

3mm Round Super Bright White LED

VT 3WA8.44H

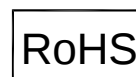
Description

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 (at 20mA):

Part Number	Emitted Color	C.C.		Lens Color	Iv(mcd)		View Angle (2θ1/2)	VF(V)	
		X	Y		Min.	Typ.		Typ.	Max.
VT 3WA8.44H	White	0.29	0.30	Clear	2200	3550	80	3.2	3.8

Absolute Maximum Ratings at Ta=25°C

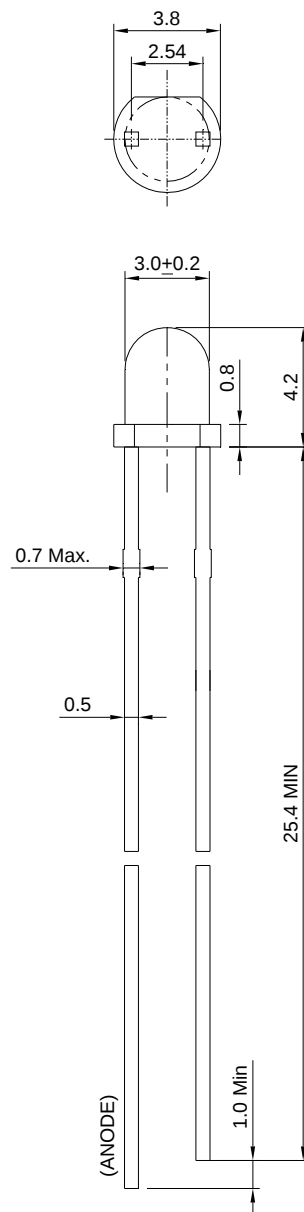
P _D (mW)	I _{FP} (mA)	I _F (mA)	T _{sol} (°C)	I _R (uA)@V _R =5V	T _{opr} (°C)	T _{stg} (°C)
120	100*	30	260±5 for 5 sec	50	-40~+85	-40+100

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.

* I_{FP}: Peak Forward Current under 1/10 duty, 1KHz condition

Package Dimension:

unit: mm

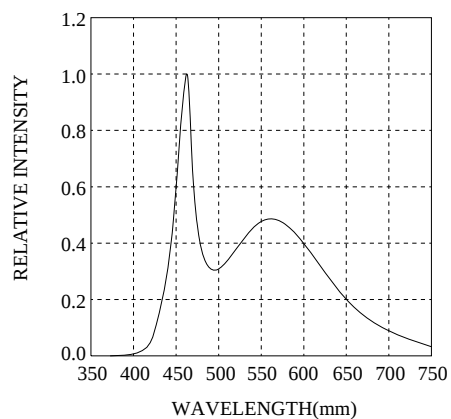


Notes:

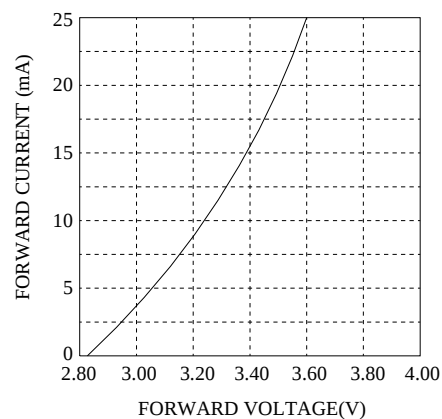
1. All dimensions are millimeters.
2. Dimensional tolerance is ± 0.2 mm unless otherwise specified.
3. Epoxy meniscus under flange is 1.5 mm max.
4. Specifications are subject to change without notice.

