

# TOIR-50b94bCEa

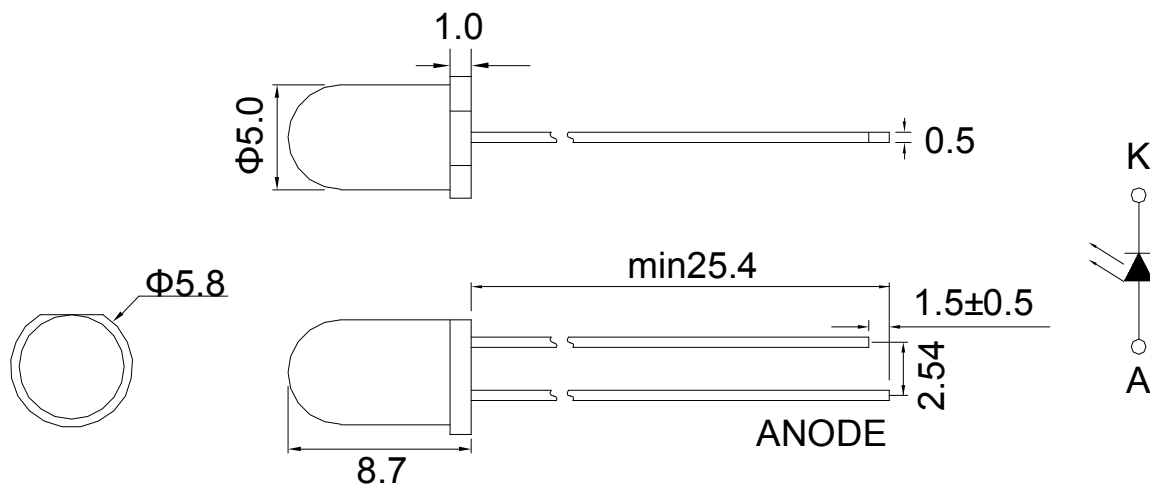
## Lamp LED

Part Number	Chip		Lens Color
	Material	Source Color	
TOIR-50b94bCEa	AlGaAs	Infrared	Water Clear

### Features

- I.C. compatible.
- Low power consumption.
- Compatible with wave soldering process.
- 5mm diameter package.
- Long life, stable and reliable.
- RoHS compliant.

### Dimensions



#### Notes:

1. All dimensions are in millimeter.
2. Tolerance is  $\pm 0.25\text{mm}$  unless otherwise noted.

## Absolute Maximum Rating @ Ta=25°C

Parameter	Maximum Rating	Unit
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	100	mA
Power Dissipation	105	mW
Continuous Forward Current	20	mA
Reverse Voltage	5	V
Operating Temperature Range	-40°C to +80°C	
Storage Temperature Range	-40°C to +100°C	
Wave Soldering Profile For Lead-free Soldering	260°C for 5 Sec	

## Electrical / Optical Characteristic @ Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Peak Wavelength	$\lambda_p$	-	940	-	nm	$I_F=20mA$
Viewing Angle	$2\theta_{1/2}$	-	30	-	deg	$I_F=20mA$
Spectral Line Half-Width	$\Delta\lambda$	-	50	-	nm	$I_F=20mA$
Reverse Current	$I_R$	-	-	10	$\mu A$	$V_R=5V$
Forward Voltage	$V_F$	-	1.2	1.5	V	$I_F=20mA$
		-	1.4	1.8		$I_F=50mA$
Radiated Output Power	$P_o$	-	50	-	mW/sr	$I_F=20mA$
		-	130	-		$I_F=50mA$