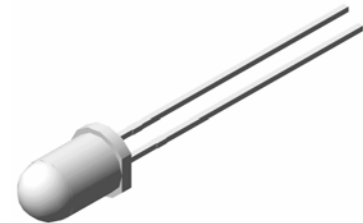


## 5mm Round 940nm Infrared Emitting Diode

### UT 5645

#### Description

The UT 5645 used high efficiency 940nm GaAlAs materials molded into tinted blue lens. Comparing conventional GaAs/GaAs technology under similar wavelength, GaAlAs offers much higher radiant power. The viewing angles being offered is 40 degree. The most suitable application is Infrared Remote Control unit.



#### Applications

- Opto-Electronic switch
- Infrared remote control unit
- Free air transmission system
- Infrared applied system



#### Electronic Optical Characteristics (at 20mA):

Part Number	(nm)		Lens Color	mW/sr		View Angle	VF(V)	
	p			Min.	Typ.		Typ.	Max.
UT 5645	940	45	Tinted Blue	7.5	9.5	40	1.2	1.5

Radiant Intensity Typ. 80 mW/sr @ IF=100mA, tp=100u sec, tp/T=0.01, VF @ 1.90 Max.

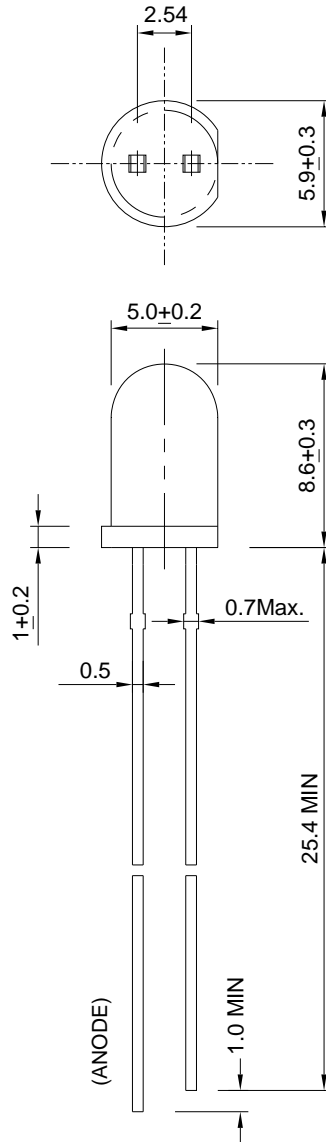
#### Absolute Maximum Ratings (at Ta=25 )

Parameter	Symbol	Rating	Unit	Condition
Continuous Forward Current	IF	100	mA	
Peak Forward Current	IP	1.0	A	Pulse width=100us Duty Cycle = 1%
Soldering Temperature	Tsol	260		4mm from lens body less than 5 seconds
Storage Temperature	Tstg	-40 - +85		
Operating Temperature	Topr	-25 - +85		
Power Dissipation	PD	150	mW	25°C Free Air Temperature

Note: Please take note the Absolute Maximum Rating values. Any operation beyond the specified ratings in this table will result degradation of LED life- span and may cause LED to fail.

**Package Dimension:**

unit: mm



**Notes:**

1. All dimensions are millimeters.
2. Tolerance is  $\pm 0.2$ mm unless otherwise specified.
3. Specifications are subject to change without notice.

### Optical Characteristics Curves

