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LED760-66-60

TECHNICAL DATA

High Power LED Array, 60 chips   AlGaAs

LED760-66-60 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. 760 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$_D$	7.8	W
Forward Current	I$_F$	750	mA
Pulsed Forward Current *[1]	I$_{FP}$	6	A
Reverse Voltage	V$_R$	50	V
Junction Temperature	T$_J$	100	°C
Thermal Resistance	R$_{thjp}$	9	K/W
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
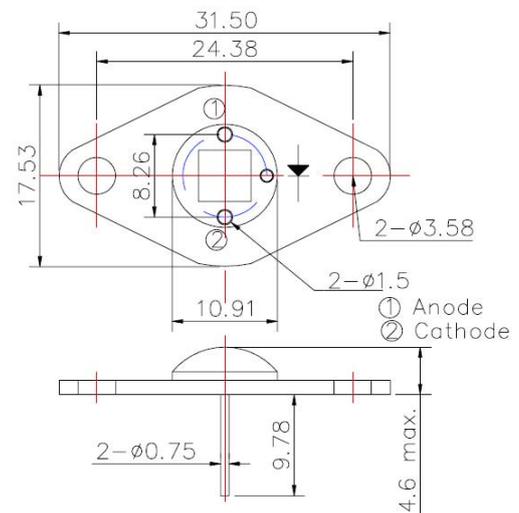
Electro-Optical Characteristics

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Total Radiated Power	P$_O$	I$_F$ = 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	-	760	-	nm
Half Width	Δλ	I$_F$ = 600 mA	-	40	-	nm
Viewing Half Angle	Θ$_{1/2}$	I$_F$ = 600 mA	-	±60	-	deg.
Rise Time	t$_f$	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