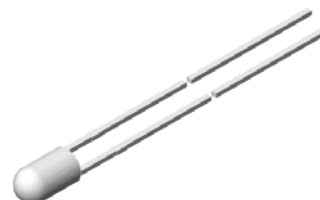


3mm Round Ultra Bright LED

VT 3W68.47

Description

This high brightness WHITE emitting LEDs are made from the most efficient InGaN technology. Its chip material is of InGaN technology, able to reach a high light output efficiency. These series of LEDs come in moisture resistance water clear lens while offering various viewing angles. Other than Bulk packing, tape and reel is available. Changes in viewing angle, luminous intensity and lens color is acceptable.



Applications

- Lighting indicator
- Status lights
- ON/OFF indicator
- Backlight illumination



Electronic Optical Characteristics (@ 20mA):

Part Number	Emitted Color	CCx	CCy	Lens Color	Iv(mcd)		View Angle (2θ1/2)	VF(V)	
					Min.	Typ.		Typ.	Max.
VT 3W68.47	White	0.29	0.30	Clear	1400	2300	50	3.5	4.0

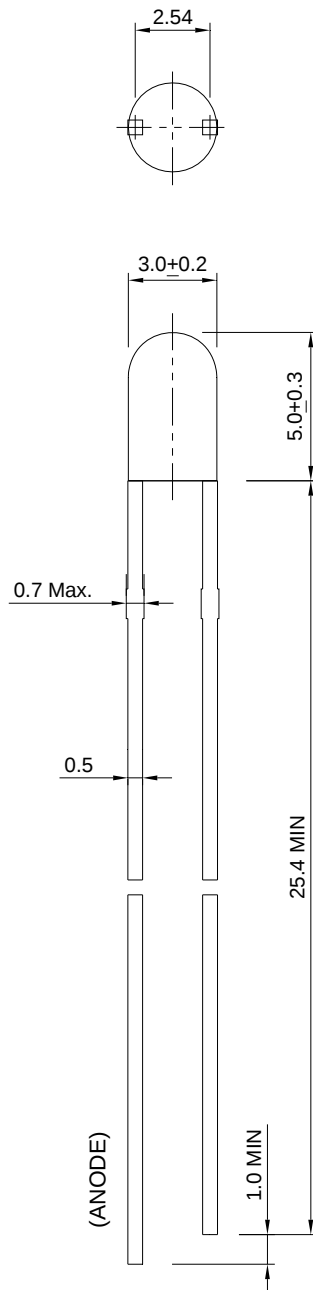
Absolute Maximum Ratings at Ta=25°C

Emitted Color	P _D (mW)	I _F (mA)	ESD(V)	I _R (uA)@V _R =5V	T _{opr} (°C)	T _{stg} (°C)
White	100	30	4000	50	-40~+85	-40~+100

Note: Please take note the Absolute Maximum Rating values. Any operation beyond the specified ratings in this table will result degradation of LED life-span and may cause LED to fail.

Package Dimension:

unit: mm

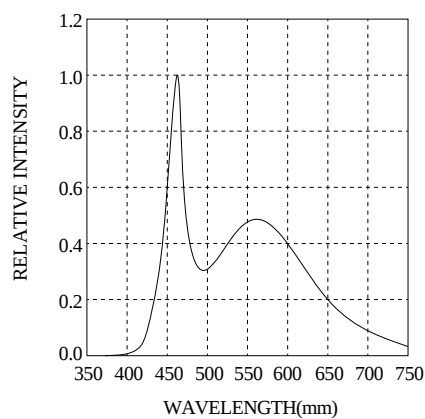


Notes:

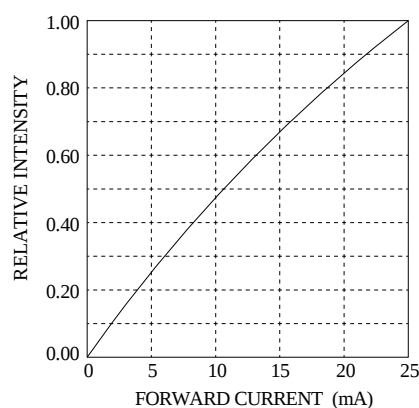
1. All dimensions are millimeters.
2. Dimensional tolerance is $\pm 0.2\text{mm}$ unless otherwise specified.
3. Epoxy meniscus under flange is 1.5 mm max.
4. Specifications are subject to change without notice.

