

PHOTOTRANSISTOR

BPW 40

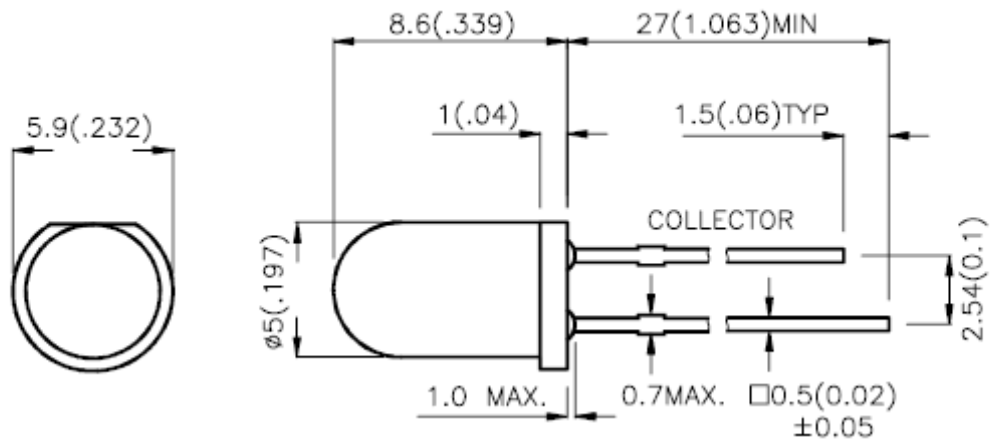
Features

- MECHANICALLY AND SPECTRALLY MATCHED TO THE BPW 40 INFRARED EMITTING LED LAMP.
- WATER CLEAR LENS

Description

Made with NPN silicon phototransistor chips.

Package Dimensions



Notes:

1. All Dimensions are in millimeters (inches).
2. Tolerance is ± 0.25 (0.01") unless otherwise noted.
3. Lead spacing is measured where the lead emerge package.
4. Specifications are subject to change without notice.

Electrical / Optical Characteristics at $T_A=25^\circ\text{C}$

Symbol	Parameter	Min.	Typ.	Max.	Unit	Test Condition
$V_{BR\ CE0}$	Collector-to-Emitter Breakdown Voltage	30	-	-	V	$I_C=100\mu\text{A}$ $E_e=0\text{mW}/\text{cm}^2$
$V_{BR\ EC0}$	Emitter-to-Collector Breakdown Voltage	5	-	-	V	$I_E=100\mu\text{A}$ $E_e=0\text{mW}/\text{cm}^2$
$V_{CE\ (SAT)}$	Collector-to-Emitter Saturation Voltage	-	-	0.8	V	$I_C=2\text{mA}$ $E_e=20\text{mW}/\text{cm}^2$
I_{CE0}	Collector Dark Current	-	-	100	nA	$V_{CE}=10\text{V}$ $E_e=0\text{mW}/\text{cm}^2$
T_R	Rise Time (10% to 90%)	-	3	-	us	$V_{CE}=5\text{V}$ $I_C=1\text{mA}$ $R_L=1000\Omega$
T_F	Fall Time (90% to 10%)	-	3	-	us	
$I_{(ON)}$	On State Collector Current	0.1	0.5	-	mA	$V_{CE}=5\text{V}$ $E_e=1\text{mW}/\text{cm}^2$ $\lambda=940\text{nm}$

Absolute Maximum Ratings at $T_A=25^\circ\text{C}$

Parameter	Maximum Rating
Collector-to-Emitter Breakdown Voltage	30V
Emitter-to-Collector Breakdown Voltage	5V
Power Dissipation at (or below) 25°C Free Air Temperature	100mW
Operating Temperature Range	$-40^\circ\text{C} \sim +85^\circ\text{C}$
Storage Temperature Range	$-40^\circ\text{C} \sim +85^\circ\text{C}$
Lead soldering Temperature ($>5\text{mm}$ for 5sec)	260°C