

High Power LED 1 Watt 350mA

VH 81D12

Description

These series high brightness WHITE emitting LEDs are made from the most efficient InGaN technology in High driving current (350mA). The typical optical light output is 145 lm/W and Thermal resistance (junction to lead frame) is 15 °C/W.



Applications

- Exterior and interior automotive illumination
- Commercial lighting
- Back lighting
- Traffic signaling
- Reading Light
- Commercial outdoor advertising signs



Electronic Optical Characteristics (at 350mA):

Part Number	Emitted Color	CCT(k)		Lens Color	Flux(lm)		View Angle (2θ1/2)	VF(V)	
		Min.	Max.		Min.	Typ		Min.	Max.
VH 81D12	White	3000	3400	Clear	140	145	140	3.0	3.3

Absolute Maximum Ratings(at Ta=25°C)

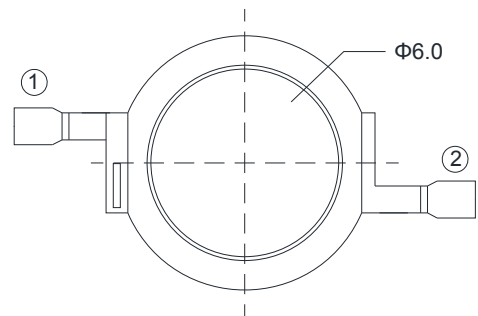
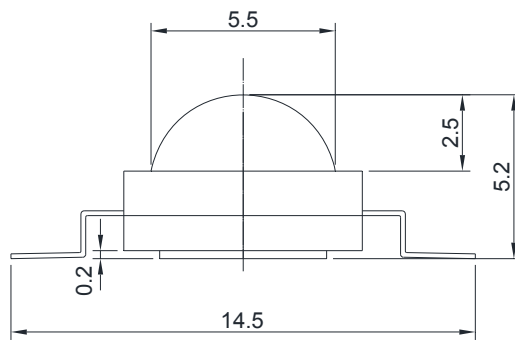
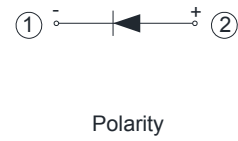
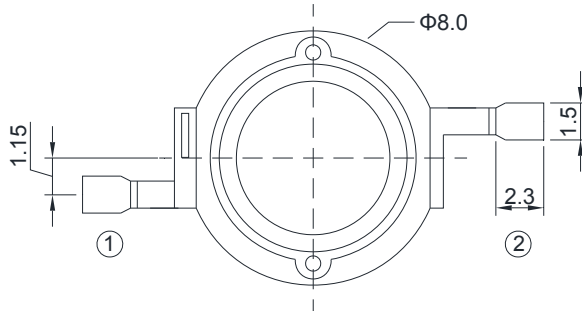
P _D (W)	R _{th} (°C/W)	I _F (mA)	I _{FP} (mA)	T _j (°C)	T _{opr} (°C)	T _{stg} (°C)
1.0	8.0	350	700	120	-30~+80	-40~+80

