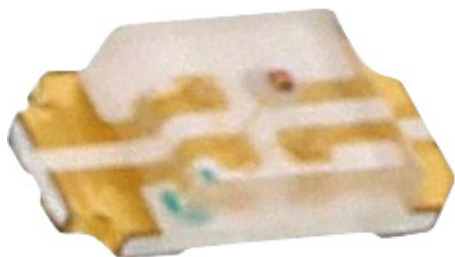


RoHS
Compliant



Features

- 3.2mm × 1.6mm SMD LED, 1.1mm thickness
- Low power consumption
- Wide view angle

Applications

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

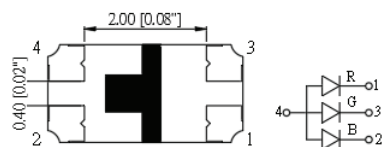
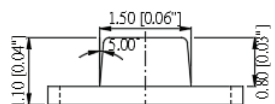
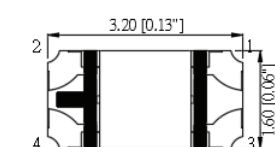
Specifications

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

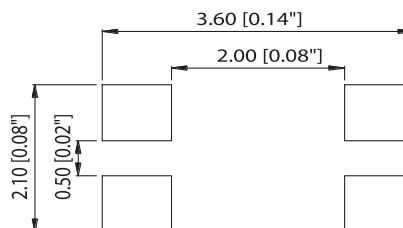
Absolute Maximum Ratings: (T _A = 25°C)					
Parameter	Symbol	Red	Green	Blue	Unit
Forward current	I _F	30			mA
Reverse voltage	V _R	5			V
Power Dissipation	P _D	72	111		mW
Operating Temperature	T _{op}	-40 to +85			°C
ESD(Human-body mode)	-	4	2		KV
Storage Temperature	T _{STG}	-40 to +85			°C
Peak pulsing 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	620	--	630		nm
			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	180	320	mcd	
			Green	320	500	800		
			Blue	100	150	250		
Viewing angle at 50% Iv	If=10mA	2θ1/2		--	120	--	Deg.	
Reverse current	Vr=5V	Ir		--	--	10	μA	

Package outlines



Recommend Pad Layout



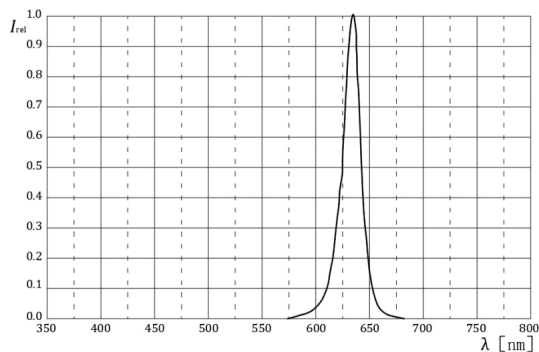
Tolerances are ± 0.1 mm (0.004inch) unless otherwise noted.

Dimensions : Millimetres (Inches)

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

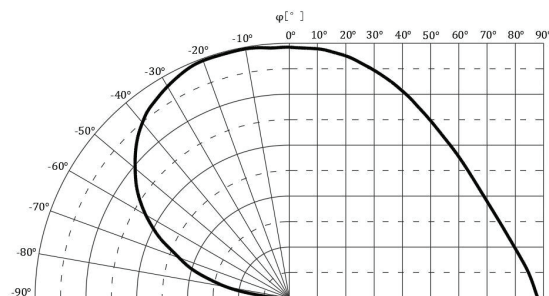
Relative Spectral Emission (Red)

IF=20mA, Ta=25°C



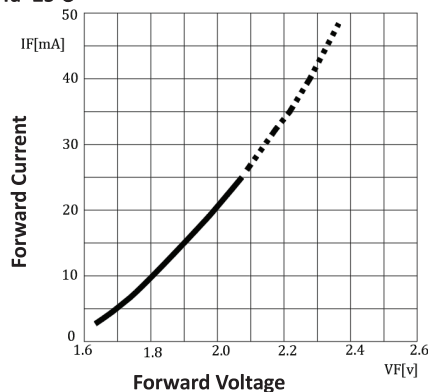
Radiation Characteristics

IF=10mA, Ta=25°C

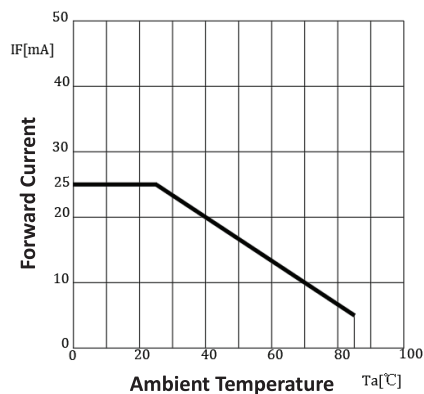


Forward Current vs Forward Voltage

Ta=25°C

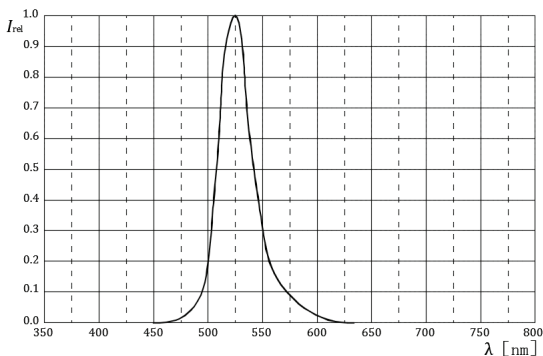


Forward Current Derating Curve



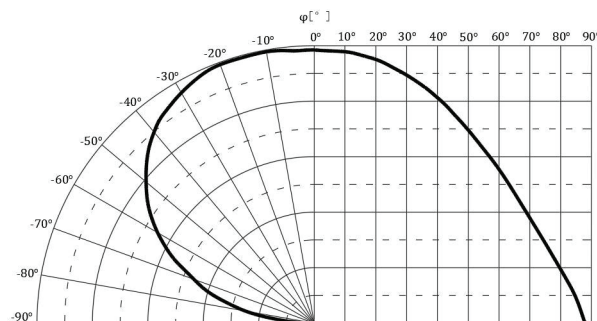
Relative Spectral Emission (Green)

