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LED890-66-60

TECHNICAL DATA

High Power LED Array, 60 chips   AlGaAs

LED890-66-60 is a wide viewing and extremely high output power illuminator assembled with a total of 60 high efficiency AlGaAs 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 improver thermal conductive efficiency.
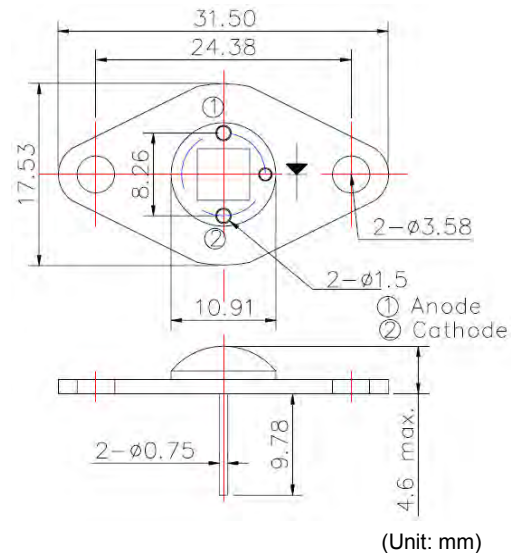
Specifications

- Structure: AlGaAs, 60 LED chips
- Peak Wavelength: typ. 890 nm
- Optical Output Power: typ. 850 mW
- Package: TO-66 stem with AlN,
              clear silicon and epoxy resin

Absolute Maximum Ratings (T_C=25°C)

Item	Symbol	Value	Unit
Power Dissipation	P_D	7.5	W
Forward Current	I_F	1000	mA
Pulsed Forward Current *[1]	I_{FP}	2.5	A
Reverse Voltage	V_R	50	V
Operating Temperature	T_{opr}	-30 … +80	°C
Storage Temperature	T_{stg}	-30 … +110	°C
Soldering Temperature *[2]	T_{sol}	265	°C

*[1] duty = 1%, pulse width = 1 µs
*[2] must be completed within 3 seconds

(Unit: mm)

① Anode
② Cathode

ATTENTION
OBSERVE PRECAUTIONS FOR HANDLING
ELECTROSTATIC SENSITIVE DEVICES

Electro-Optical Characteristics

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Total Radiated Power	P_O	I_F = 800 mA	-	850	-	mW
Total Radiated Power	P_O	I_{FP} = 5 A	-	5500	-	mW
Radiant Intensity	I_E	I_F = 800 mA	-	300	-	mW/sr
Forward Voltage	V_F	I_F = 800 mA	-	7.0	-	V
Peak Wavelength	λ_P	I_F = 800 mA	875	890	905	nm
Half Width	$\Delta\lambda$	I_F = 800 mA	-	40	-	nm
Viewing Half Angle	$\Theta_{1/2}$	I_F = 800 mA	-	±60	-	deg.

Heat Sink is required, LED is required to keep less than 60°C

Notes

- This high power LED must be cooled!
- Do not view directly into the emitting area of the LED during operation!
- The above specifications are for reference purpose only and subjected to change without prior notice.

NOTE
LED MUST BE COOLED

Typical Performance Curves

Forward Current – Forward Voltage	Radiant Power - Forward Current