

OS-3W RGB/6-pin (120°, 50/70/15 Lm)

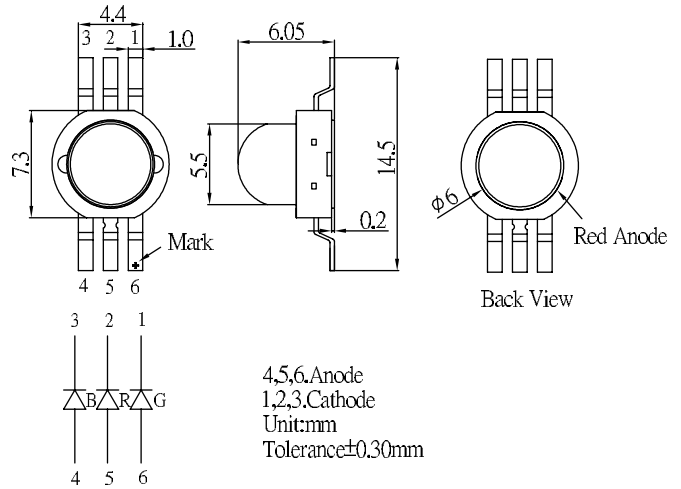
Features

- Highest Luminous Flux
- Super Energy Efficiency
- Long Lifetime Operation
- Superior ESD protection
- Superior UV Resistance
- Water Clear Type

Applications

- Mobile Phone Flash
- Automotive Interior/Exterior Lighting / Signal Lighting
- Architectural Lighting
- LCD TV / Monitor Backlight
- Projector Light Source / Traffic Signals / Task Lighting
- Decorative / Pathway Lighting / Household Applications

Outline Dimension



Absolute Maximum Rating

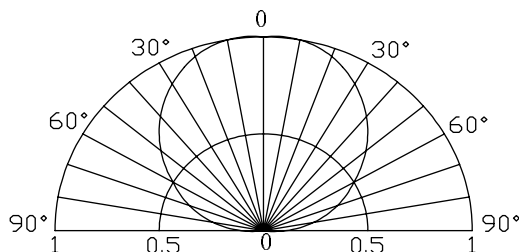
Item	Symbol	Value		Unit
		Red	Green/Blue	
DC Forward Current	IF	400	400	mA
Pulse Forward Current*	IFP	500	500	mA
Reverse Voltage	VR	5	5	V
Power Dissipation	PD	1200	1600	mW
Operating Temperature	Topr	-30 ~ +85		°C
Storage Temperature	Tstg	-40 ~ +100		°C
Lead Soldering Temperature	Tsol	260°C / 5sec		°C

Notes: *Pulse width Max.10ms Duty ratio max 1/10

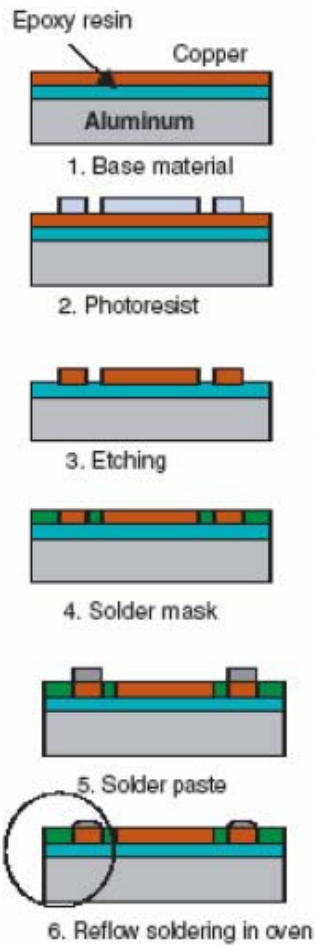
Typical Electrical / Optical Characteristics at TA=25°C

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
DC Forward Voltage	VF (R)	IF=350mA	2.0	2.5	3.0	V
	VF (B/G)	IF=350mA	3.0	3.3	4.0	V
DC Reverse Current	IR	VR=5V	-	-	10	µA
Domi. Wavelength	λD (Red)	IF=350mA	620	625	630	nm
	λD (Green)	IF=350mA	520	525	535	nm
	λD (Blue)	IF=350mA	455	460	465	nm
Luminous Flux	φ v (Red)	IF=350mA	40	50	-	lm
	φ v (Green)	IF=350mA	50	70	-	lm
	φ v (Blue)	IF=350mA	10	15	-	lm
50% Power Angle	2θ1/2	IF=350mA	-	120	-	deg

Directivity



Xeon Emitters Soldering Process Flow



Selection of MCPCB material according to specification

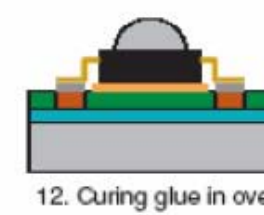
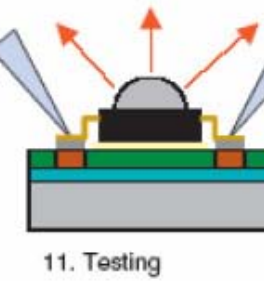
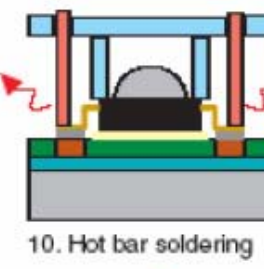
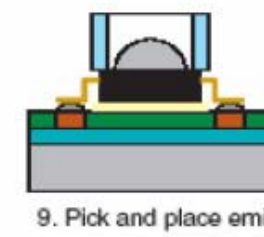
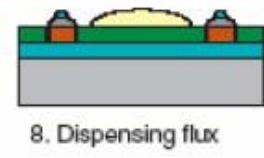
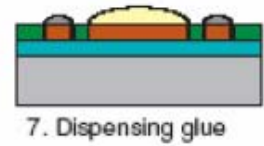
Addition of photoresist layer according to electrical layout

Etching process

Application of solder mask

Application of solder paste and SMD components

Reflow soldering of SMD components and plating tin on the solder pads



Dispensing of thermal conductive glue

Dispensing flux on solder pads

Pick and place emitter on MCPCB with vacuum nozzle

Hot bar soldering of emitter according to process window

Functional testing of emitters

Curing of the glue in oven according to glue process