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 0.25 duty, t_p ≤ 100 usec

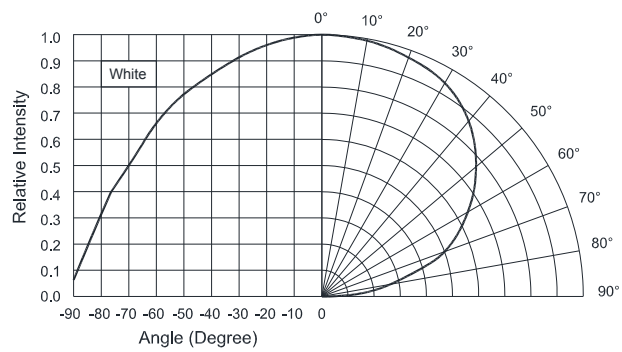
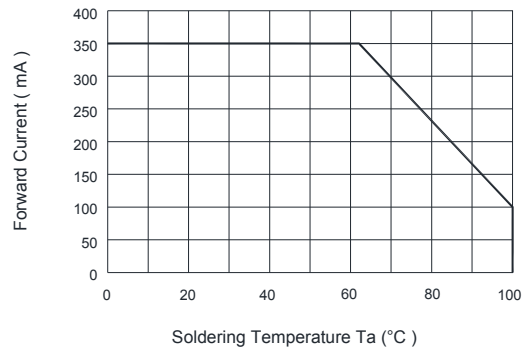
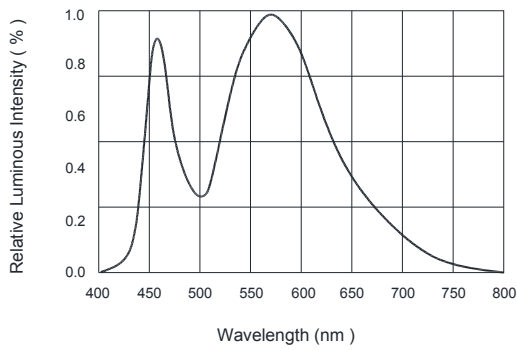
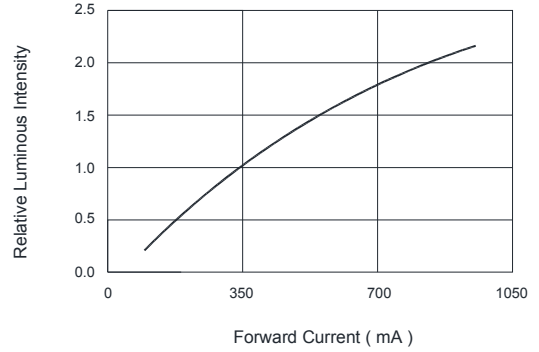
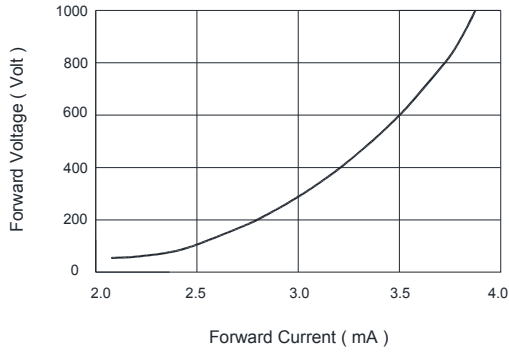
Package Dimension:

unit : mm

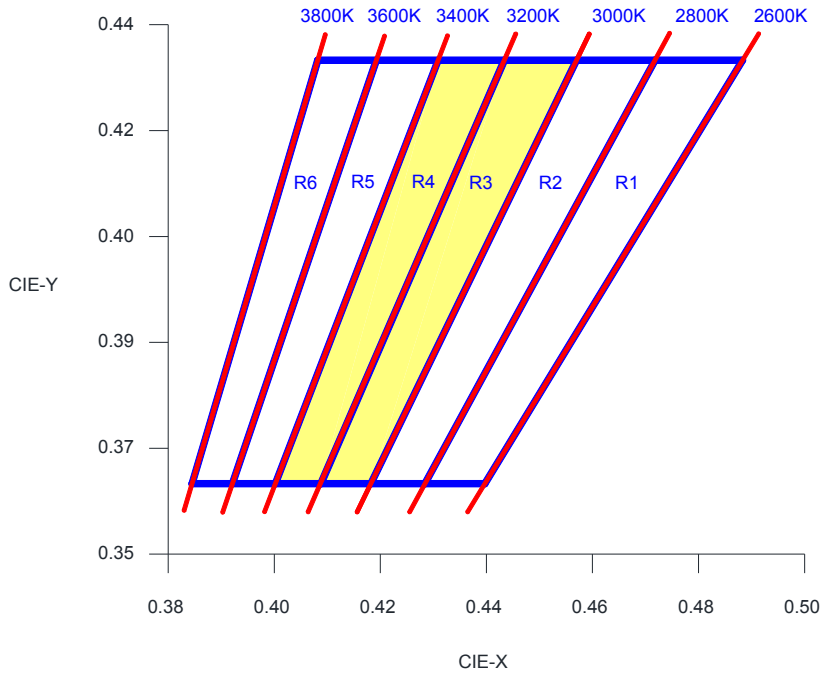

Notes:

1. All dimensions are millimeters.
2. Dimensional tolerance is +/- 0.2mm unless otherwise specified.
3. Specifications are subject to change without notice.

Typical Electro-optical Characteristics Curves



CIE Chromaticity Diagram:



RANK	X	Y	RANK	X	Y
R1	0.4284	0.3633	R4	0.4002	0.3633
	0.4397	0.3633		0.4088	0.3633
	0.4883	0.4433		0.4434	0.4433
	0.4718	0.4433		0.4309	0.4433
R2	0.4181	0.3633	R5	0.3921	0.3633
	0.4284	0.3633		0.4002	0.3633
	0.4718	0.4433		0.4309	0.4433
	0.4570	0.4433		0.4192	0.4433
R3	0.4088	0.3633	R6	0.3845	0.3633
	0.4181	0.3633		0.3921	0.3633
	0.4570	0.4433		0.4192	0.4433
	0.4434	0.4433		0.4082	0.4433