LED810-66-60

TECHNICAL DATA

High Power LED Array, 60 chips   AlGaAs

LED810-66-60 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 AIN 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. 810 nm
- Optical Output Power: typ. 1 W
- Package: TO-66 stem with AIN,
            clear silicon and epoxy resin

Absolute Maximum Ratings (T_C=25°C)

Item	Symbol	Value	Unit
Power Dissipation	P_D	7.6	W
Forward Current	I_F	750	mA
Pulsed Forward Current *[1]	I_{FP}	3	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}	240	°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
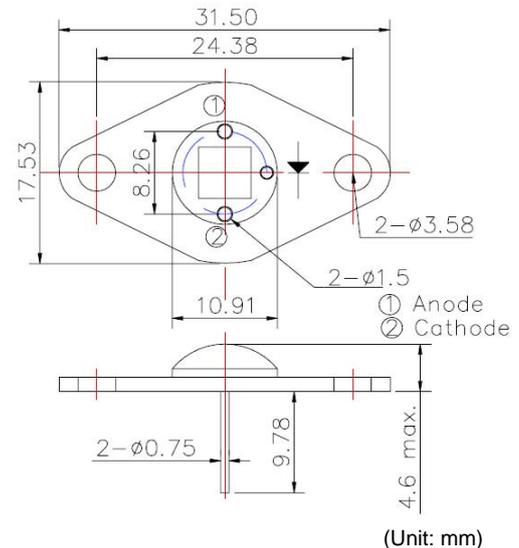
Electro-Optical Characteristics

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Total Radiated Power	P_O	I_F = 600 mA	-	1	-	W
Total Radiated Power	P_O	I_F = 3 A	-	4	-	W
Radiant Intensity	I_E	I_F = 600 mA	-	450	-	mW/sr
Forward Voltage	V_F	I_F = 600 mA	-	9.0	-	V
Reverse Voltage	V_R	I_R = 10 µA	50	-	-	V
Peak Wavelength	λ_P	I_F = 600 mA	-	810	-	nm
Half Width	$\Delta\lambda$	I_F = 600 mA	-	30	-	nm
Viewing Half Angle	$\Theta_{1/2}$	I_F = 600 mA	-	±60	-	deg.
Rise Time	t_r	I_F = 600 mA	-	100	-	ns
Fall Time	t_f	I_F = 600 mA	-	100	-	ns

Heat Sink is required, thermal resistance <8K/W

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