

RoHS
Compliant



Features

- 1.6mm × 1.5mm SMD LED, 0.6mm thickness
- Low power consumption
- Wide view angle

Applications

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

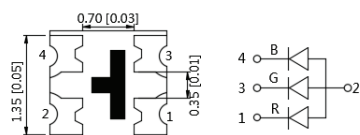
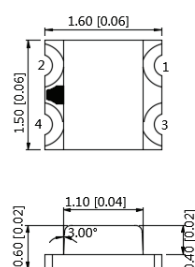
Specifications

Emitting Colour : Red/Green/Blue
Lens Colour : Water transparent
Material : AlGaInP/ InGaN/GaN / InGaN/GaN

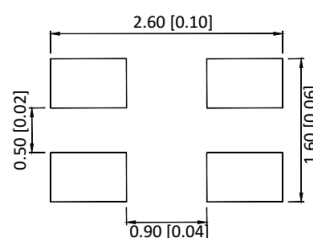
Absolute Maximum Ratings: (T _A = 25°C)					
Parameter	Symbol	Red	Green	Blue	Unit
Forward current	I _F	30			mA
Reverse voltage	V _R	5			V
Power Dissipation	P _D	72	111		mW
Operating Temperature	T _{op}	-40 to +85			°C
ESD(Human-body mode)	-	4	2		KV
Storage Temperature	T _{STG}	-40 to +85			°C
Peak pulsing current (1/8 duty f=1kHz)	I _{FP}	125			mA

Electro-Optical Characteristics at T _A = 25°C							
Parameter	Test Condition	Symbol		Min.	Typ.	Max.	Unit
Wavelength at peak emission	If=20mA	λp	Red	--	635	--	nm
			Green	--	520	--	
			Blue	--	464	--	
Spectral half bandwidth		Δλ	Red	--	20	--	
			Green	--	35	--	
			Blue	--	25	--	
Dominant wavelength		λd	Red	615	--	625	
			Green	520	--	530	
			Blue	465	--	475	
Forward Voltage		VF	Red	1.8	--	2.4	V
			Green	2.8	--	3.7	
			Blue	2.8	--	3.7	
Luminous Intensity		IV	Red	100	--	250	mcd
			Green	320	--	800	
			Blue	100	--	250	
Viewing angle at 50% Iv	If=10mA	2θ1/2		--	120	--	Deg.
Reverse current	Vr=5V	Ir		--	--	10	μA

Package outlines



Recommend Pad Layout



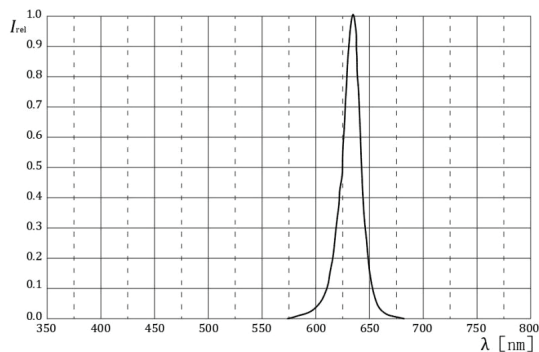
Tolerances are ±0.1mm (0.004inch) unless otherwise noted.

Dimensions : Millimetres (Inches)

Newark.com/multicomp-pro
Farnell.com/multicomp-pro
sg.element14.com/b/multicomp-pro

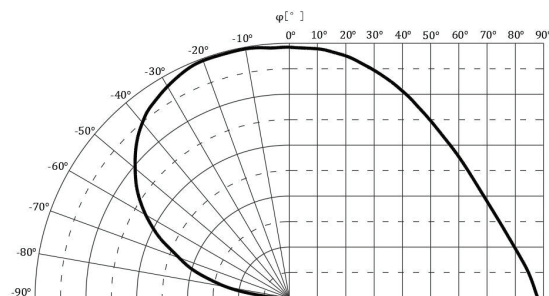
Relative Spectral Emission (Red)