IF=20mA, Ta=25°C



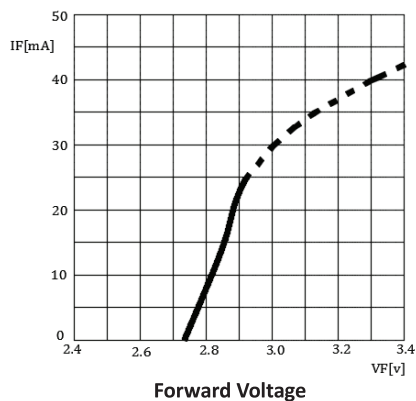
Radiation Characteristics

IF=10mA, Ta=25°C

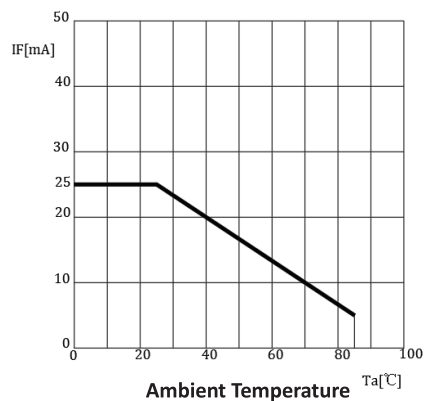


Forward Current vs Forward Voltage

Ta=25°C

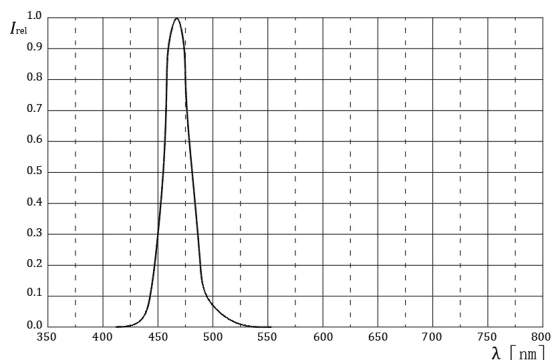


Forward Current Derating Curve



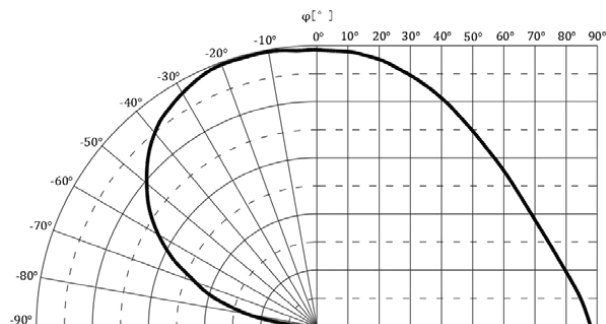
Relative Spectral Emission (Blue)

IF=20mA, Ta=25°C



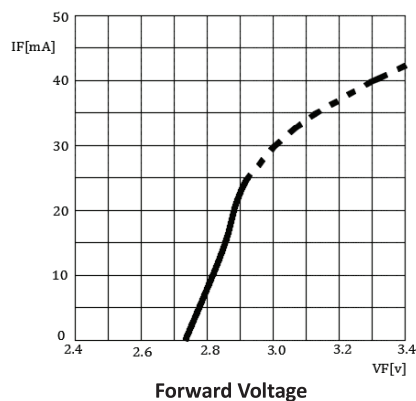
Radiation Characteristics

IF=10mA, Ta=25°C

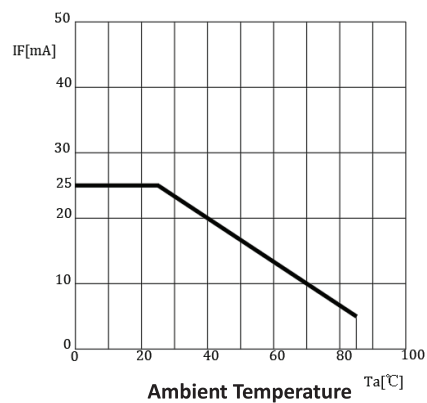


Forward Current vs Forward Voltage

Ta=25°C

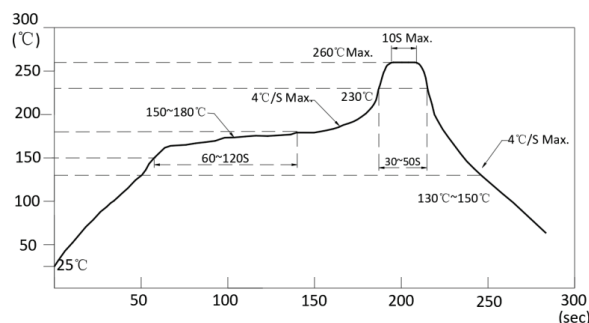


Forward Current Derating Curve



Reflow Profile

Reflow Temp/Time



Notes:

- We recommend the reflow temperature 245°C ($\pm 5^\circ\text{C}$). 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 1206, 1.1mm	MP017057

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