

Cylindrical LED

Super Blue, 3mm

multicomp^{PRO}

RoHS
Compliant

Specifications

Dice Material : InGaN
Emitted colour : Super Blue
Lens colour : Blue Diffused
Peak wavelength : 470nm
Viewing angle : 100°
Luminous intensity (IV) : 100mcd

Electrical / Optical Characteristics at Ta = 25°C						
Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Luminous Intensity	IV	70	100	140	mcd	IF = 20mA
Viewing Angle	2θ1/2		100		deg	
Peak Emission Wavelength	λp		470		nm	
Dominant Wavelength	λD	465	468	472	nm	
Spectral Line Half-Width	Δλ		45		nm	
Forward Voltage	VF	2.8	3.2	3.6	V	VR=5V
Reverse Current	Ir	-	-	10	uA	

▲ Luminous intensity (IV) ±10%, Forward Voltage (VF) ±0.1V, Wavelength (λd) ±0.5nm

Absolute Maximum Ratings: (Ta = 25°C)			
Parameter	Symbol	Rating	Unit
Power Dissipation	Pd	85	mW
Peak Forward Current (Duty 1/10 @ 1KHZ)	IF (Peak)	100	mA
Recommended Operating Current	IF (Rec)	30	mA
Electrostatic Discharge	ESD _{HBM}	200	V
Operating Temperature Range	T _{OPR}	-40 to +85	°C
Storage Temperature Range	T _{STG}	-40 to +100	°C
Lead Soldering Temperature Range (1.6 mm (1/16 inch) from body)	Reflow Soldering: 260°C for 5 sec. Hand Soldering: 350°C for 3 sec.		

