THEM-CLW Flux LED

RoHS Compliant

Features:

- Long operating life
- Energy efficiency
- Low thermal resistance
- Compact design
- Instant light
- Fully dimmable
- No UV
- Superior ESD protection

Typical Applications:

- Reading lights
- Portable light
- Orientation
- Entertainment
- Garden
- Security light
- Ceiling light
- Architectural lighting
- General lighting
- Jewel display illumination

Absolute Maximum Ratings:

Parameter	Conditions	Conditions
DC Forward Current	350mA	700mA
Peak Pulse Current	500mA	800mA
LED Junction Temperature	110°C	110°C
Operating Temperature	-30°C to +100°C	
Storage Temperature	-40°C to +120°C	
Soldering Temperature	Manual 260°C(max) 5 Seconds	
Reverse Voltage	Manual 260°C (max) 5 Seconds	

Flux Characteristics at 350mA, Junction Temperature, T_J=25°C

Colour	Minimum Luminous Flux(lm)	Typical Luminous Flux(lm)	Max. Luminous Flux(lm)	Beam Pattern
Cool White	80	125	-	Lambertian

Notes :
1. Luminous flux is measured with an accuracy of ±10%

Optical Characteristics at 350mA, Junction Temperature, T_J=25°C

Colour	Dominant Wavelength λd Peak Wavelength λp or Colour Temperature (CCT)		Viewing Angle Degree
	Min.	Max.	2θ1/2
Cool White	5000k	10000k	120

Notes :
1. CCT ±5% tester tolerance.
2. Wavelength is measured with an accuracy of ±0.5nm.

Electrical Characteristics at 350mA, Junction Temperature, T_J=25°C

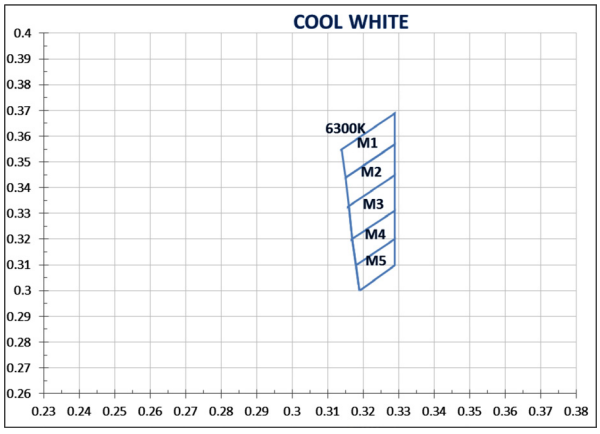
Colour	Forward Voltage V_F(V)			Temperature Coefficient of V_F(mV/°C)	Thermal Resistance Junction to lead (°C/W)
	Min.	Typ.	Max.	$\Delta V_F/\Delta Tj$	
Red	-	3.2	-	-2	12

Notes:
1. VF ±0.1V tester tolerance.

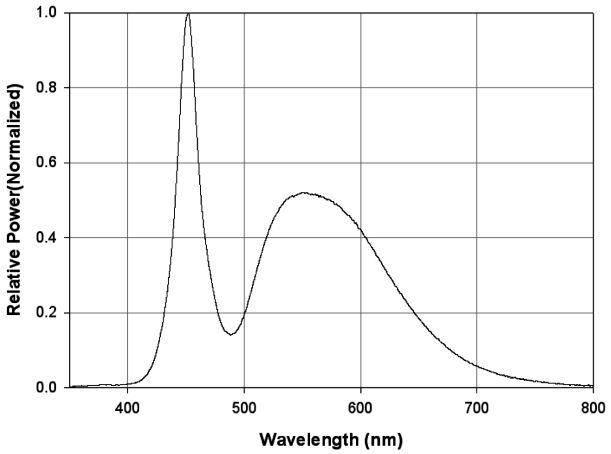
Colour Bins for Cool White

Bin Code	X	Y	Typ. CCT(K)	Bin Code	X	Y	Typ. CCT(K)
M1	0.314 0.329 0.329 0.315	0.355 0.369 0.357 0.344	5970	M4	0.329 0.329 0.318 0.317	0.331 0.320 0.310 0.320	5970
M2	0.315 0.329 0.329 0.316	0.344 0.357 0.345 0.333	5970	M5	0.329 0.329 0.319 0.318	0.320 0.310 0.300 0.310	5970
M3	0.329 0.329 0.317 0.316	0.345 0.331 0.320 0.333	5970	-	-	-	-