Typical Electro-optical Characteristics Curves

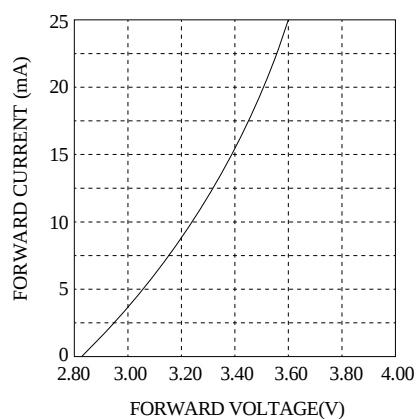
Relative Intensity vs. Wavelength



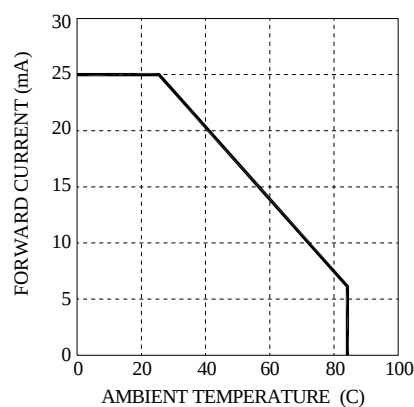
Relative Intensity vs. Forward Current



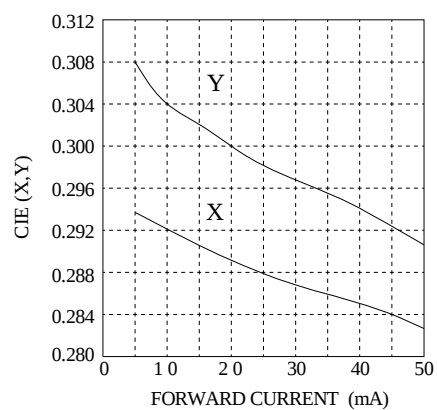
Forward Current vs. Forward Voltage



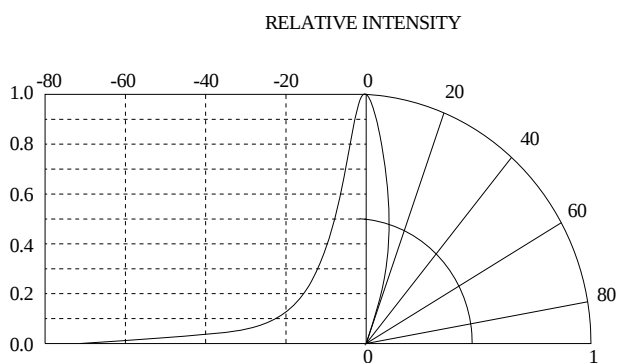
Forward Current vs. Ambient Temp.



