

SMC770

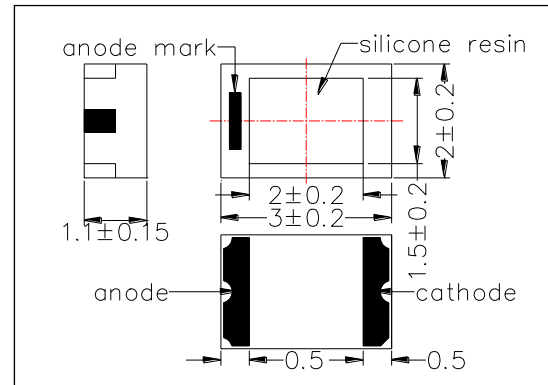
High Performance Infrared SMD LED on Ceramics

SMC770 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 770nm.

<Specifications>

1. Product Name: SMD type Infrared LED
2. Type Number: SMC770
3. Chip:
 - Chip Material: AlGaAs
 - Chip Dimension: 0.4mm x 0.4mm
 - Peak Wavelength: 770nm type
4. Package
 - Package: Ceramics
 - Lens: Silicone 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	-30 ~ +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		1.75	1.95	V
Reverse Current	IR	VR=5V			10	uA
Radiated Power*	PO	IF=50mA	5.0	10.0		mW
Radiant Intensity**	IE	IF=50mA	2.0	5.0		mW/sr
Peak Wavelength	λP	IF=50mA	765	780	795	nm
Half Width	Δλ	IF=50mA		35		nm
Viewing Half Angle	θ1/2	IF=50mA		±55		deg
Rise Time	tr	IF=50mA		80		ns
Fall Time	tf	IF=50mA		80		ns

* Measured by Photodyne #500

** Measured by Tektronix J-6512

