

LED565-66-60 epoxy lens type illuminator

LED565-66-60 is a wide viewing and extremely high output power illuminator assembled with a total of 60 high efficiency GaP 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

High reliability
Compact TO-66 package
High output power at 565 nm

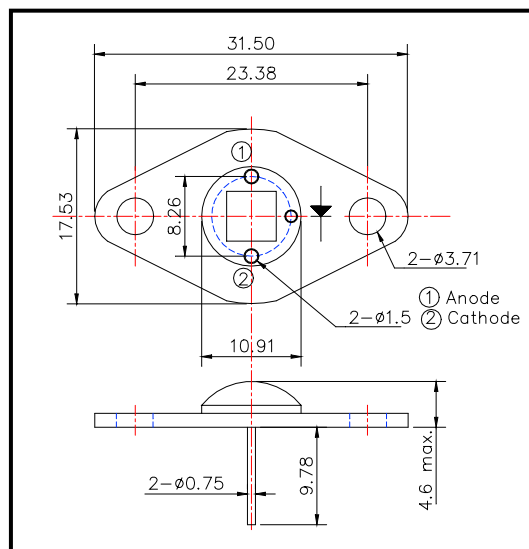
Applications

Indicator light
CCD lighting
General illumination

Specifications

Product name	illuminator
Spec. No.	LED565-66-60
Chip Material	GaP
Peak wavelength	565 nm
Stem	TO-66 stem with AlN
Lens	Clear silicone and epoxy lens

Outer dimension (Unit: mm)



Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	P _D	5	W	T _a = 25°C
Forward Current	I _F	360	mA	T _a = 25°C
Pulse Forward Current	I _{FP}	-	A	T _a = 25°C
Reverse Voltage	V _R	60	V	T _a = 25°C
Operating Temperature	T _{OPR}	-30 ~ +85	°C	
Storage Temperature	T _{STG}	-30 ~ +100	°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
Total Radiated Power	P _O	I _F = 240 mA		12		mW
Total Radiated Power	P _O	I _F = - A		-		mW
Radiant Intensity	I _E	I _F = 240 mA		-		mW/sr
Forward Voltage	V _F	I _F = 240 mA		11	12	V
Reverse Current	I _R	V _R = 60 V			10	μA
Peak Wavelength	λ _P	I _F = 240 mA	555	565	575	nm
Spectrum Half Width	Δλ	I _F = 240 mA		25		nm
Viewing Half Angle	2θ _{1/2}	I _F = 240 mA		±60		deg
Rise Time	t _r	I _F = 100 mA		-		ns
Fall Time	t _f	I _F = 100 mA		-		ns

Heat sink is required thermal resistance <8 K/W