: SMC830
3. Chip:
 - Chip Material: AlGaAs
 - Peak Wavelength: 830nm 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	190	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]						
Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=50mA		1.60	1.80	V
Reverse Current	IR	VR=5V			10	uA
Radiated Power*	PO	IF=50mA	5.0	10.0		mW
Radiant Intensity**	IE	IF=50mA	3.0	5.0		mW/sr
Peak Wavelength	λP	IF=50mA	815	830	845	nm
Half Width	Δλ	IF=50mA		35		nm
Viewing Half Angle	θ1/2	IF=50mA		±55		deg
Rise Time	tr	IF=50mA		60		ns
Fall Time	tf	IF=50mA		40		ns

* Measured by Photodyne #500

** Measured by Tektronix J-6512

