LS-CU301-090W

Preliminary

瑞健光電
RAYTRONS

High Brightness LED Power Module

FEATURES

- Cu based PCB, with Rayben MHE301 technology 1.0 mm thickness
- CREE XML LED
- Shiny white surface
- 90 W multichip LED, maximum 6605 lm for cool white, 6097 lm for natural white, and 5080 lm for warm white at 3000 mA driving current
- CRI: minimum 65 for cool white, 75 for natural white, 80 for warm white
- Color temperature: 2600K – 8300K
- Angle of half intensity: ± 63°

DESCRIPTION:

LS-CU301-090W is a high brightness LED modules. Totally 9 pieces 10 W multichip power LEDs are soldered on a Cu plate. The Cu plate with Rayben MHE301 technology guarantees best heat removal and distribution.

LS-CU301-90W has a wide range of color temperature available.

Additional to the modules a suitable LED driver is available.

APPLICATIONS

- Internal lighting in buildings
- Tunnel lights
- High Bay, Low Bay
- General lighting application

Parts Table			
P/N	Color	**LUMINOUS FLUX** (at I_F = 2000 mA typ.)	Color Temperature K
LS-CU301-090W-830	Warm white	3862	2600-3700
LS-CU301-090W-740	Natural white	4634	3700-5000
LS-CU301-090W-650	Cool white	5021	5000-8300

ABSOLUTE MAXIMUM RATINGS			
PARAMETER	SYMBOL	VALUE	UNIT
Forward current	I_F	3000	mA
Power dissipation	P	86	W
Junction temperature	Tj	150	^oC
Operating temperature range	Tamb	-40 to +80	^oC
Storage temperature range	Tstg	-40 to + 100	^oC

Electro-Optical characteristics (Warm White, 3000K)					
PARAMETER	Symbol	Value			Unit
		Min @ 700mA,	Typ. @ 2000mA	Max @ 3000mA	
Luminous Flux	ΦV	1562	3862	5080	Lm
Correlated Color Temperature	CCT	2600		3700	K
CRI	Ra	80			
Operating Voltage	Vopt	24.5	27.6	28.5	V
Power Dissipation	PD	17.2	55.2	85.5	W

Note: all parameter are measured at Tj = 85C using Warm White 3000K

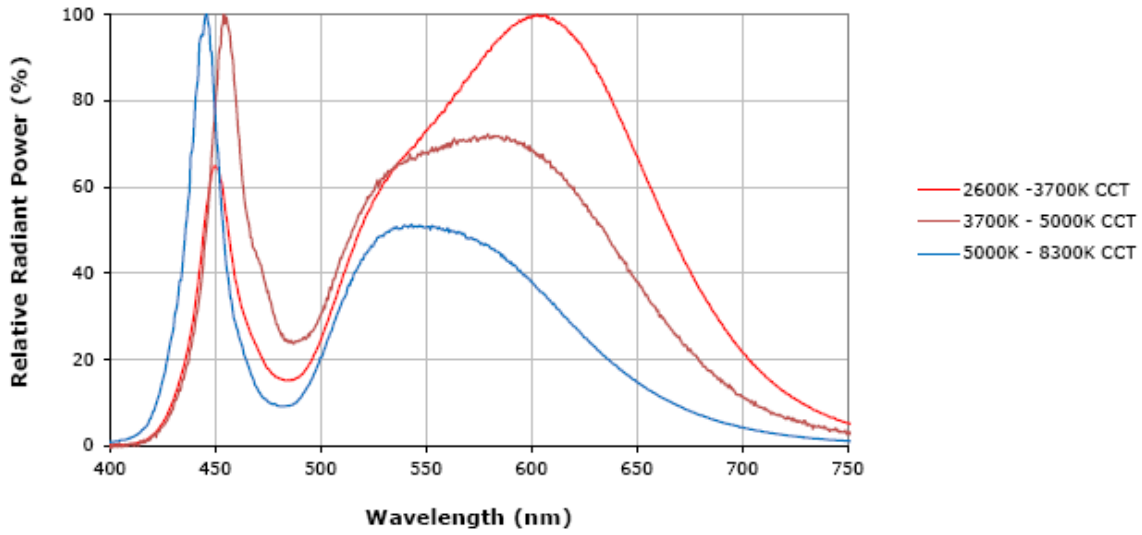
Electro-Optical characteristics (Natural White, 4000K)					
PARAMETER	Symbol	Value			Unit
		Min @ 700mA,	Typ. @ 2000mA	Max @ 3000mA	
Luminous Flux	ΦV	985	4634	6098	Lm
Correlated Color Temperature	CCT	3700		5000	K
CRI	Ra	75			
Operating Voltage	Vopt	24.5	27.6	28.5	V
Power Dissipation	PD	17.2	55.2	85.5	W

