



VISIBLE LED

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1.ELEMENT APPEARANCE

DATE : JUL.28.2005.

Model No.	Material	Lighting Color	Resin Color
RT5-5818RGBW-B	R AlGaAs	Red	White Diffused
	G InGaN	Green	
	B GaInN / ITO	Blue	

2.ABSOLUTE MAXIMUM RATINGS AT Ta=25

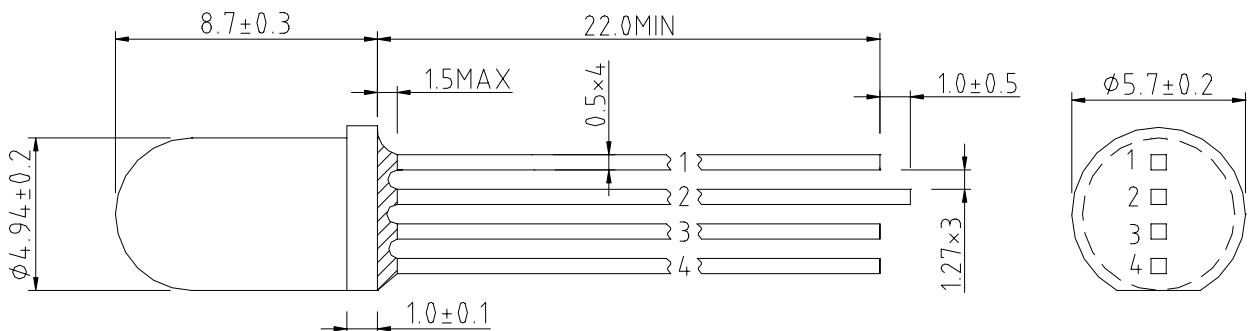
Characteristic	Symbol	Rating	Unit
Forward direct current	IFM	25	mA
Reverse voltage	VRM	4	V
Operating temperature	Topr	-25 to +75	
Storage temperature	Tstg	-25 to +100	
Power dissipation	Pd	R50 / GB100	mW
Lead soldering temperature (5mm from body) 260 for 5sec.			

3.ELECTRO-OPTICAL CHARACTERISTICS AT Ta=25

Characteristic	Symbol	Condition	Min.	Typ.	Max.	Unit
Luminous intensity	Iv	IF= 20 mA	R	70	120	mcd
			G	200	350	
			B	60	100	
Forward voltage	VF	IF= 20 mA	R	1.8	2.0	V
			G	3.3	4.0	
			B	3.3	4.0	
Reverse current	IR	VR=4V			10	μA
Peak emission wavelength	p	IF=20mA	R	660		nm
Dominant wavelength	d	IF=20mA	R	-		nm
			G	530		
			B	470		
Spectral line half width		IF=20mA	R	25		nm
			G	35		
			B	30		
Viewing angle	2 1/2	IF=20mA		110		deg.

