



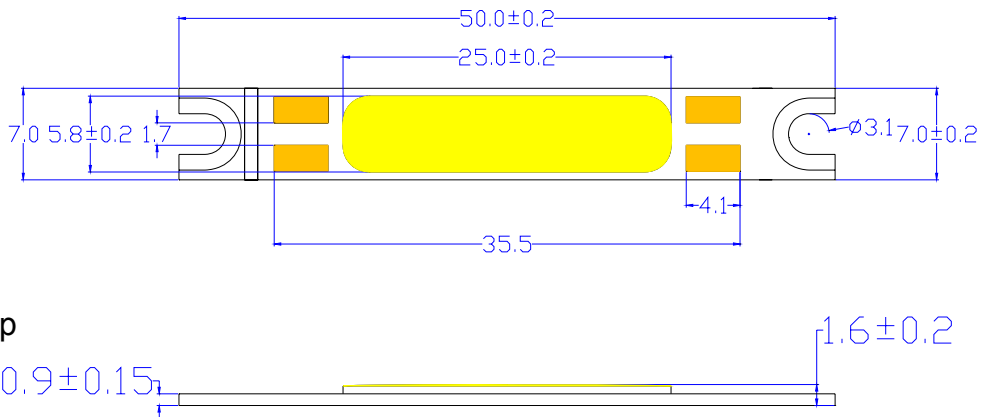
Part No.: RG12N3W3-350mA

Features:

- ✧ High radiometric power per LED
- ✧ Very long operating life
- ✧ More Energy Efficient than Incandescent and most Halogen lamps
- ✧ Easy installation with Screws

Typical Applications:

- ✧ Spot light
- ✧ Bulb
- ✧ Down Light
- ✧ cornering lamp
- ✧ Panel Light
- ✧ Street Light



Product Picture:

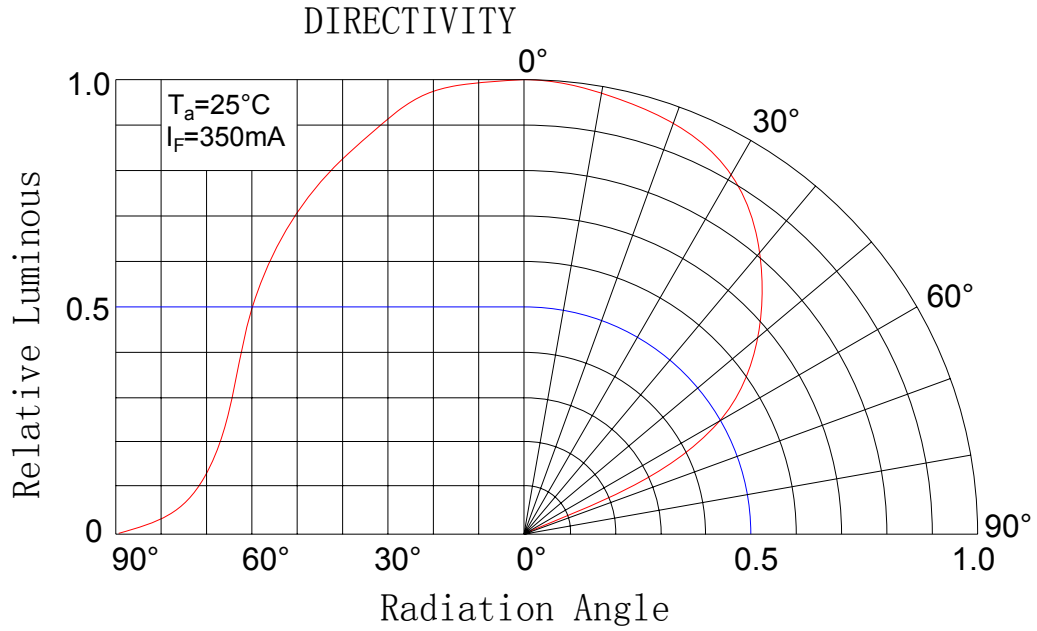


NOTES:

- ✧ All dimensions are millimeter.
- ✧ Tolerance is ±0.3mm unless otherwise noted.
- ✧ It is strongly recommended that the temperature of lead be not higher than 100°C.



