



LED770-03AU

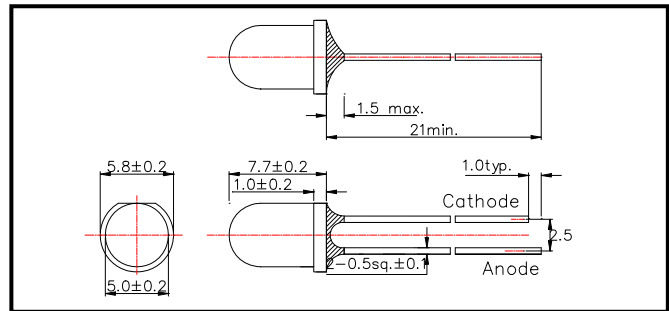
Infrared LED Lamp

LED770-03AU is an AlGaAs LED mounted on a lead frame with a clear epoxy lens. On forward bias, it emits a spectral band of radiation which peaks at 770 nm.

Specifications

- 1) Product Name Infrared LED Lamp
- 2) Type No. LED770-03AU
- 3) Chip
- (1) Chip Material AlGaAs
- (2) Peak Wavelength 770 nm typ.
- 4) Package
- (1) Type 5 mm clear molding
- (2) Resin Material Epoxy Resin
- (3) Lead Frame Soldered

Outer dimension (Unit: mm)



Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	P _D	190	mW	T _a = 25°C
Forward Current	I _F	100	mA	T _a = 25°C
Pulse Forward Current	I _{FP}	500	mA	T _a = 25°C
Reverse Voltage	V _R	5	V	T _a = 25°C
Operating Temperature	T _{OPR}	-30 ~ +85	°C	
Storage Temperature	T _{STG}	-30 ~ +100	°C	
Soldering Temperature	T _{SOL}	260	°C	

‡Pulse Forward Current condition: Duty = 1% and Pulse Width = 10 μs.

‡Soldering condition: Soldering condition must be completed within 3 seconds at 260°C

Electro-Optical Characteristics [T_a=25°C]

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V _F	I _F = 50 mA		1.75	1.95	V
Reverse Current	I _R	V _R = 5 V			10	uA
Total Radiated Power	P _O	I _F = 50 mA	13.0	18.0		mW
Radiant Intensity	I _E	I _F = 50 mA	18	35		mW/sr
Peak Wavelength	λ _P	I _F = 50 mA	750	770	790	nm
Half Width	Δλ	I _F = 50 mA		35		nm
Viewing Half Angle	α	I _F = 50 mA		±15		deg.
Rise Time	t _r	I _F = 50 mA		80		ns
Fall Time	t _f	I _F = 50 mA		80		ns

‡Total Radiated Power is measured by Photodyne #500

‡Radiant Intensity is measured by Tektronix J-6512