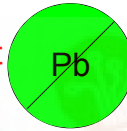


This component is RoHS compliant



# BOD100 TO18 Plastic Phototransistor

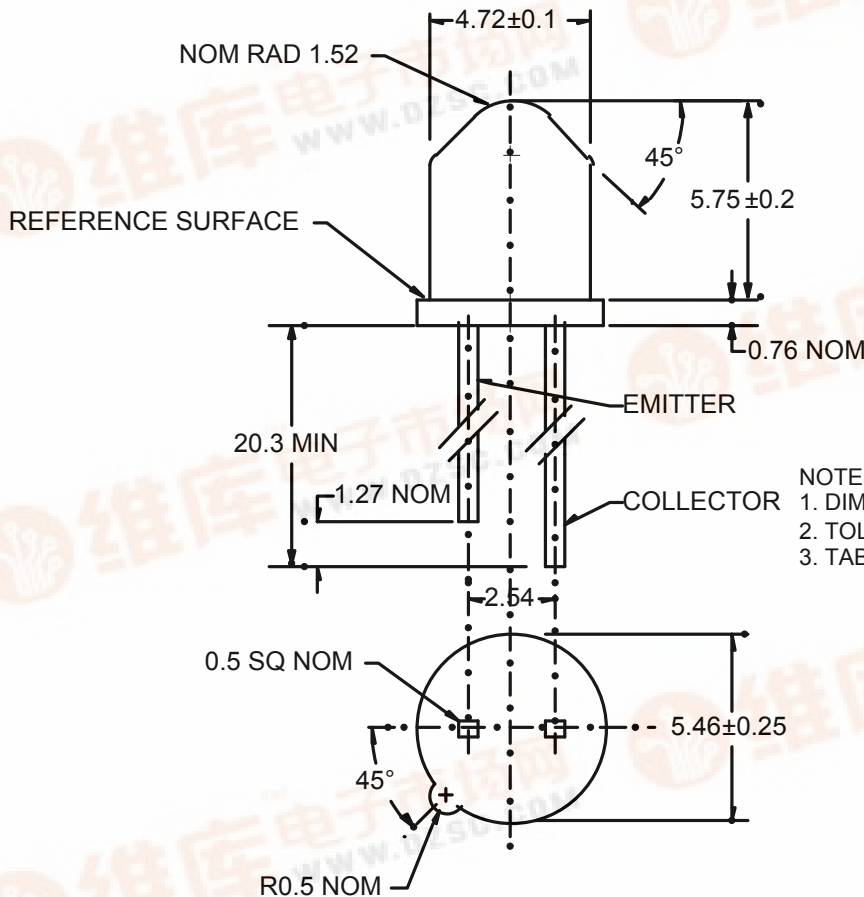
## FEATURES

- Min/max light current selection.
- Good optical to mechanical alignment
- Ambient visible light filtering.
- Black body gives easy recognition from IR emitter.

## DESCRIPTION

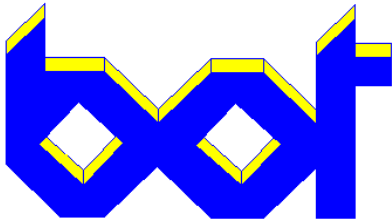
The BOD100 is a silicon phototransistor encapsulated in an Infrared transparent black TO18 package

## MECHANICAL DATA

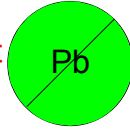


- NOTES
1. DIMENSIONS mm
  2. TOLERANCE +/- 0.25 UNLESS STATED
  3. TAB DENOTES EMITTER





This component is RoHS compliant



# BOD100 TO18 Plastic Phototransistor

## ABSOLUTE MAXIMUM RATINGS (25°C unless otherwise noted)

STORAGE TEMP	-40 C TO +100°C
OPERATING TEMP	-40 C TO 100°C
COLLECTOR-EMITTER VOLTAGE	30V
EMITTER-COLLECTOR VOLTAGE	5.0V
POWER DISSIPATION	100mW (1)
LEAD SOLDERING TEMPERATURE (Iron)	240°C for 5secs(2,3,5)
LEAD SOLDERING TEMPERATURE(Flow)	260°C for 10secs

## OPTO ELECTRONIC DATA(Ta=25°C unless stated)

PARAMETER	SYMBOL	MIN	TYP	MAX	UNITS	TEST CONDITIONS
Collector-Emitter Breakdown	V(BR)CEO	30.0			V	Ic = 100µA
Emitter-Collector Breakdown	V(BR)ECO	5.0			V	Ie = 100µA
Collector-Emitter Dark Current	ICEO			100	nA	Vce= 10.0V, Ee = 0
On state Collector Current	IC(ON) (3) (4)	7.5		11.5	mA	Vce=5.0V,H=1.5mW/ Sq.cm (6)
Reception angle at half sensitivity.	Θ		±20		Deg	
Rise Time	Tr		8.0		mS	Ic=0.2mA,Vcc=5V, RI=100Ω
Fall Time	Tf		8.0		mS	Ic=0.2mA,Vcc=5V, RI=100Ω
Saturation Voltage	Vce			0.40	V	Ic=0.6mA,Ee=).5mW/ sq.cm.(6)

### NOTES

1. Derate power dissipation linearly at 1.33mW/°C above 25°C.
2. RMA flux is recommended.
3. Methonal or Isopropylalcohols are recommended as cleaning agents.
4. Solder iron tip 1.6mm minimum from housing.
5. Leads not to be under strees or tension.
6. Light source is AlGaAs Led with peak wavelength of 880nm.