Typical Radiation Pattern





Part No.: **RG12N3W3-350mA**

Absolute maximum ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Test Condition	Value		Unit
			Min.	Max.	
DC Forward Current	I_F	----	----	490	mA
Peak Pulse Current	I_{peak}	Duty=1/10 1kHz	----	560	mA
Power Dissipation	P_d	----	----	4.4	W
LED Junction Temperature	T_J	----	----	125	$^\circ\text{C}$
Operating Temperature	T_{opr}	----	-25	+85	$^\circ\text{C}$
Storage Temperature	T_{str}	----	-40	+100	$^\circ\text{C}$
ESD Sensitivity	----	HBM	8000	----	V
Soldering Temperature	----	----	300 $^\circ\text{C}$ for 5 Seconds max		

Electrical and optical characteristics ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Test Condition	Value			Unit	
			Min.	Typ.	Max.		
Forward Voltage	V_F	$I_F = 350\text{mA}$		9		V	
Luminous Flux	Φ_v			280	----	lm	
Viewing Angle	$2\theta_{1/2}$			----	120	----	Deg.
Color Temperature	CCT		2970	3045	3120	K	
Color Rendering	R_a		80			--	
	R_g		5				
Thermal Resistance	R_J	-----		8		$^\circ\text{C/W}$	

Luminous Flux Bins ($T_a = 25^\circ\text{C}$)

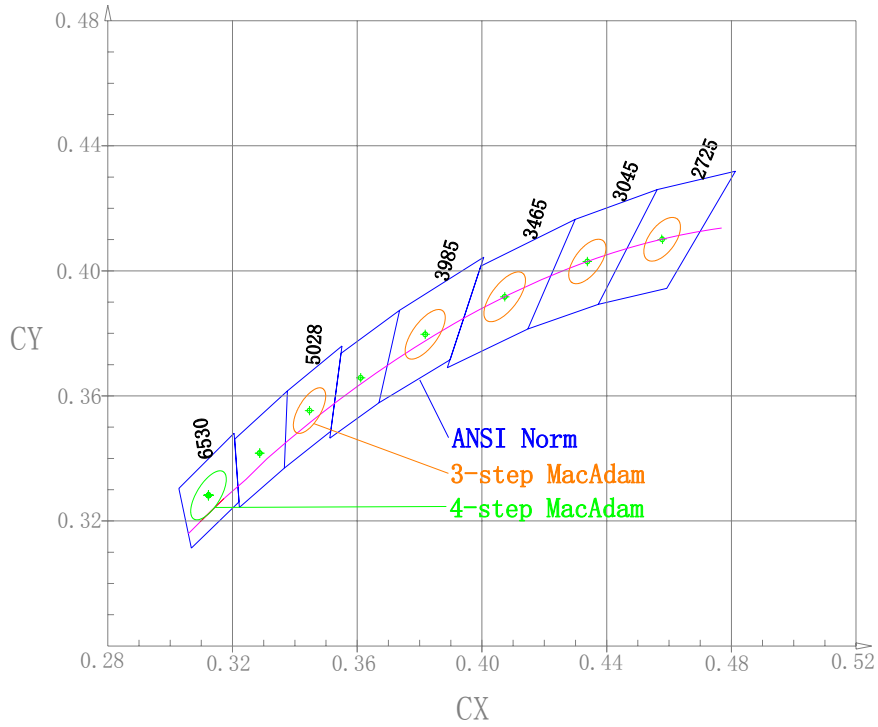
Unit: lm

Bin	U	V	W
Min	240	280	320
Max	280	320	360



Part No.: RG12N3W3-350mA

Chromaticity Coordinates Ranks($I_F=350mA$ $T_a=25^\circ C$)





Part No.: **RG12N3W3-350mA**

Colour temperature	Center of Coordinates		Long axis	Minor axis	Gradient	Explain
6500K	0.3123	0.3282	0.00892	0.0038	58.23	4-step MacAdam
5000K	0.3447	0.3553	0.00822	0.00354	59.62	3-step MacAdam
4000K	0.3818	0.3797	0.00939	0.00402	53.72	
3500K	0.4073	0.3917	0.00951	0.00417	52.58	
3000K	0.4338	0.403	0.00714	0.00408	53.22	
2700K	0.4578	0.4101	0.00774	0.00411	53.7	

Code	Colour temperature
W27	2700K
W30	3000K
W35	3500K
W40	4000K
W50	5000K
W65	6500K

Notes:

