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AUSTRIA



B5M-447-380S

- Ultraviolet Light Emitting Diode
- 380 nm, 100 mcd
- InGaN structure
- 5 mm epoxy package



Description

B5M-447-380S is an InGaN based UV LED, typically emitting at 380nm with a luminous intensity of 100 mcd. It comes in a hermetically sealed clear 5 mm epoxy resin.

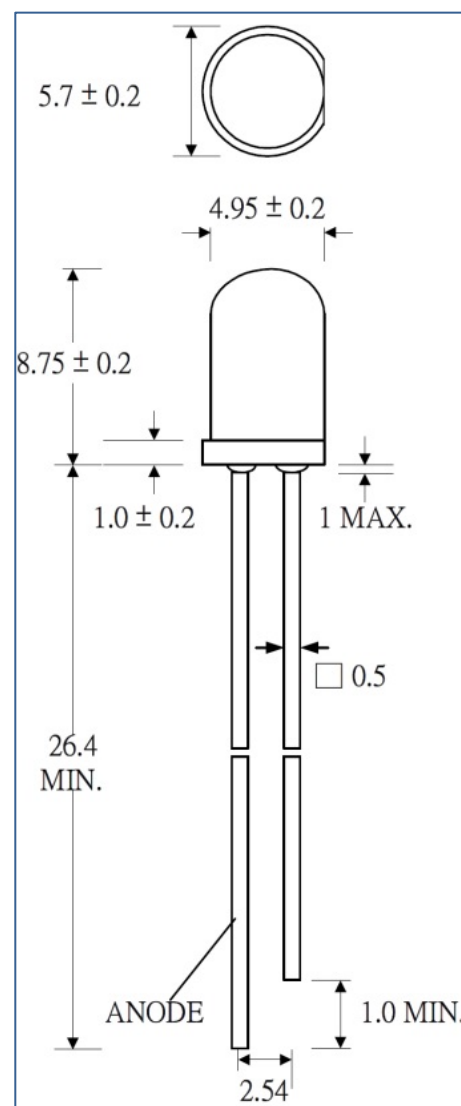
Maximum Rating ($T_{CASE} = 25^{\circ}C$)

Parameter	Symbol	Values		Unit
		Min.	Max.	
Power Dissipation, DC	P_D		120	mW
Pulse Forward Current*	I_{FP}		100	mA
Reverse Voltage	V_R		5.0	V
Operating Temperature	T_{OPR}	- 40	+ 85	$^{\circ}C$
Storage Temperature	T_{STG}	- 40	+ 100	$^{\circ}C$
Soldering Temperature (max 3s)	T_{SOL}		+ 260	$^{\circ}C$

* Duty cycle = 10% @ 1 kHz

Electro-Optical Characteristics ($T_{CASE} = 25^{\circ}C$, $I_F = 20$ mA)

Parameter	Symbol	Values			Unit
		Min.	Typ.	Max.	
Peak Wavelength	λ_P		380		nm
Spectral Width (FWHM)	$\Delta\lambda$		30		nm
Forward Voltage	V_F	2.8		3.6	V
Reverse Current ($V_R = 5V$)	V_R			10	μA
Luminous Intensity	I_V	50	100		mcd
Viewing Half Angle	$\Theta_{1/2}$		7.5		deg.

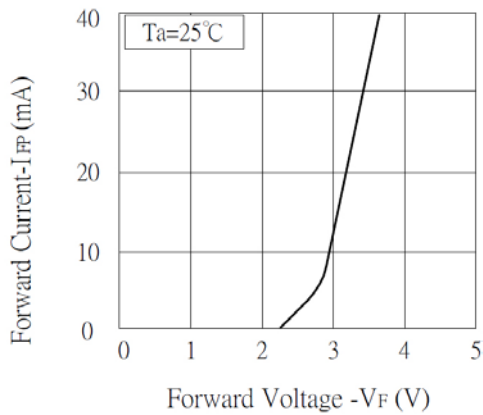


All dimensions in mm

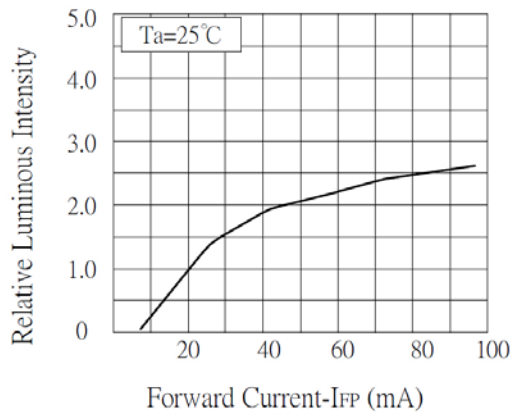


Performance Characteristics

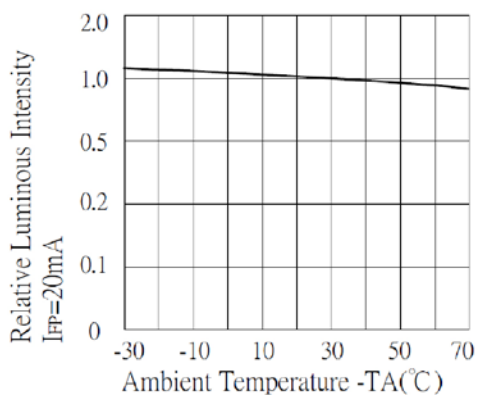
Forward Current vs. Forward Voltage



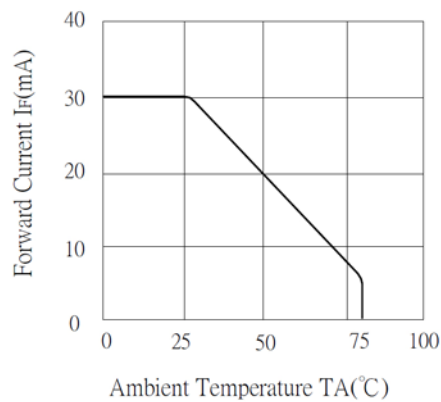
Relative Luminous Intensity vs. Forward Current



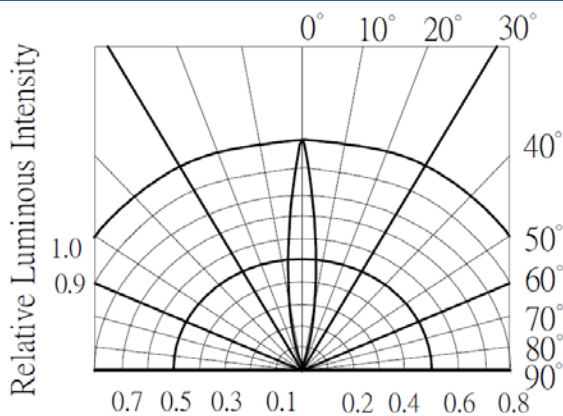
Relative Luminous Intensity vs. Ambient Temp.



Allowable Forward Current vs. Ambient Temp.



Relative Luminous Intensity



Relative Luminous Intensity vs. Wavelength

