

PRELIMINARY

LED450-66-60 epoxy lens type BLUE color illuminator

LED450-66-60 is a wide viewing and extremely high output power illuminator assembled with a total of 60 high efficiency InGaN diode chips, mounted on a metal stem TO-66 with AlN ceramics and covered with double coated clear silicone and epoxy resin. These devices are designed for high current operation with proper heat sinking to improve thermal conductive efficiency.

Features

- 1) High reliability
- 2) Compact (TO-66) package
- 3) High output power at 450 nm

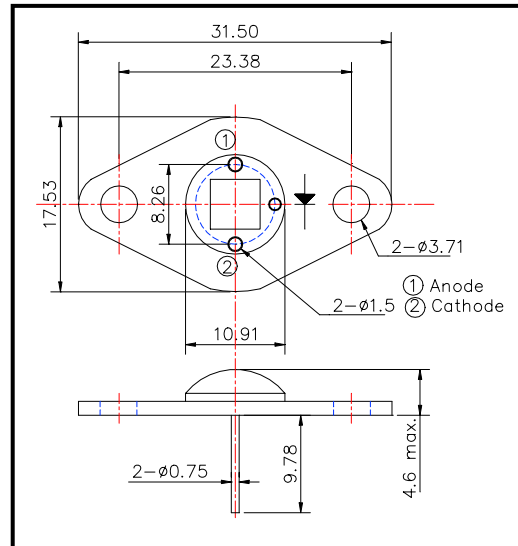
Applications

- 1) For high intensity lighting source

Specifications

- 1) Product name Blue color illuminator
- 2) Spec. No. LED450-66-60
- 3) Chip
 - (1) Material InGaN
 - (2) Peak wavelength 450 nm
- 4) Package
 - (1) Stem TO-66 stem with AlN
 - (2) Lens Clear silicone and epoxy lens

Outer dimension (Unit: mm)



Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temp.
Power Dissipation	P _D	8.0	W	T _a = 25° C
Forward Current	I _F	400	mA	T _a = 25° C
Pulse Forward Current	I _{FP}	2000	mA	T _a = 25° C
Reverse Voltage	V _R	50	V	T _a = 25° C
Operating Temperature	T _{OPR}	-30 ~ +80	°C	
Storage Temperature	T _{STG}	-30 ~ +110	°C	
Soldering Temperature	T _{SOL}	240	°C	

‡Pulse Forward Current condition: Duty = 1% and Pulse Width = 1 μs.

‡Soldering condition: Soldering condition must be completed within 3 seconds at 260°C

Electro-Optical Characteristics

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V _F	I _F = 240 mA		18.0		V
Brightness	I _V	I _F = 240 mA		450		mcd
Total Radiated Power	P _O	I _F = 240 mA		40		mW
Radiant Intensity	I _E	I _F = 240 mA		20		mW/sr
Reverse Current	V _R	I _R = 10 μA	50			V
Peak Wavelength		I _F = 240 mA	440	450	460	nm
Half Width		I _F = 240 mA		30		nm
Viewing Half Angle		I _F = 240 mA		±60		deg.

‡Heat sink is required thermal resistance <8 K/W

ROITHNER LASERTECHNIK, A-1040 Vienna, Austria, Schoenbrunner Strasse 7
 Tel.: +43-1-586 52 43 - 0, Fax.: +43-1-586 52 43 44
 e-mail: office@roithner-laser.com, http://www.roithner-laser.com