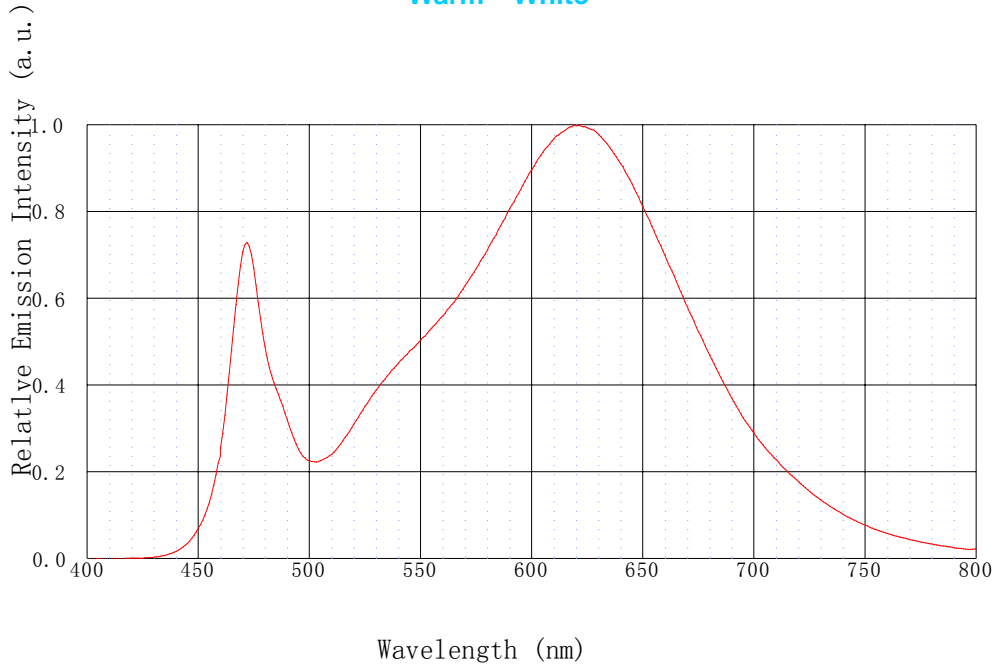
- ◇ * Ranking at T_C=25℃
- ◇ * It is strongly recommended that the temperature of lead be not higher than 100℃
- ◇ * Tolerance of measurements of the Forward Voltage is ±2%V
- ◇ * Tolerance of measurements of the Luminous Flux is ±10%
- ◇ * Tolerance of measurements of the Color Rendering R_a is ±3
- ◇ * Tolerance of measurements of the Color Rendering R₉ is ±5
- ◇ * The R₉ value for the above rank shall be greater than 0
- ◇ * Chromaticity Coordinates (x,y) is measured with an accuracy of ±0.01
- ◇ * The center of Coordinates (x,y) is based on C78.377:2008 ANSI reference
- ◇ * Ellipse refer to IEC 60081:1997



Part No.: RG12N3W3-350mA

Characteristic spectrum : $T_J=25^{\circ}\text{C}$

Warm White





Part No.: RG12N3W3-350mA

Typical electrical/optical characteristic curves:

Fig.1 Forward Current (mA) Vs. Forward Voltage (V)

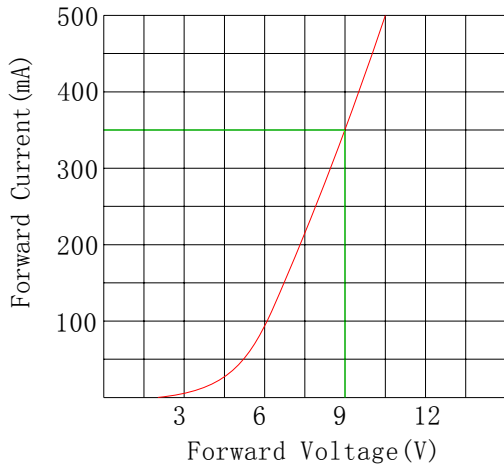


Fig.2 Relative Intensity Vs Forward Current (mA)