4.DIMENSIONS UNIT : m/m

- SIGN : 1. RED CATHODE
2. COMMON ANODE
3. BLUE CATHODE
4. GREEN CATHODE

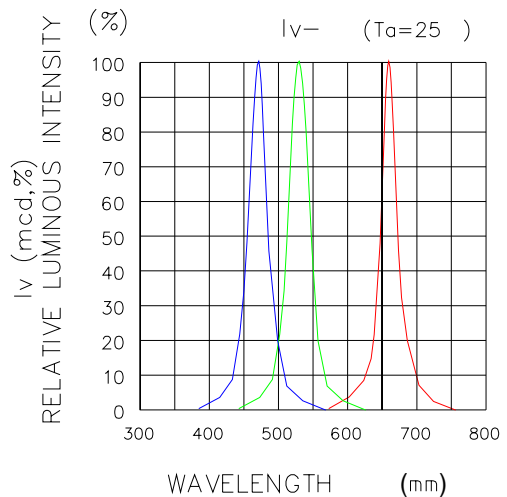
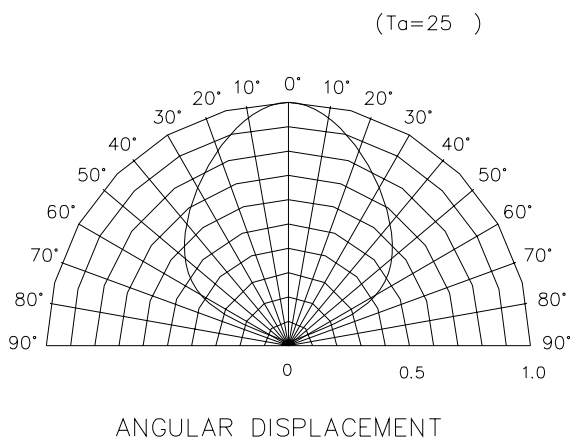
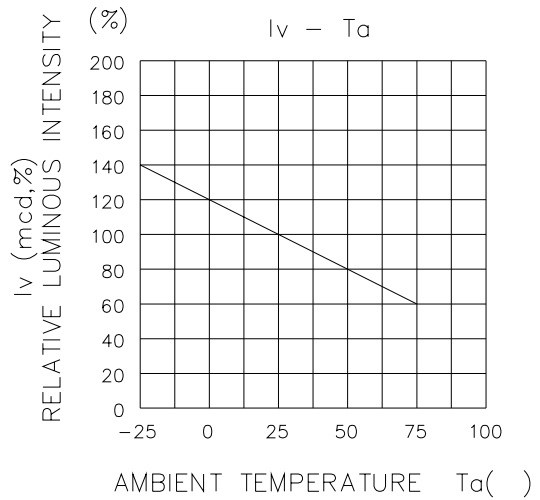
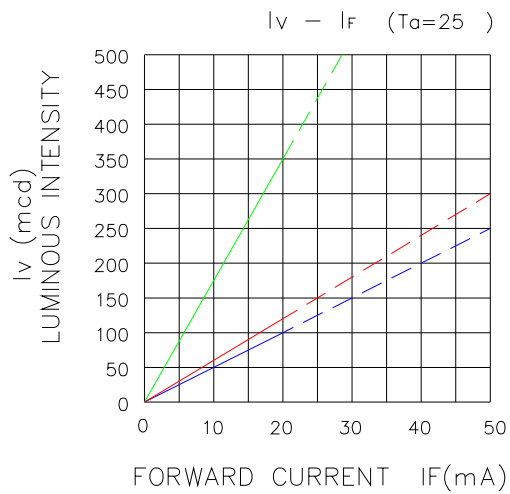
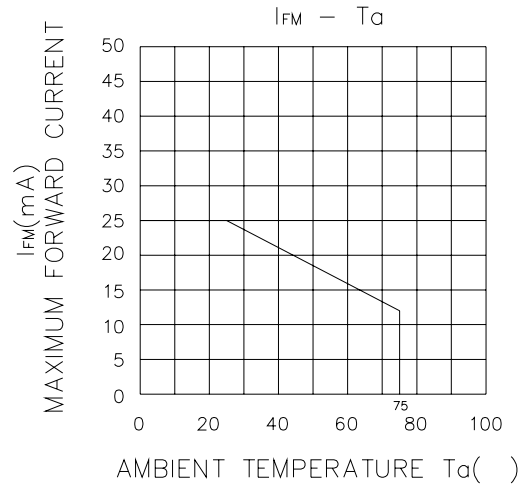
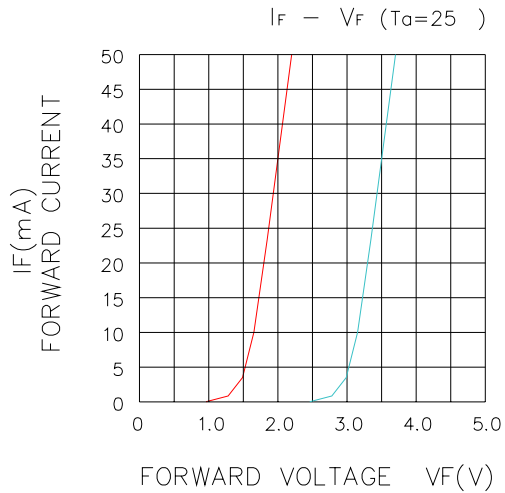




RODAN(TAIWAN)LTD.

