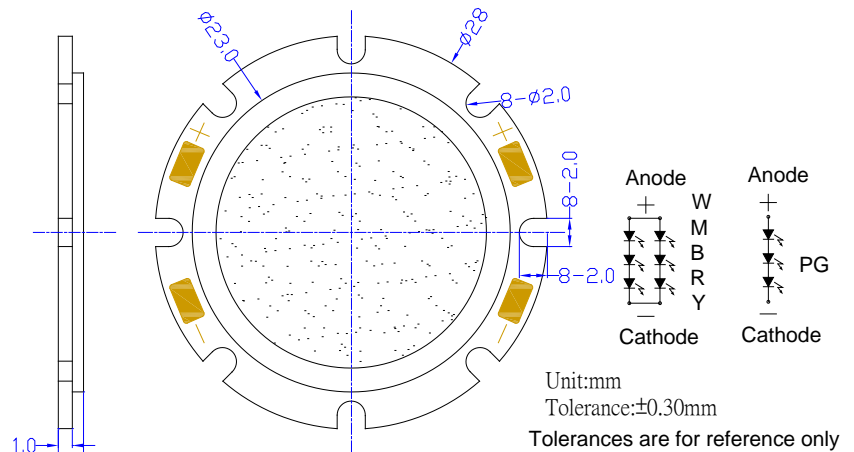


**■ Features**

- High-power LED
- Long lifetime operation
- Typical viewing angle : 140deg
- RoHS compliant
- Possible to attach to heat sink directly without using print circuit board.

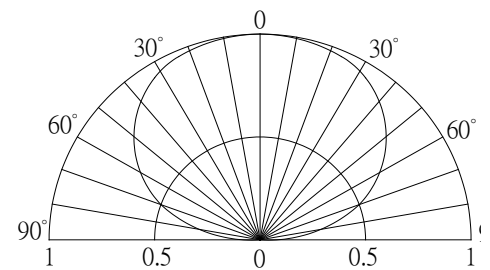
**■ Applications**

- Indoor & outdoor lighting
- Light Bulb
- Reading lamps
- Display cases, furniture illumination, marker
- Architectural illumination
- Spotlights

**■ Outline Dimension**

**■ Absolute Maximum Rating**

(Ta=25°C)

Item	Symbol	Value		Unit
		W/M/B/G	R/Y	
DC Forward Current *1	I <sub>F</sub>	700	700	mA
Pulse Forward Current*2	I <sub>FP</sub>	1200	1200	mA
Reverse Voltage	V <sub>R</sub>	15	15	V
Power Dissipation*1	P <sub>D</sub>	8,400	5,880	mW
Operating Temperature	T <sub>opr</sub>	-30 ~ +85		°C
Storage Temperature	T <sub>stg</sub>	-40~ +100		°C
Lead Soldering Temperature	T <sub>sol</sub>	260°C5sec		-

**■ Directivity**


\*1, Power dissipation and forward current are the value when the module temperature is set lower than the rating by using an adequate heat sink.

\*2, Pulse width Max.10ms Duty ratio max 1/10

**■ Electrical -Optical Characteristics**

(Ta=25°C)

Part Number	Color		V <sub>F</sub> (V)			I <sub>R</sub> (μA)	Φ <sub>v</sub> (lm)*			λD(nm)*			2θ1/2(deg)
			Min.	Typ.	Max.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	Typ.
			I <sub>F</sub> =600mA			V <sub>R</sub> =5V		I <sub>F</sub> =600mA					
SLQ6WCOBB	White	W	9.6	10.2	12.0	20	420	450	-	X=0.31, Y=0.33			140
SLQ6WCOBBC	Warm White	M	9.6	10.2	12.0	20	370	400	-	X=0.44, Y=0.41			140
SLQ6WCOBAZ	Blue	B	9.6	10.2	12.0	20	60	80	-	465	470	475	140
SLQ6WCOBVP	Pure Green	G	9.6	10.2	12.0	20	300	360	-	520	525	530	140
SLQ6WCOBAM	Yellow	Y	6.0	7.2	8.4	20	220	270	-	585	590	595	140
SLQ6WCOBR	Red	R	6.0	7.2	8.4	20	220	270	-	620	625	630	140

Note: Don't drive at rated current more than 5s without heat sink for High Power series.

