



## LED1050-66-60



### TECHNICAL DATA

## High Power LED Array, 60 chips

GaAs

LED1050-66-60 is a wide viewing and extremely high output power illuminator assembled with a total of 60 high efficiency GaAs 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.

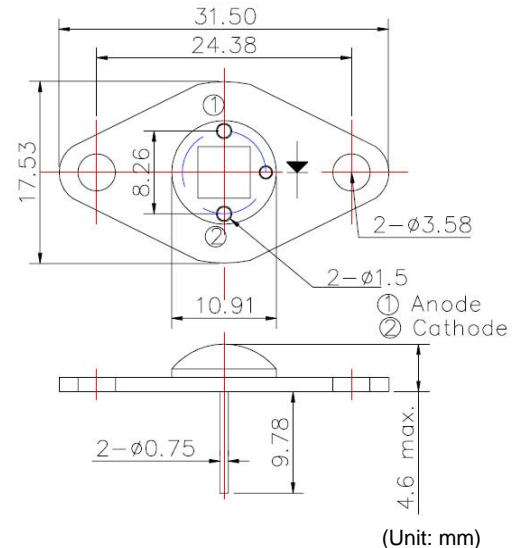
### Specifications

- Structure: GaAs, 60 LED chips
- Peak Wavelength: typ. 1050 nm
- Optical Output Power: typ. 120 mW
- Package: TO-66 stem with AlN, clear silicone and epoxy resin

### Absolute Maximum Ratings ( $T_C=25^\circ\text{C}$ )

Item	Symbol	Value	Unit
Power Dissipation	$P_D$	6.0	W
Forward Current	$I_F$	800	mA
Reverse Voltage	$V_R$	30	V
Operating Temperature	$T_{opr}$	-30 ... +80	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-30 ... +110	$^\circ\text{C}$
Soldering Temperature *	$T_{sol}$	265	$^\circ\text{C}$

\* must be completed within 3 seconds



### Electro-Optical Characteristics

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Total Radiated Power	$P_O$	$I_F = 600 \text{ mA}$	-	120	-	mW
Forward Voltage	$V_F$	$I_F = 600 \text{ mA}$	-	7.0	-	V
Reverse Voltage	$V_R$	$I_R = 10 \mu\text{A}$	30	-	-	V
Peak Wavelength	$\lambda_P$	$I_F = 600 \text{ mA}$	1000	1050	1100	nm
Half Width	$\Delta\lambda$	$I_F = 600 \text{ mA}$	-	55	-	nm
Viewing Half Angle	$\Theta_{1/2}$	$I_F = 600 \text{ mA}$	-	$\pm 60$	-	deg.
Rise Time	$t_r$	$I_F = 600 \text{ mA}$	-	15	-	ns
Fall Time	$t_f$	$I_F = 600 \text{ mA}$	-	10	-	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.