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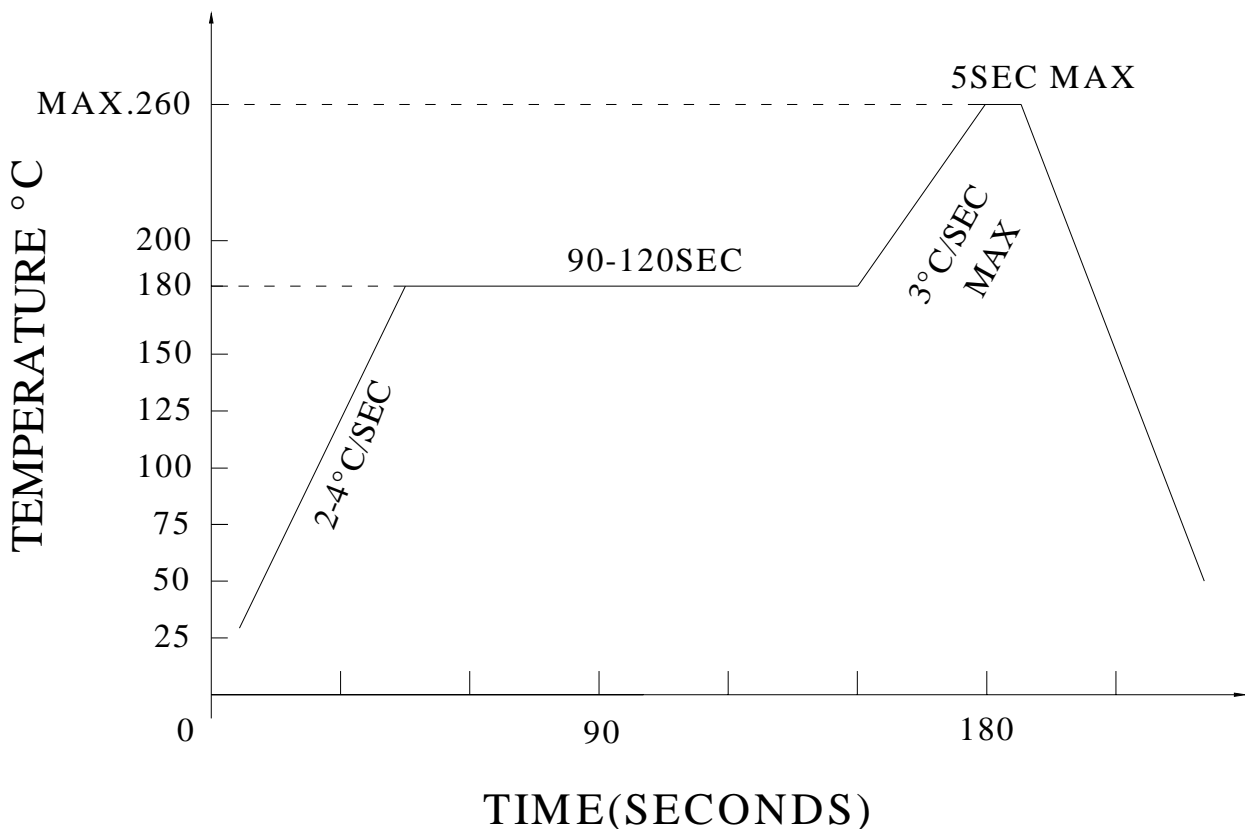


Lamp Condition

In the automatic mounting of LAMP LED to the L/F, any bending, expanding, and pulling forces against the LAMP LED should be minimized to prevent the electrical failures or mechanical damaged.

Reflow Soldering and Temperature Profile

The LAMP LED is designed for the reflow soldering process. Too high temperature or too large temperature gradient may cause the electrical and optical failures.





Reliability Test Items

CONDITIONS :

The reliability of products shall be satisfied with items listed below.

NO.	<u>Item</u>	Condition	Time/Cycle	Number of Damaged
1	Soldering Heat Test	260	5 sec	0/60
2	Thermal Shock	0 (15sec) ~100 (15sec)	20 cycle	0/60
3	High Temp. Storage	100	1000 Hrs	0/60
4	Low Temp. Storage	-25	1000 Hrs	0/60
5	Operation Temperature Cycle Test	-25 ~75	100 Cycles , 200Hrs	0/60
6	High Temp. High Humidity Test	60 , 90% RH	1000Hrs	0/60
7	Operation Life Test	Room Temp.160mA, duty cycle 1/8 , pulse width 1ms	1000Hrs	0/60