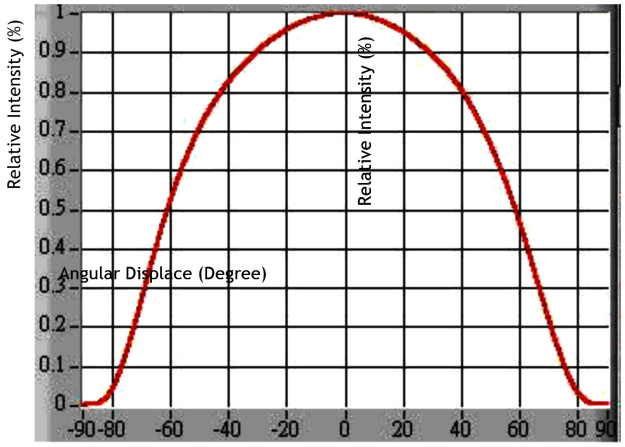
Tolerance on each Colour bin (x, y) is ±0.01



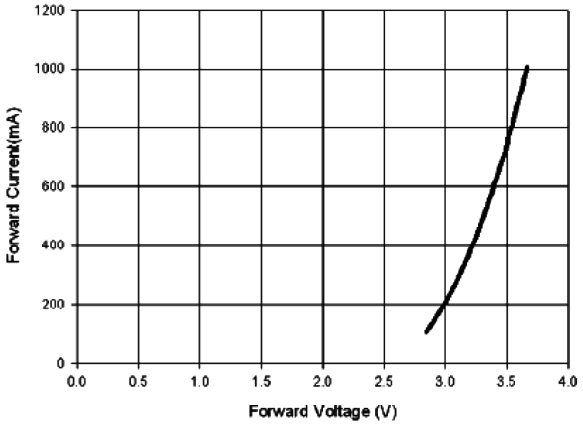
White Colour Spectrum



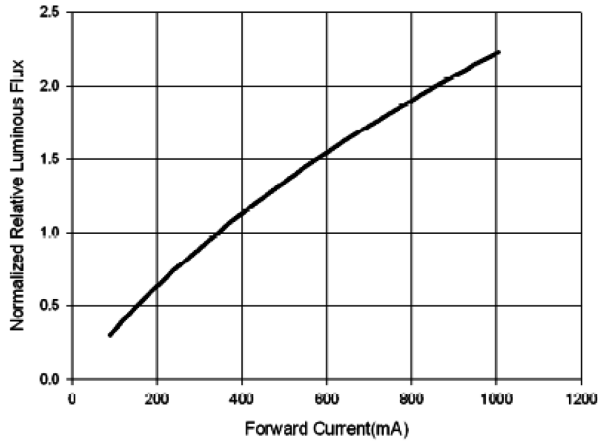
Typical Spatial Radiation Pattern



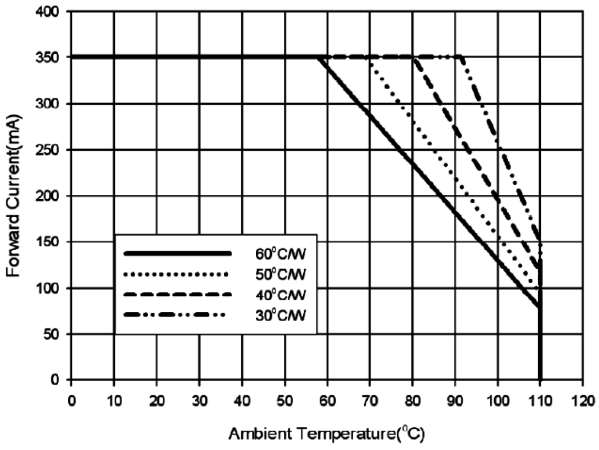
Forward I-V Characteristics



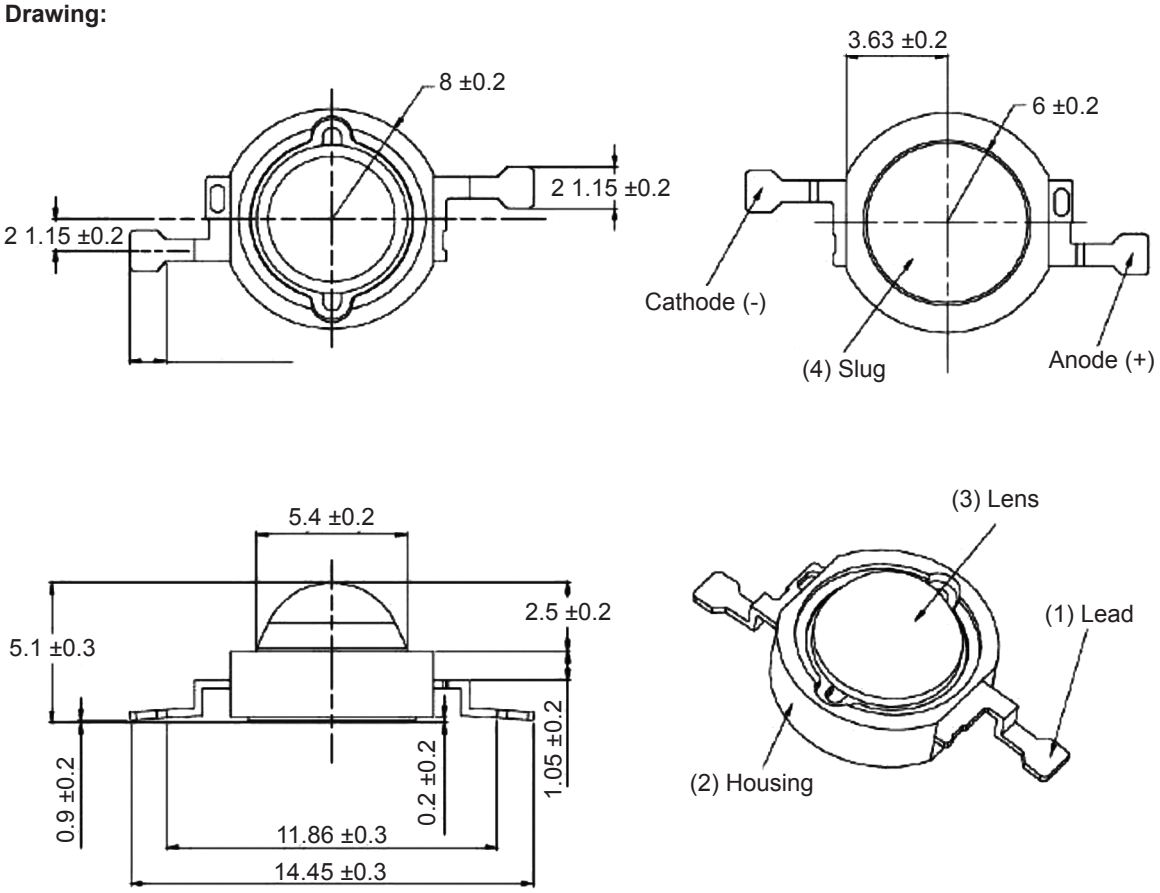
Forward L-I Characteristics



Current Derating Curves



Drawing:



Dimensions : Millimetres
Tolerance : ±0.2 mm

Notes:

The polarity of slug at bottom is anode.

It is important that the slug can't contact aluminium surface, it is strongly recommended that there should coat a uniform electrically isolated heat dissipation film on the surface.

It is strongly recommended that the temperature of lead be not higher than 70°C.

Part Number Table

Description	Part Number
THEM-CLC Flux Cool White LED	THEM-CLWX(COOL WHITE) (M1-M5)