Note: all parameter are measured at Tj = 85C using Natural White 4000K

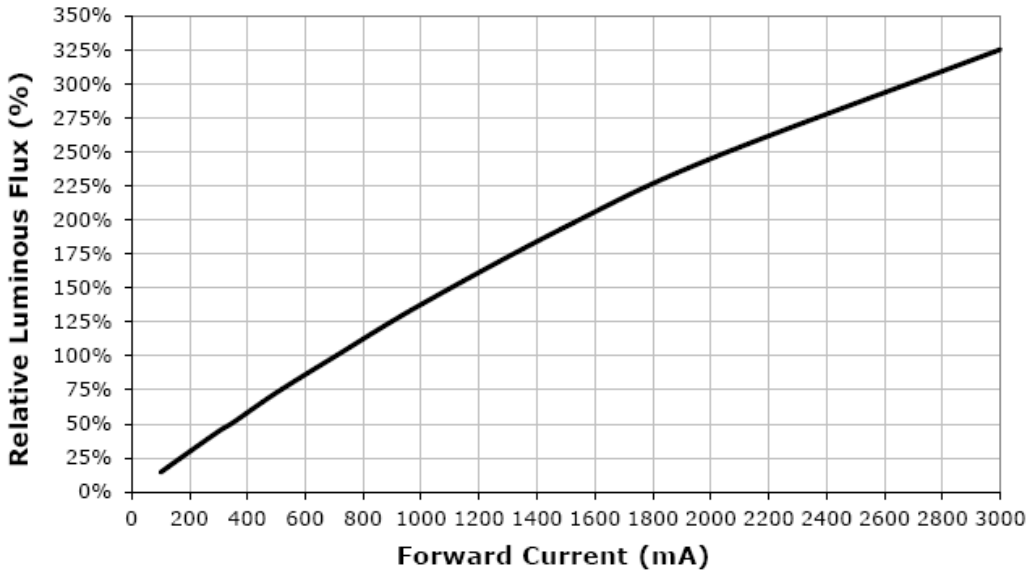
Electro-Optical characteristics (Cool White, 5700K)					
PARAMETER	Symbol	Value			Unit
		Min @ 700mA,	Typ. @ 2000mA	Max @ 3000mA	
Luminous Flux	ΦV	2031	5021	6605	lm
Correlated Color Temperature	CCT	5000		8300	K
CRI	Ra	65			
Operating Voltage	Vopt	24.5	27.6	28.5	V
Power Dissipation	PD	17.2	55.2	85.5	W

Note: all parameter are measured at Tj = 85C using Cool White, 5700K

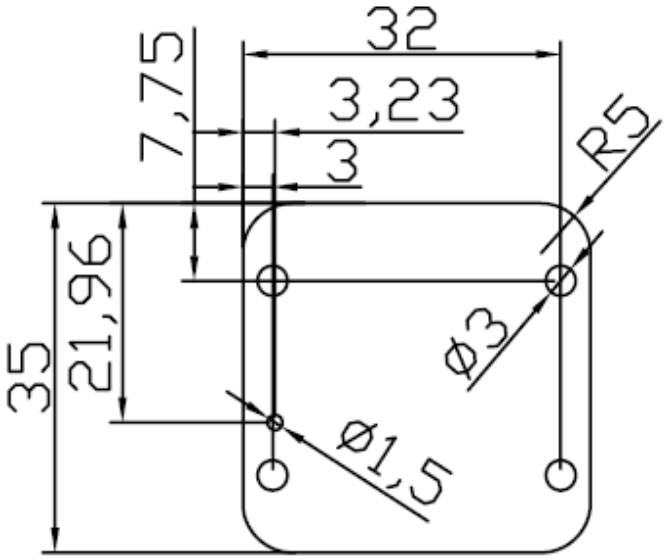
Relative Spectral Power Distribution



Relative Flux VS Current (Tj = 25C)



Outline Dimension:



* Notes:
[1] All dimensions are in millimeters.
[2] Scale : none

Packaging Dimension:

TBD