IF=20mA, Ta=25°C



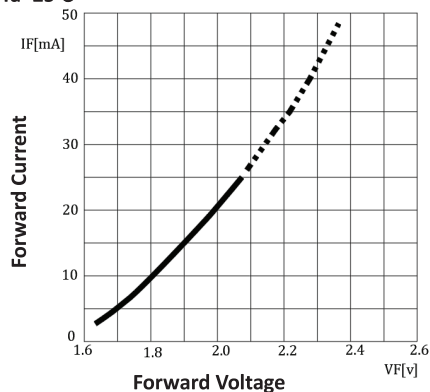
Radiation Characteristics

IF=10mA, Ta=25°C

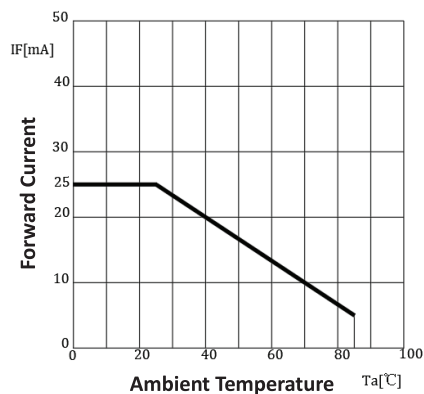


Forward Current vs Forward Voltage

Ta=25°C

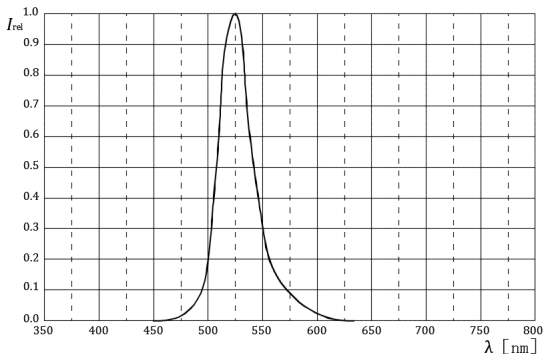


Forward Current Derating Curve



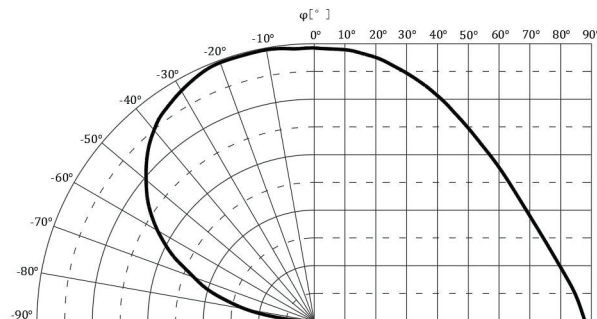
Relative Spectral Emission (Green)

