

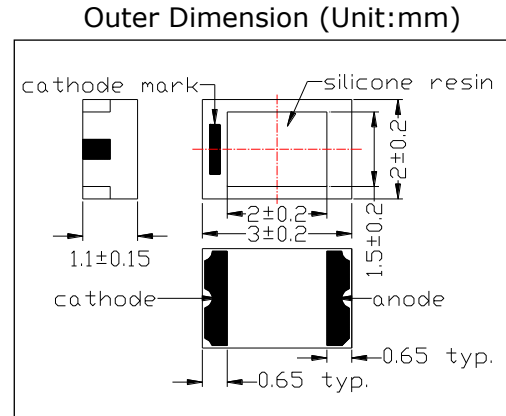
SMC405

UV Color SMD LED on Ceramics

SMC405 consists of an InGaN LED mounted on the ceramics package and is sealed with silicone resin. It emits a spectral band of radiation at 405nm.

<Specifications>

1. Product Name: SMD type UV Color LED
2. Type Number: SMC405
3. Chip:
 - Chip Material: InGaN
 - Peak Wavelength: 405nm type
4. Package
 - Lead Frame Die: Ceramics
 - Lens: Silicone Resin



Absolute Maximum Ratings				
Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	PD	110	mW	Ta=25°C
Forward Current	IF	50	mA	Ta=25°C
Reverse Voltage	VR	5	V	Ta=25°C
Junction Temperature	Tj	100	°C	
Thermal Resistance	Rthja	190	K/W	
Operating Temperature	TOPR	-20 ~ +80	°C	
Storage Temperature	TSTG	-30 ~ +80	°C	
Soldering Temperature*	TSOL	250	°C	

* 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=20mA		3.5	4.0	V
Reverse Current	IR	VR=5V			10	uA
Radiated Power*	PO	IF=20mA	6	12		mW
Brightness**	IV	IF=20mA		10		mcd
Peak Wavelength	λP	IF=20mA	395	405	415	nm
Half Width	Δλ	IF=20mA		15		nm
Viewing Half Angle	θ1/2	IF=20mA		±55		deg

* Measured by Ando Optical Multi Meter AQ2140&AQ2741

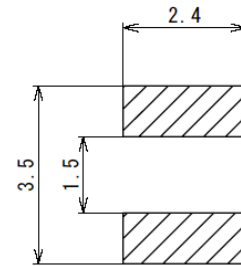
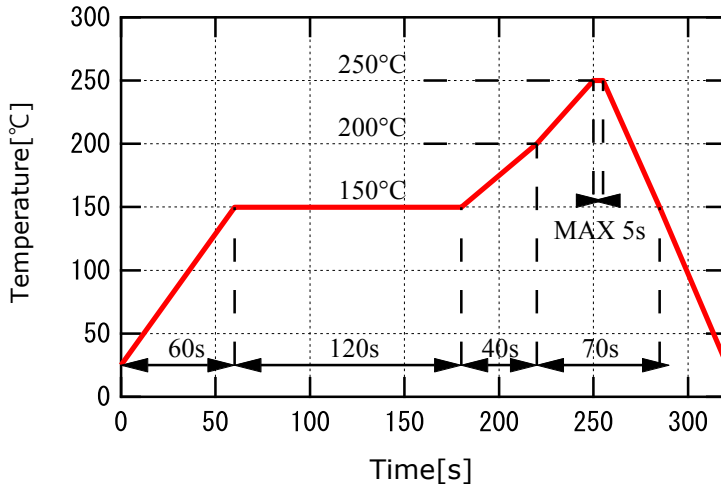
** Measured by Tektronix J-16



SMD Application

IR-Reflow Soldering Profile for Lead Free Soldering

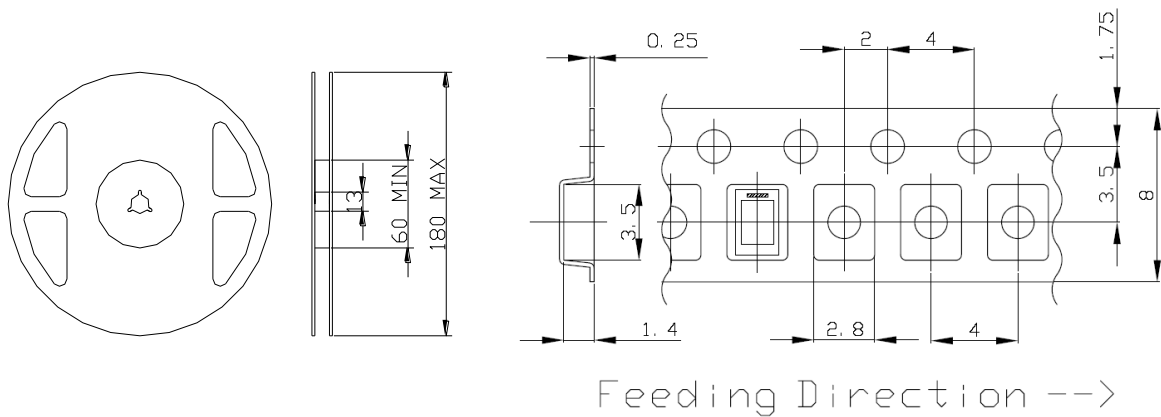
Recommended Land layout (Unit:mm)



Don't put stress on SMD and a circuit board after soldering

SMD Packing

Tape and Reel Dimensions (Unit:mm)



Feeding Direction -->

Wrapping

Moisture barrier bag aluminum laminated film with a desiccant to keep out the moisture absorption during the transportation and storage.

Disclaimer

Product specifications and data shown in this product catalog are subject to change without notice for the purposes of improving product performance, reliability, design, or otherwise.

Product data and parameters in this catalog are typical values based on reasonably up-to-date measurements. Product data and parameters may vary by user application and over time.

Products shown in this catalog are intended to be used for general electronic equipment. Products are not guaranteed for applications where product malfunction or failure may cause personal injury or death, including but not limited to life-supporting / saving devices, medical devices, safety devices, airplanes, aerospace equipment, automobiles, traffic control systems, and nuclear reactor control systems.

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