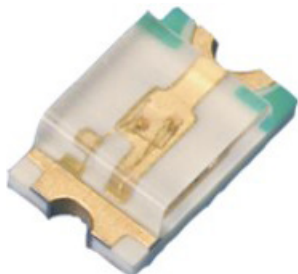


RoHS
Compliant



Features

- 1mm × 0.5mm SMD LED, 0.4mm thickness
- Low power consumption
- Wide view angle

Applications

- Ideal for Back light and indicator
- Various colours and lens types available

Specifications

Emitted colour : Red
Dice : AlGaInP
Lens colour : Water transparent

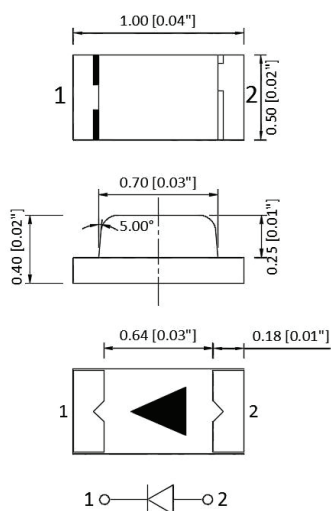
Absolute Maximum Ratings: (T_A = 25°C)

Parameter	Symbol	Value	Unit
Forward current	I _f	25	mA
Reverse voltage	V _r	5	V
Power dissipation	P _d	60	mW
Operating Temperature	T _{op}	-40 to +85	°C
ESD (Huma-body mode)	-	4	KV
Storage Temperature	T _{STG}	-40 to +85	°C
Peak pulsing current (1/8 duty f=1kHz)	I _{fp}	125	mA

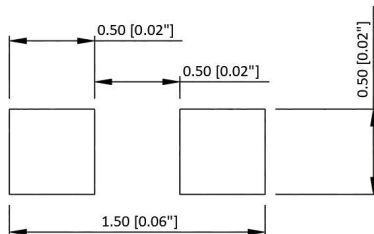
Electrical / Optical Characteristics at T_A = 25°C

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Wavelength at peak emission	λ _p	I _F =20mA	-	648	-	nm
Spectral half-bandWidth	Δλ		-	18	-	
Dominant wavelength	λ _d		630	-	640	
Forward Voltage	V _f		1.8	-	2.4	V
Luminous intensity	I _v		50	80	160	mcd
Viewing Angle at 50% I _v	2θ _{1/2}		-	120	-	Deg.
Reverse Current	I _r	V _r =5V	-	-	10	μA

Package Outlines



Recommend Pad Layout

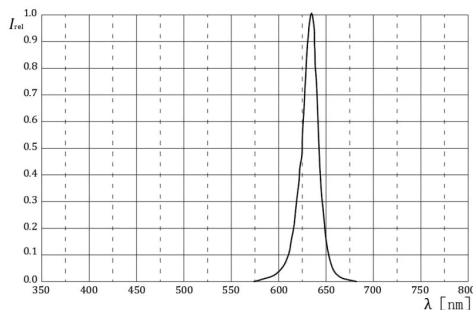


Dimensions : Millimetres (Inches)

Typical Electrical/Optical Characteristics Curves

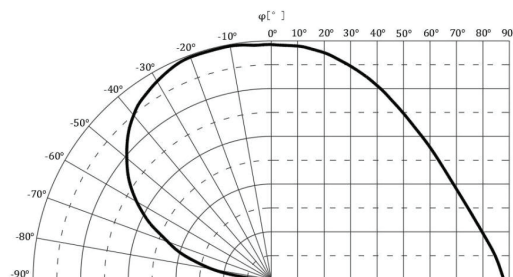
Relative Spectral Emission

$I_F=20\text{mA}$, $T_a=25^\circ\text{C}$



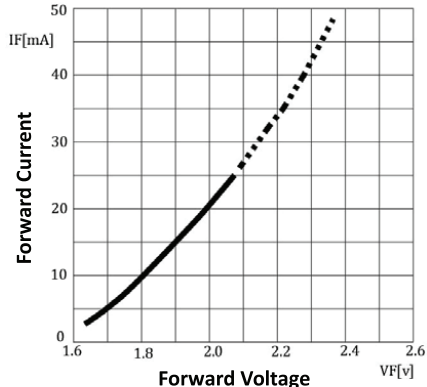
Radiation Characteristics

$I_F=10\text{mA}$, $T_a=25^\circ\text{C}$

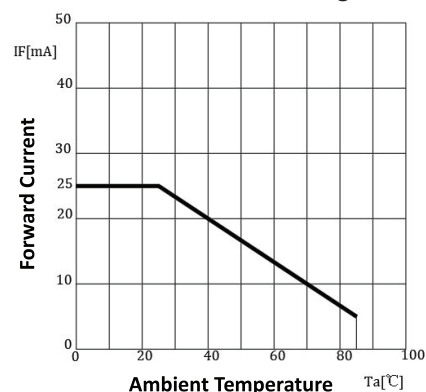


Forward Current vs Forward Voltage

$T_a=25^\circ\text{C}$

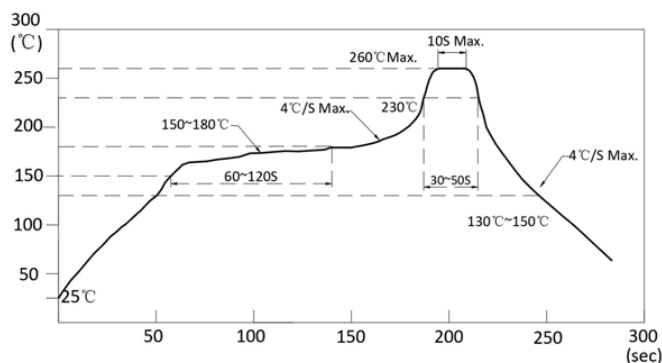


Forward Current Derating Curve



Reflow Profile

Reflow Temp/Time



Notes:

- We recommend the reflow temperature 245°C (±5°C). The maximum soldering temperature should be limited to 260°C.
- Don't cause stress to the epoxy resin while it is exposed to high temperature.
- Number of reflow process shall be 2 times or less.

Part Number Table

Description	Part Number
Single Colour LED, 0402, Red	MP017022

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