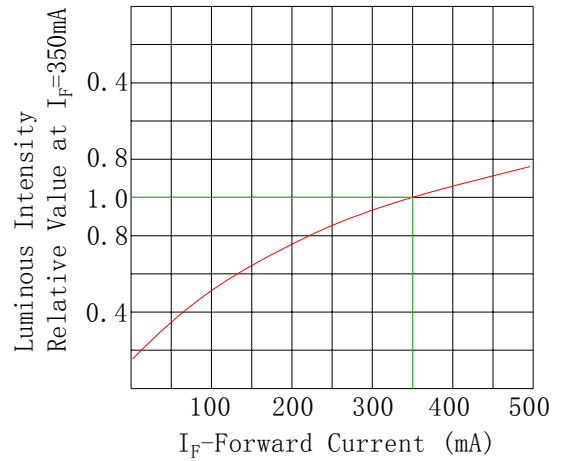


Fig.3 Forward Current Vs Ambient Temperature

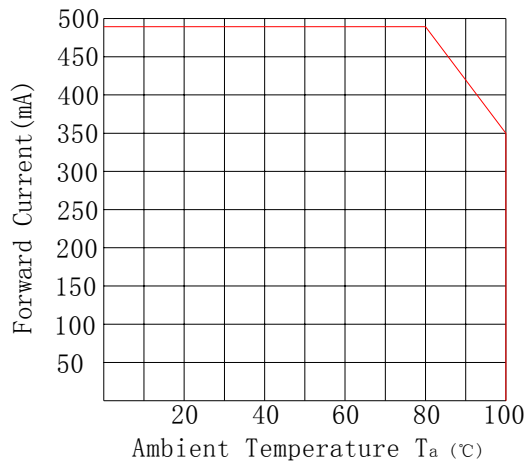
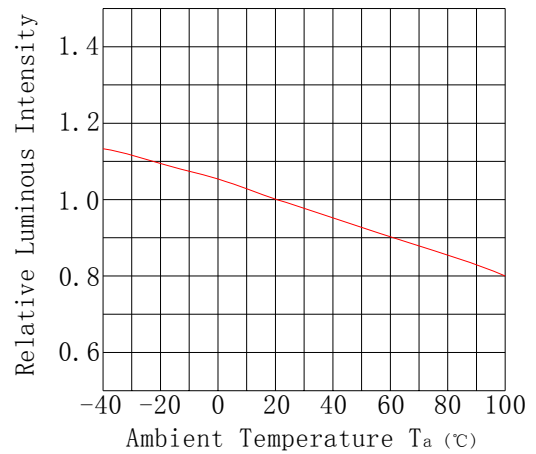


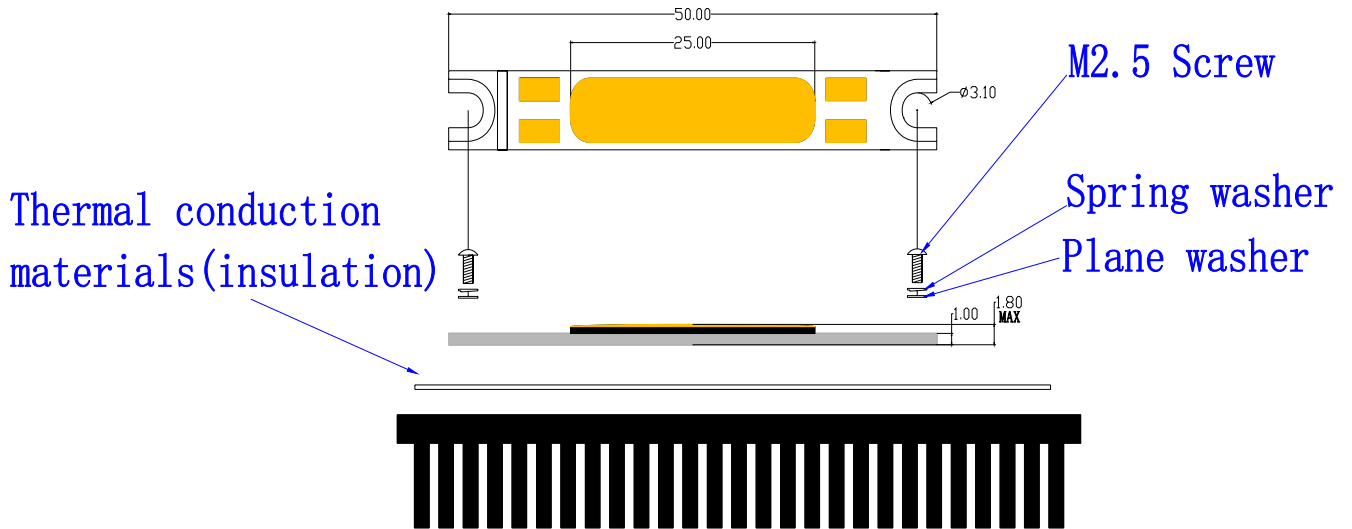
Fig.4 Relative Intensity Vs. Ambient Temperature





Part No.: RG12N3W3-350mA

Recommended installation screw pitch



If you can not solve the heat problem, the product will destroy easily. Suggest that the surface of the heat sink is $35\text{cm}^2/\text{W}$