Newark.com/multicomp-pro
Farnell.com/multicomp-pro
Element14.com/multicomp-pro

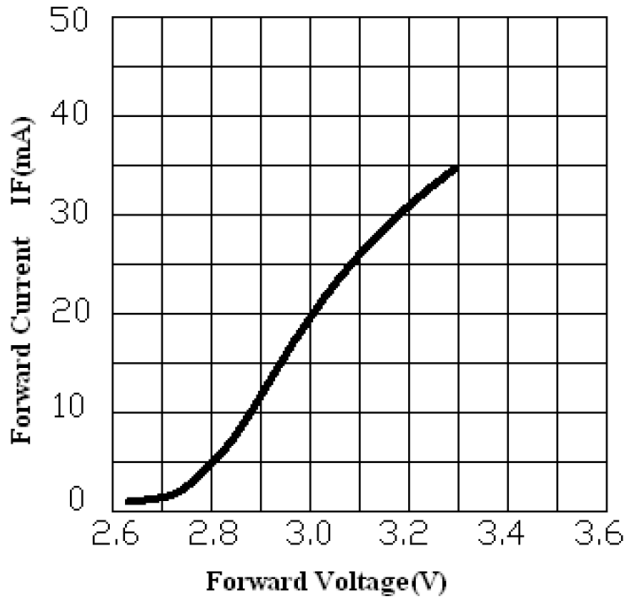
multicomp^{PRO}

Cylindrical LED

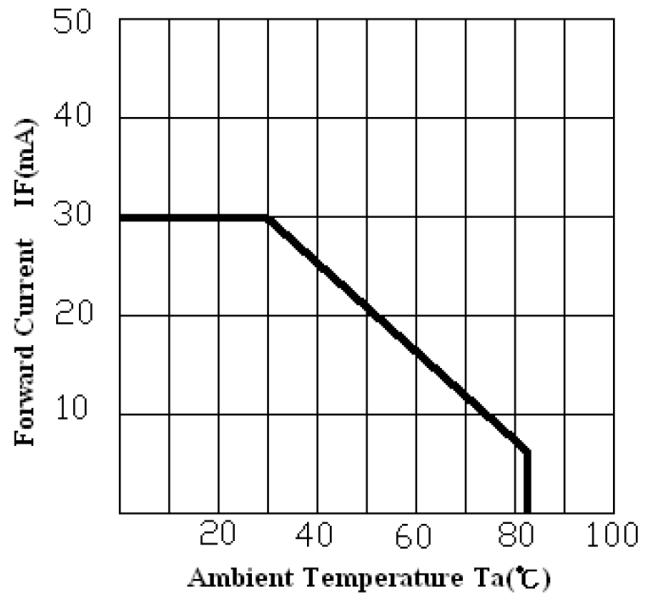
Super Blue, 3mm

Typical Electro-Optical Characteristics Curves

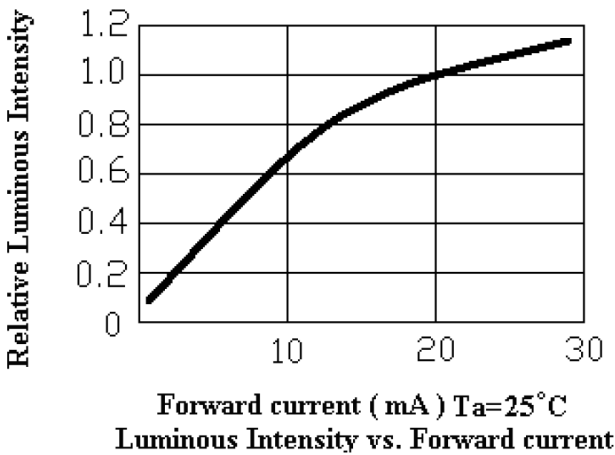
Super Blue (InGaN $\lambda_P=470\text{nm}$)



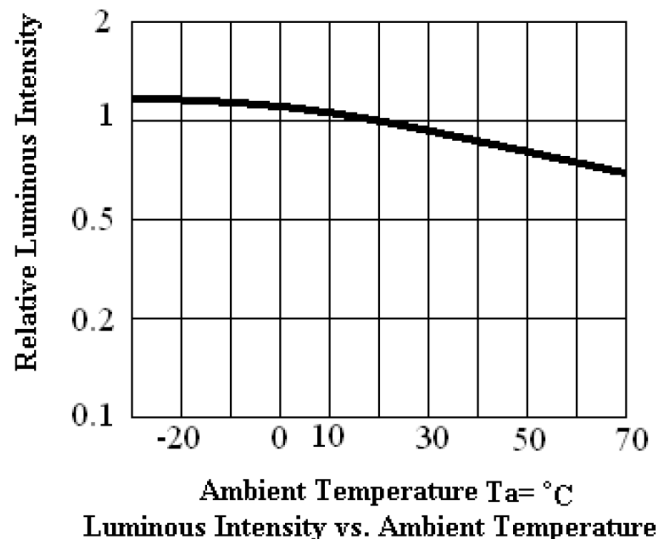
Forward Current vs. Forward Voltage



Forward Current Derating Curve



Luminous Intensity vs. Forward current

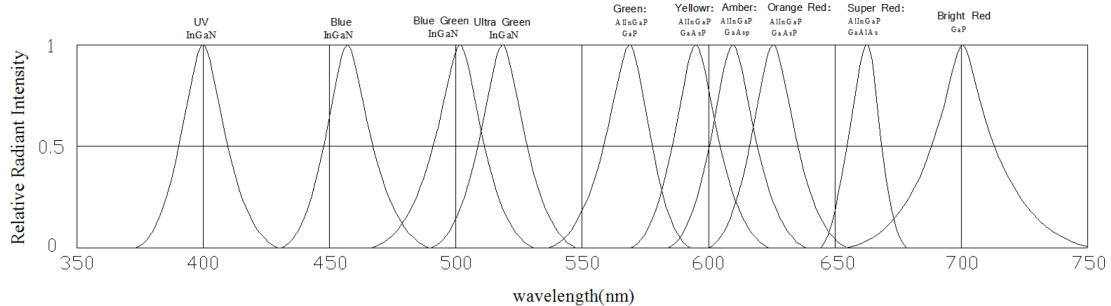


Luminous Intensity vs. Ambient Temperature

Cylindrical LED

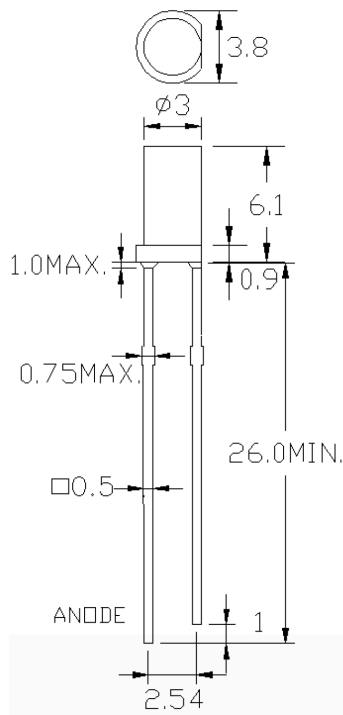
Super Blue, 3mm

multicomp PRO



Relative Intensity VS. wavelength

Dimensions



Dimensions : Millimetres

Part Number Table

Description	Part Number
Cylindrical LED, Super Blue, 470nm, 100°, 100mcd, Through hole	MP007985

Important Notice : This data sheet and its contents (the "Information") belong to the members of the AVNET group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp Pro is the registered trademark of Premier Farnell Limited 2019.

Newark.com/multicomp-pro
 Farnell.com/multicomp-pro
 Element14.com/multicomp-pro

multicomp PRO