

SIDE LOOK PACKAGE NPN PHOTOTRANSISTOR

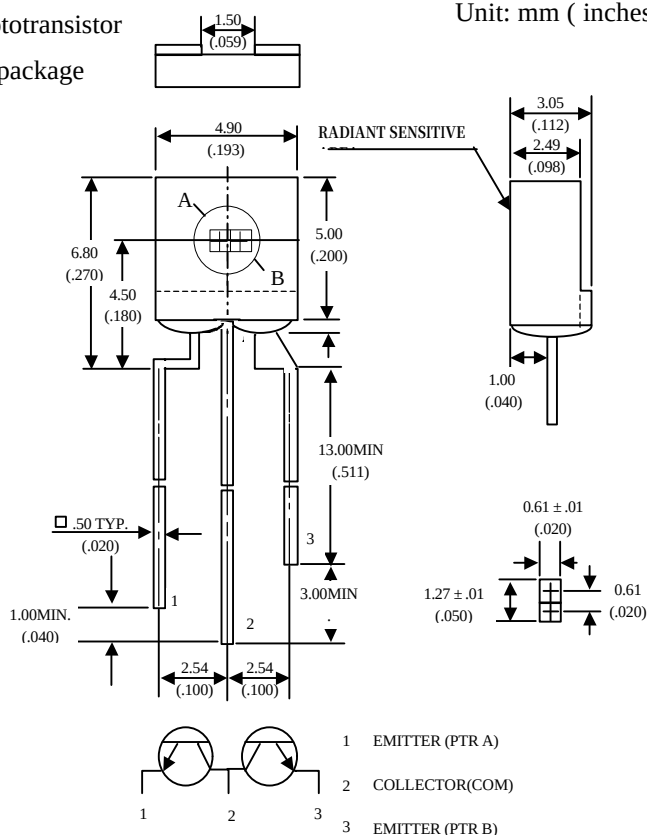
MID-95A3LH

Description

The MID-95A3LH is a TWIN NPN silicon phototransistor mounted in a special dark plastic side looking package and suitable for the IRED (940nm) Type.

Package Dimensions

Unit: mm (inches)



Features

- Wide range of collector current
- Low cost plastic package

NOTES :

1. All dimensions are in millimeters.(inches).
2. Tolerance is $\pm 0.25\text{mm}$ (.010") unless otherwise noted .
3. Protruded resin under flange is 1.5mm (.059") max.
4. Specifications are subject to change without notice.

Absolute Maximum Ratings

@ $T_A = 25^\circ\text{C}$

Parameter	Maximum Rating	Unit
Power Dissipation	100	mW
Collector-Emitter Voltage	30	V
Emitter-Collector Voltage	5	V
Operating Temperature Range	-55°C to $+100^\circ\text{C}$	
Storage Temperature Range	-55°C to $+100^\circ\text{C}$	
Lead Soldering Temperature	260°C for 5 seconds	

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Optical-Electrical Characteristics

@ $T_A=25^{\circ}\text{C}$

Parameter	Test Conditions	Symbol	Min.	Typ .	Max.	Unit
Collector-Emitter Breakdown Voltage	$I_C=1\text{mA}$ $E_e=0$	$V_{(BR)CEO}$	30			V
Emitter-Collector Breakdown Voltage	$I_e=100\mu\text{A}$ $E_e=0$	$V_{(BR)ECO}$	5			V
Collector-Emitter Saturation Voltage	$I_C=0.1\text{mA}$ $E_e=0.1\text{mW/cm}^2$	$V_{CE(SAT)}$	0.1		0.4	V
Rise Time	$V_R=5\text{V}$, $R_L=1\text{K}\Omega$	T_r		10		μS
Fall Time		T_f		10		
Collector Dark Current	$V_{CE}=10\text{V}$ $E_e=0$	I_{CEO}			100	nA
On State Collector Current	$V_{CE}=5\text{V}$ $E_e=0.1\text{mW/cm}^2$	$I_{C(ON)}$	0.16	0.4		mA

Typical Optical-Electrical Characteristic Curves

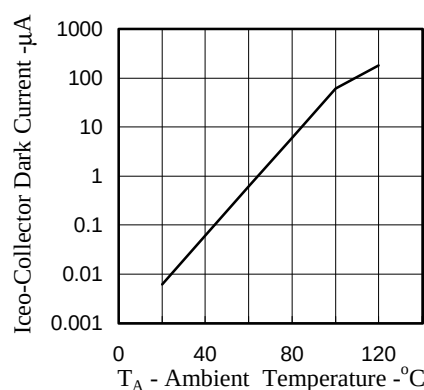


FIG.1 COLLECTOR DARK CURRENT VS AMBIENT TEMPERATURE

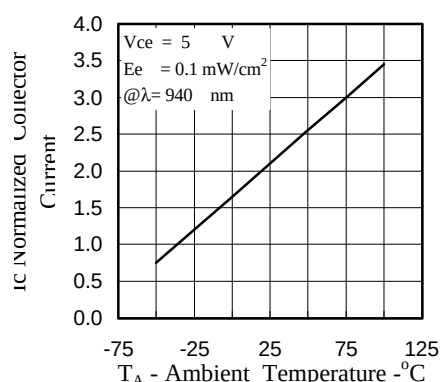


FIG.2 NORMALIZED COLLECTOR CURRENT VS AMBIENT TEMPERATURE

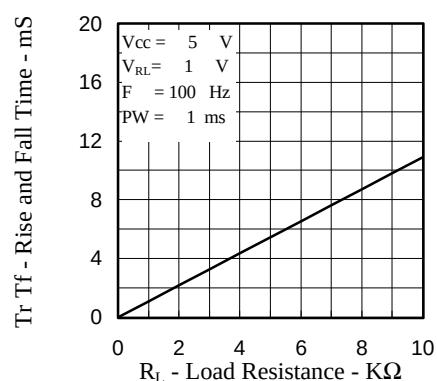


FIG.3 RISE AND FALL TIME VS LOAD RESISTANCE

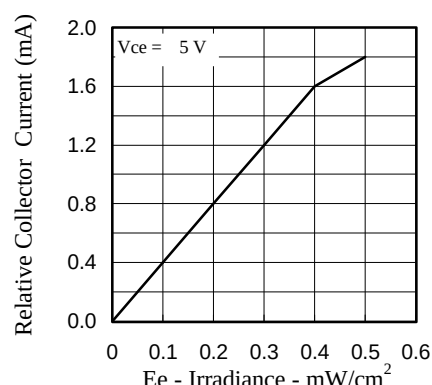


FIG.4 RELATIVE COLLECTOR CURRENT VS IRRADIANCE