\* Tolerance of chromaticity coordinates is ±10% , \*Tolerance of Domi Wavelength is ±1nm \* Tolerance of Luminous Flux is ±20%

**Heat design**

The following pictures show some measurements of mounted 5W Led on the heat sink for each board A and B (See Fig 1) with using thermograph to make an observation about heat distribution. Each boards is tested at various current conditions. As a result, LED needs larger heat sink as much as possible to reduce its own case temperature.

**Fig. 1 Configuration pattern examples for board assembly**

Board	LED power	Material	Surface area (mm <sup>2</sup> )	Min.
A	5W	Al	20,600	
B	10W	Al	41,200	
C	25W	Al	103,000	
D	50W	Al	206,000	
E	100W	Al	412,000	
F	200W	Al	824,000	
G	300W	Al	1236,000	

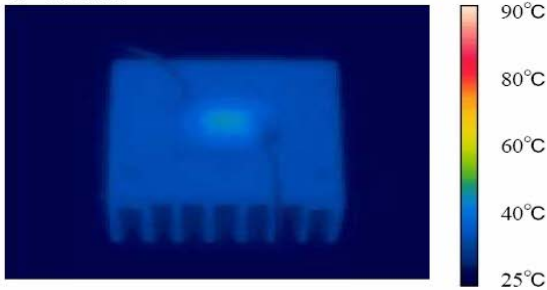
Above tested LED device is attached with adhesive sheet to the heatsink.

For reference's sake, Tj absolute maximum rating is defined at 115°C as a prerequisite on design process of 5W LED.

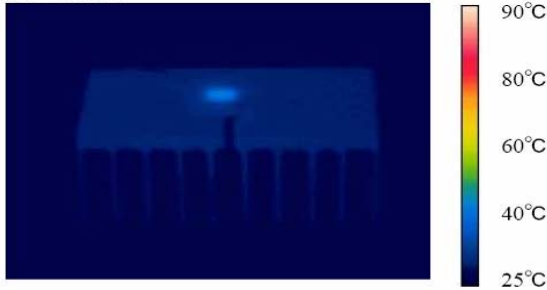
**<Fig.2> Board A (surface area=10,300mm<sup>2</sup>)**

**<Fig.3> Board B (surface area=20,600mm<sup>2</sup>)**

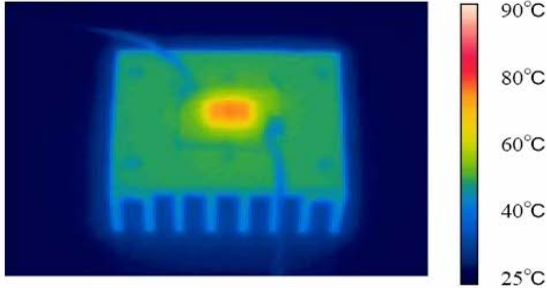
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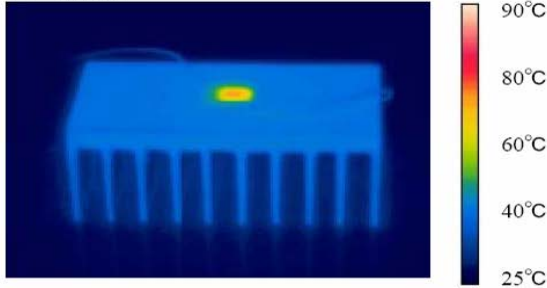
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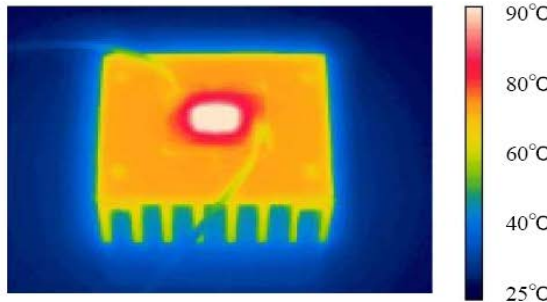
IF=400mA



IF=400mA



IF=600mA



IF=600mA

