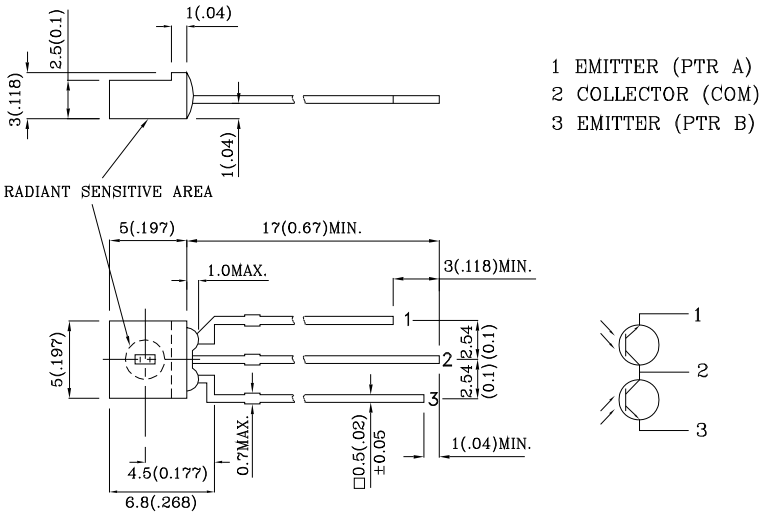
SunLED
www.SunLEDusa.com

Part Number: **XRNI82B**

NPN BLACK PLASTIC PHOTOTRANSISTOR

Features

- MECHANICALLY AND SPECTRALLY MATCHED TO THE INFRARED EMITTING LED LAMP SERIES.
- BLACK DIFFUSED LENS.
- COUPLED WITH INFRARED EMITTING LED LAMP SERIES FOR MOUSE APPLICATION.
- RoHS COMPLIANT.



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ± 0.25(0.01") unless otherwise noted.
3. Specifications are subject to change without notice.

Absolute Maximum Ratings at T_A=25°C

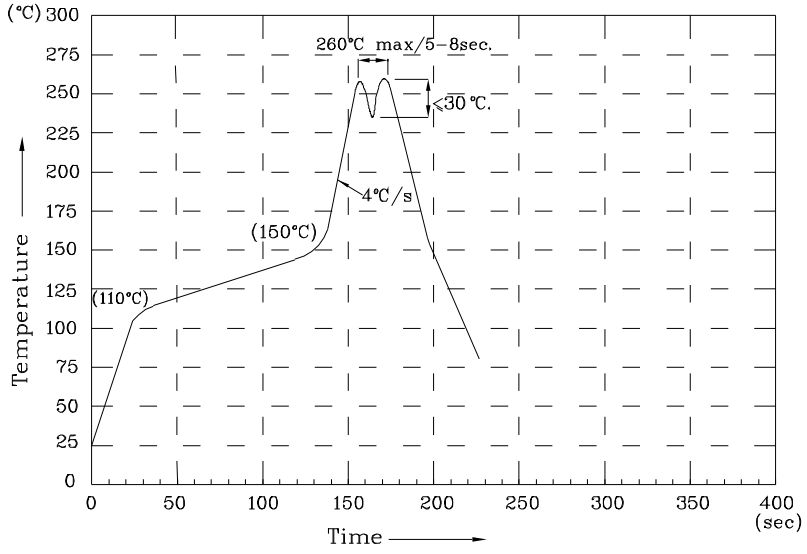
Parameter	Max. Ratings
Collector-to-Emitter Voltage	30V
Emitter-to-Collector Voltage	5V
Power Dissipation at (or below) 25°C Free Air Temperature	100mW
Operating / Storage Temperature Range	-55°C To +100°C
Lead Soldering Temperature (>5mm for 5sec)	260°C

Electrical / Optical Characteristics at T_A=25°C

Symbol	Parameter	Min.	Typ.	Max.	Unit	Test Condiction
$V_{BR\ CEO}$	Collector-to-Emitter Breakdown Voltage	30	-	-	V	I_C=100 μ A Ee=0mW/cm²
$V_{BR\ ECO}$	Emitter-to-Collector Breakdown Voltage	5	-	-	V	I_E=100 μ A Ee=0mW/cm²
$V_{CE(SAT)}$	Collector-to-Emitter Saturation Voltage	-	-	0.4	V	I_C=500 μ A Ee=5mW/cm²
I_{CEO}	Collector Dark Current	-	-	100	nA	V_{CE}=10V Ee=0mW/cm²
T_R	Rise Time (10% to 90%)	-	16	-	μ s	V_{CE}=5V I_C=1mA R_L=1KΩ
T_F	Fall Time (90% to 10%)	-	18	-	μ s	
$I_{(ON)}$	On State Collector Current	0.1	0.4	-	mA	V_{CE}=5V Ee=1mW/cm2 λ=940nm
R	Collector Current Ratio of Phototransistor	0.8	1	1.25	Ω	Ic (on) (a)/ Ic(on) (b)

XRNI82B

Wave Soldering Profile For Lead-free Through-hole LED.



NOTES:

1. Recommend the wave temperature 245℃~260℃. The maximum soldering temperature should be less than 260℃.
2. Do not apply stress on epoxy resins when temperature is over 85 degree℃.
3. The soldering profile apply to the lead free soldering (Sn/Cu/Ag alloy).
4. No more than once.

PACKING & LABEL SPECIFICATIONS XRNI82B