

# NMOP-10077

## Infrared Emitting Diode

The NMOP-10077 is a high-power GaAlAs IRED mounted in a TO-46 type header with clear epoxy encapsulation, has wide beam angle and is relatively low-cost compared TO-46 Epoxy type devices.

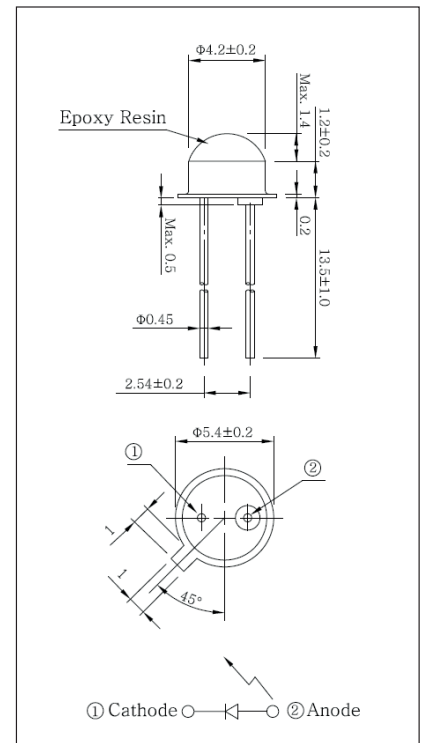
### FEATURES

- High-output power
- High-speed response
- Low profile package

### APPLICATIONS

- Optical emitters
- Optical switches
- Transmitting distance with glass cable

Dimensions [mm]



### MAXIMUM RATINGS

Item	Symbol	Rating	Unit
Reverse voltage	$V_R$	5	V
Forward current	$I_F$	80	mA
Pulse forward current	$I_{FP}$	1	A
Power dissipation	$P_D$	140	mW
Operating temperature	$T_{opr.}$	-30 ~ +80	°C
Storage temperature	$T_{stg}$	-35 ~ +100	°C
Soldering temperature *1	$T_{sol}$	260	°C

\*1. For Max. 5 seconds at the position of 2mm from the package.

### ELECTRO-OPTICAL CHARACTERISTICS

( $T_a = 25^\circ\text{C}$ )

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage	$V_F$	$I_F = 200\text{mA}$		1.3	1.6	V
Reverse current	$I_R$	$V_R = 5\text{V}$			10	$\mu\text{A}$
Radiant intensity	$P_o$	$I_F = 50\text{mA}$		17		mW
Peak emission wavelength	$\lambda_P$	$I_F = 50\text{mA}$		890		nm
Spectral bandwidth	$\Delta \lambda$	$I_F = 50\text{mA}$		30		nm
Half angle	$\Delta \theta$			±45		deg.

