

L-610MP4BT/BD

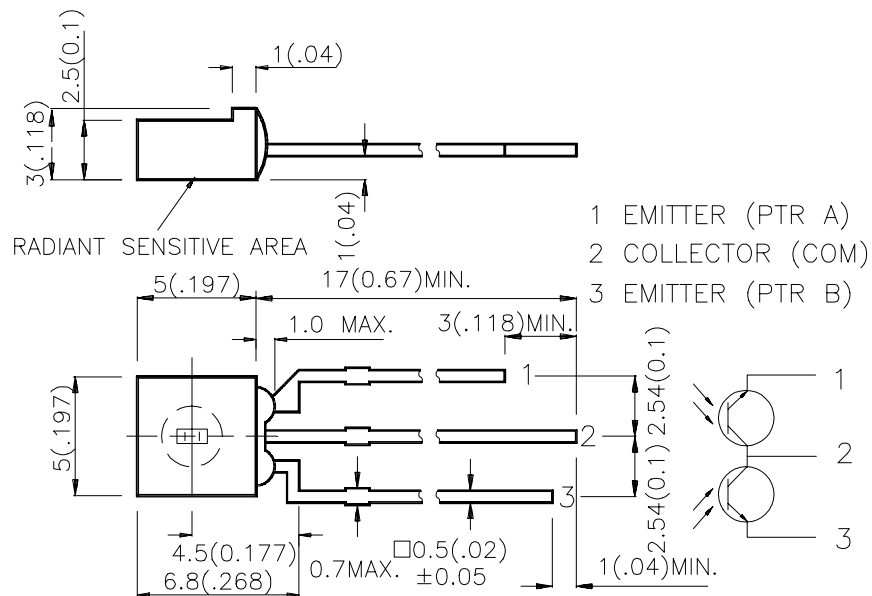
### Features

- MECHANICALLY AND SPECTRALLY MATCHED TO THE KM-4457 INFRARED EMITTING LED LAMP SERIES.
- BLACK PLASTIC PACKAGE.
- COUPLED WITH KM-4457 INFRARED EMITTING LED LAMP SERIES FOR MOUSE APPLICATION.

### Description

Made with NPN silicon phototransistor chips.

### Package Dimensions



### Notes:

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

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

Parameter	Maximum Ratings
Collector-to-Emitter Breakdown Voltage	30V
Emitter-to-Collector Breakdown Voltage	5V
Power Dissipation at (or below) $25^{\circ}\text{C}$ Free Air Temperature	100mW
Operating Temperature Range	$-55^{\circ}\text{C} \sim +100^{\circ}\text{C}$
Storage Temperature Range	$-55^{\circ}\text{C} \sim +100^{\circ}\text{C}$
Lead Soldering Temperature(4mm For 5sec)	$260^{\circ}\text{C}$

## Electrical And Radiant Characteristics at $T_A=25^{\circ}\text{C}$

Symbol	Parameter	Min.	Typ.	Max.	Unit	Test Condition
$V_{BR\text{CEO}}$	Collector-to-Emitter Breakdown Voltage	30	-	-	V	$I_C=100\mu\text{A}$ $E_e=0\text{mW}/\text{cm}^2$
$V_{BR\text{ECO}}$	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	-	-	0.4	V	$I_C=500\mu\text{A}$ $E_e=5\text{mW}/\text{cm}^2$
$I_{CEO}$	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%)	-	16	-	us	$V_{CE}=5\text{V}$ $I_C=1\text{mA}$ $R_L=1\text{K}\Omega$
$T_F$	Fall Time (90% to 10%)	-	18	-	us	
$I_{(ON)}$	On State Collector Current	0.1	0.5	-	mA	$V_{CE}=5\text{V}$ , $E_e=1\text{mW}/\text{cm}^2$ , $\lambda=940\text{nm}$
R	On State Collector Current	0.8	1	1.25	mA	$I_C(ON)(a) / I_C(ON)(b)$