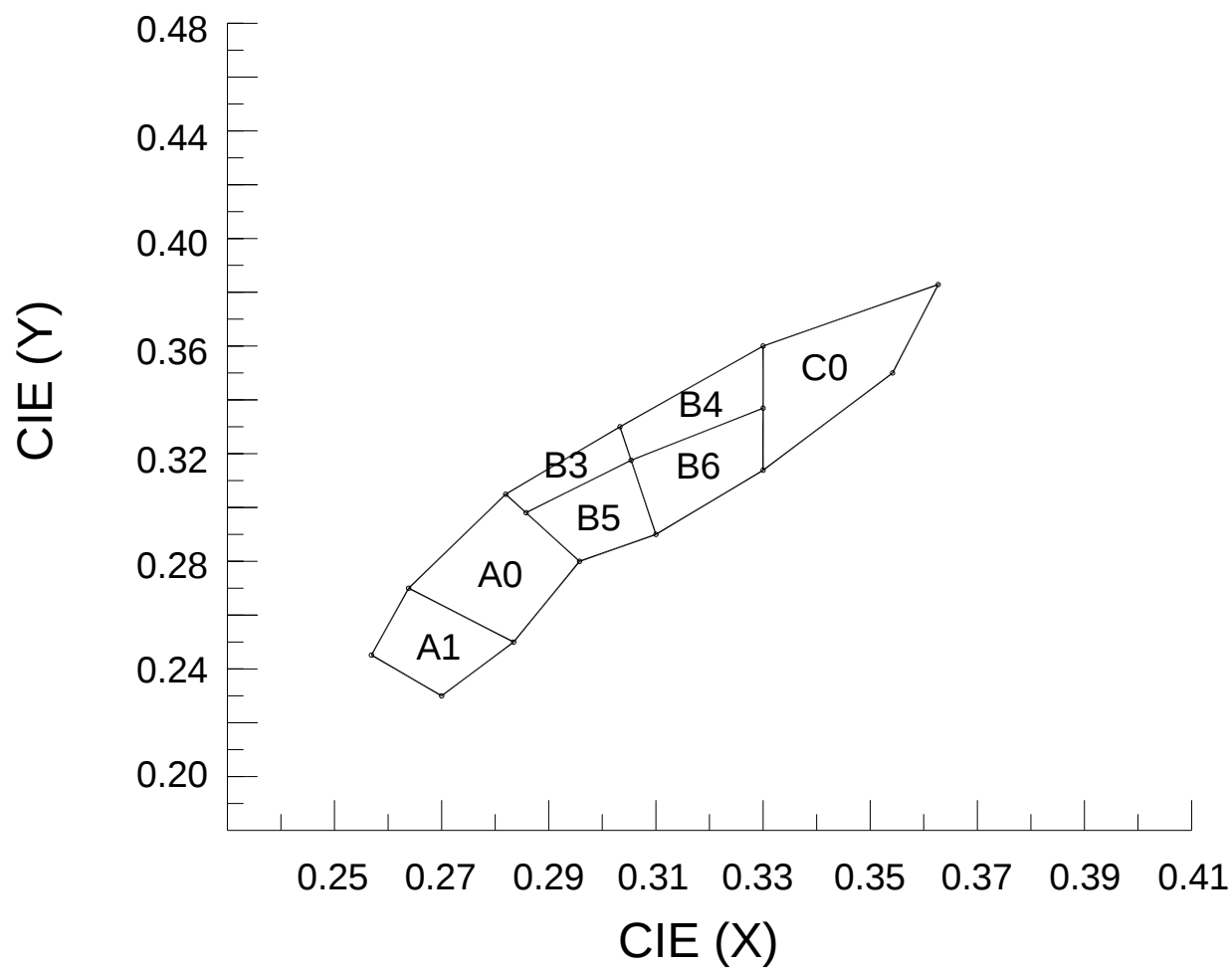
Chromaticity Coordinate vs. Forward Current



Radiation Characteristics



CIE Chromaticity Diagram



Color Ranks ($I_F=20\text{mA}$, $T_a=25^\circ\text{C}$)

Rank	CIE x	CIE y	Rank	CIE x	CIE y
A1	0.255	0.245	B5	0.287	0.295
	0.264	0.267		0.307	0.315
	0.280	0.248		0.311	0.294
	0.270	0.230		0.296	0.276
A0	0.264	0.267	B6	0.307	0.315
	0.283	0.305		0.330	0.339
	0.296	0.267		0.330	0.318
	0.280	0.248		0.311	0.294
B3	0.283	0.305	C0	0.330	0.360
	0.304	0.330		0.361	0.385
	0.307	0.315		0.355	0.350
	0.287	0.295		0.330	0.318
B4	0.304	0.330	--	--	--
	0.330	0.360		--	--
	0.330	0.339		--	--
	0.307	0.315		--	--

Measurement uncertainty of the color coordinates: ± 0.01

Luminous intensity Rank @ 20 mA

Bin Code	47	48	49	50
Iv (mcd)	1400-1800	1800-2240	2240-2800	2800-3550

Forward Voltage Ranks @ 20mA

Iv Ranks	O	P	Q	R	S
V	2.9-3.1	3.1-3.3	3.3-3.5	3.5-3.7	3.7-4.0