IF=20mA, Ta=25°C



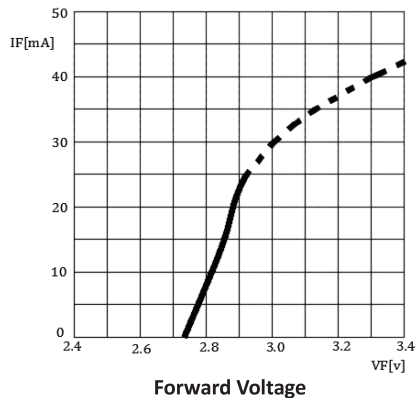
Radiation Characteristics

IF=10mA, Ta=25°C

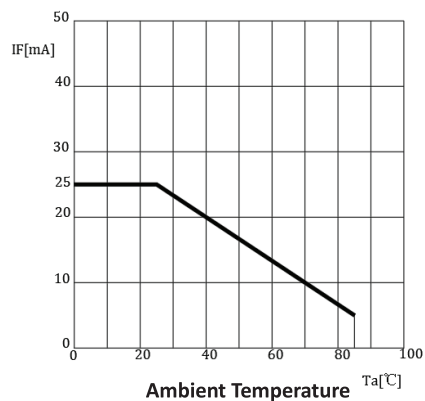


Forward Current vs Forward Voltage

Ta=25°C

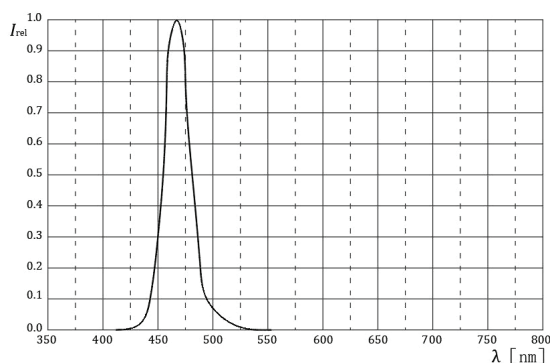


Forward Current Derating Curve



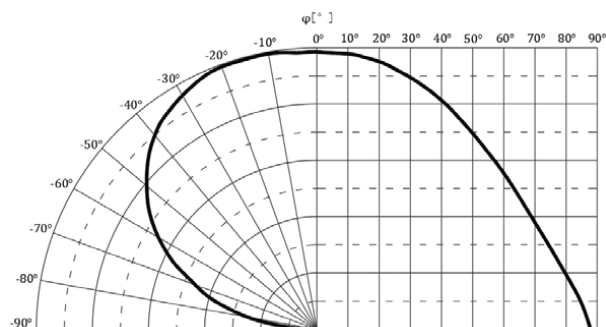
Relative Spectral Emission (Blue)

IF=20mA, Ta=25°C



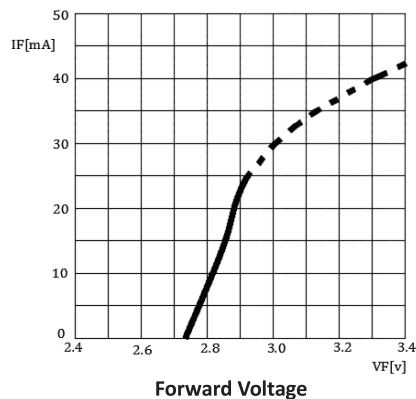
Radiation Characteristics

IF=10mA, Ta=25°C

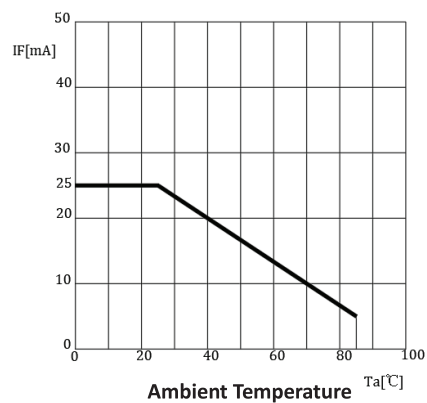


Forward Current vs Forward Voltage

Ta=25°C

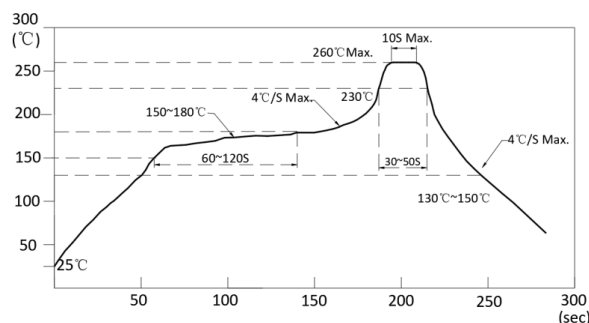


Forward Current Derating Curve



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
Multi Colour Led, Common Anode, Red, Green and Blue, SMD 1615, 0.6mm	MP017059

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