Typical Electro-optical Characteristics Curves

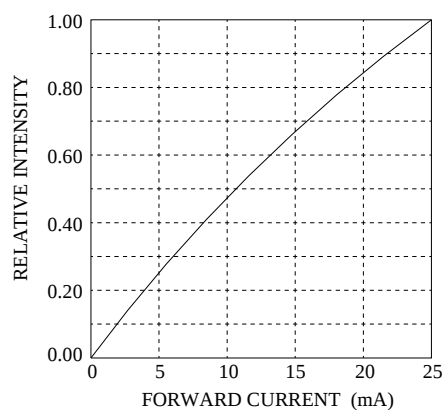
Relative Intensity vs. Wavelength



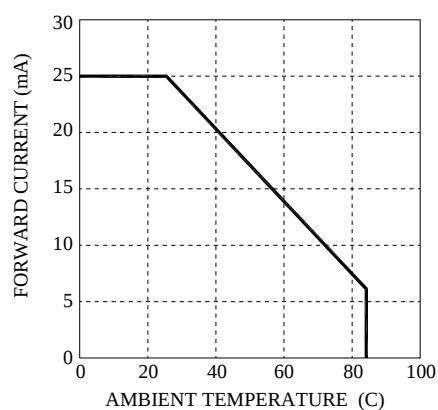
Forward Current vs. Forward Voltage



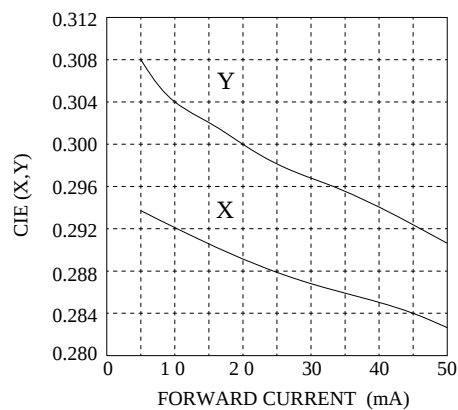
Relative Intensity vs. Forward Current



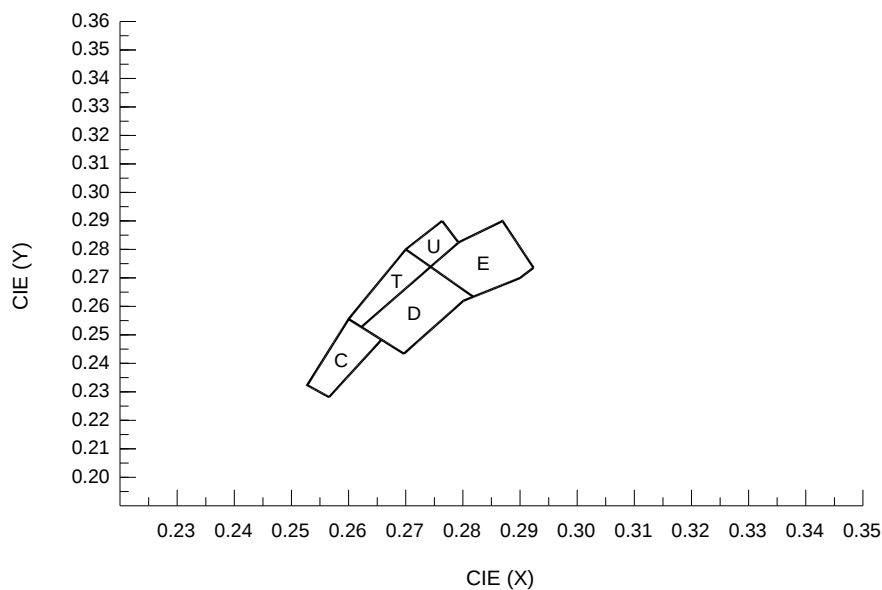
Forward Current vs. Ambient Temp.



Chromaticity Coordinate vs. Forward Current



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
C	0.2515	0.2330	D	0.2624	0.2538
	0.2563	0.2286		0.2716	0.2426
	0.2670	0.2482		0.2808	0.2619
	0.2600	0.2563		0.2745	0.2725
E	0.2745	0.2725	T	0.2601	0.2566
	0.2808	0.2619		0.2624	0.2538
	0.2923	0.2774		0.2745	0.2726
	0.2879	0.2899		0.2703	0.2797
U	0.2703	0.2797	--	--	--
	0.2745	0.2725		--	--
	0.2807	0.2824		--	--
	0.2769	0.2909		--	--

Measurement uncertainty of the color coordinates: ± 0.01

Luminous Intensity Rank @ 20 mA

Bin Code	49	50	51	52
LI (mcd)	2240-2800	2800-3550	3550-4500	4500-5600

Forward Voltage Rank @ 20mA

Bin Code	8	9	10	11
FV(V)	3.0-3.2	3.2-3.4	3.4-3.6	3.6-3.8