

Infrared Emitting Diode

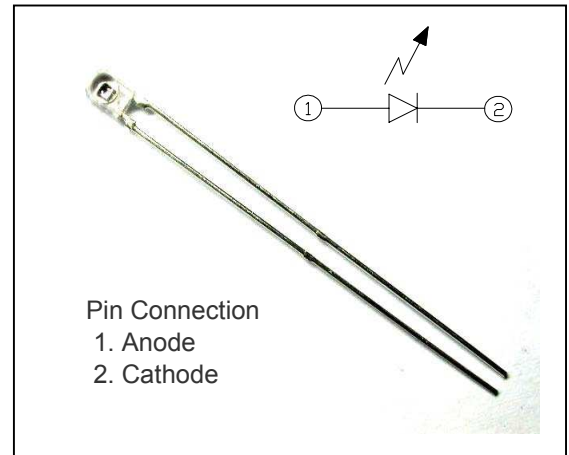
KEL1001L

Description

The KEL1001L, high-power GaAs IRED mounted in a clear side-looking package, is compact, low profile, and easy to mount.

Features

- High reliability
- Compact, low profile package
- Side-looking plastic package



RoHS



Applications

- Photointerrupter
- Optical switches
- Mouse, toys

Absolute Maximum Ratings

[T_A = 25°C]

Parameter	Symbol	Min.	Max.	Max.
Reverse Voltage	V _R	-	5	V
Forward Current	I _F	-	50	mA
Power Dissipation	P _D	-	100	mW
Pulse Forward Current*1	I _{FP}	-	1	A
Operating Temperature	T _{opr}	-25	85	°C
Storage Temperature	T _{stg}	-40	85	°C
Soldering Temperature*2	T _{sol}	-	260	°C
ESD Withstand Voltage (HBM)	V _{ESD}	-	±2.0	KV

*1 : Pulse Width : Tw ≤ 100 μs, Periode : T = 10ms

*2 : Distance from end of the package=2mm, time=5sec, Max

The contents of this data sheet are subject to change without advance notice for the purpose of improvement. When using this product, would you please refer to the latest specifications.

KEL1001L

Electrical Characteristics

[T_A = 25°C]

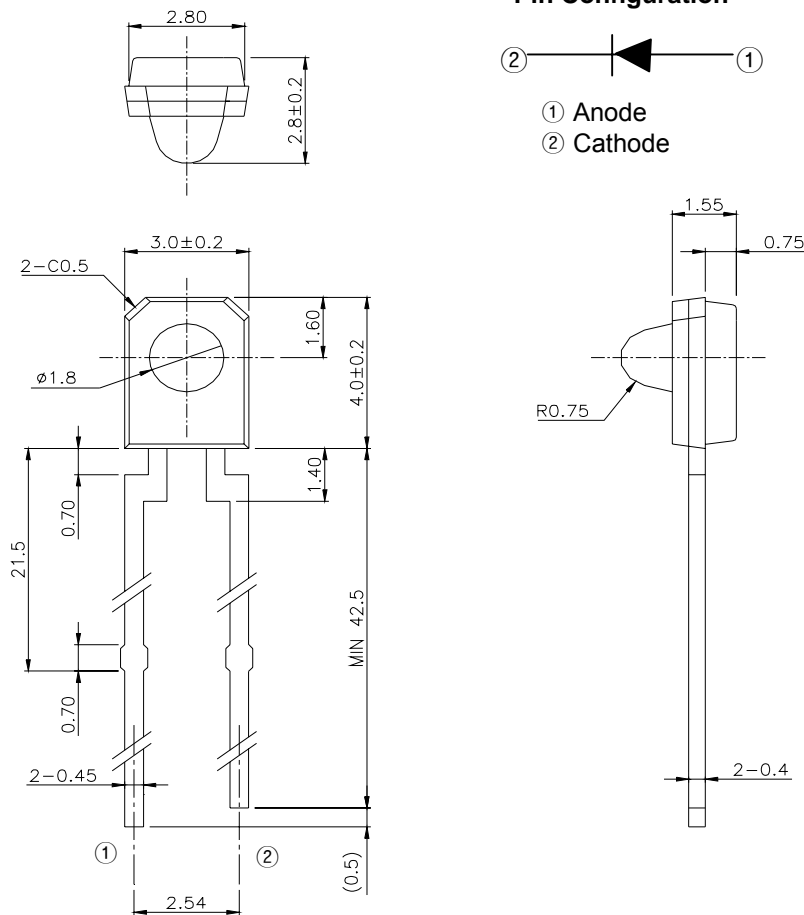
Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward Voltage	V _F	I _F =20mA	-	1.2	2.0	V
Reverse Current	I _R	V _R =5V	-	-	100	μA
Aperture Radiant Incident*3	I _c (PTr)	I _F =4mA, V _{CE} =3.5V	-	1.5	-	mA
Peak Emission Wavelength	λ _P	I _F =20mA	-	940	-	nm
Spectral Bandwidth 50%	Δλ	I _F =20mA	-	50	-	nm
Half Angle	Δθ	-	-	±10	-	deg

*3. For KEL1001L, output intensity is measured indirectly by measuring the emitter current of a 'Standard' ST-304L2 Phototransistor.

The parts are 6mm apart (lead to lead), LED test current is 4.0mA, V_{CE}=3.5V, no added PTr series resistance, and the standard PTr sensitivity is 0.532mA

Package Outline Dimensions

(Unit : mm)



The contents of this data sheet are subject to change without advance notice for the purpose of improvement. When using this product, would you please refer to the latest specifications.