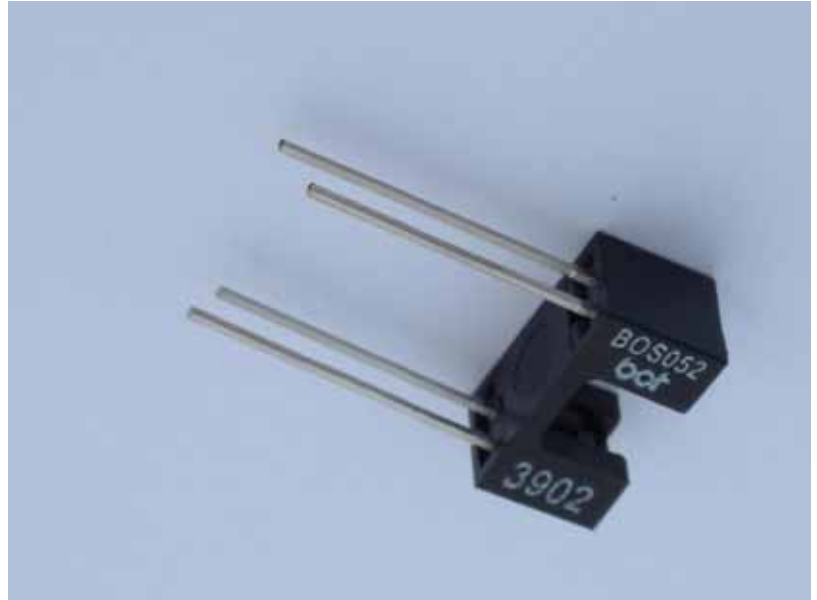


# BOS052 Slotted Optical Switch

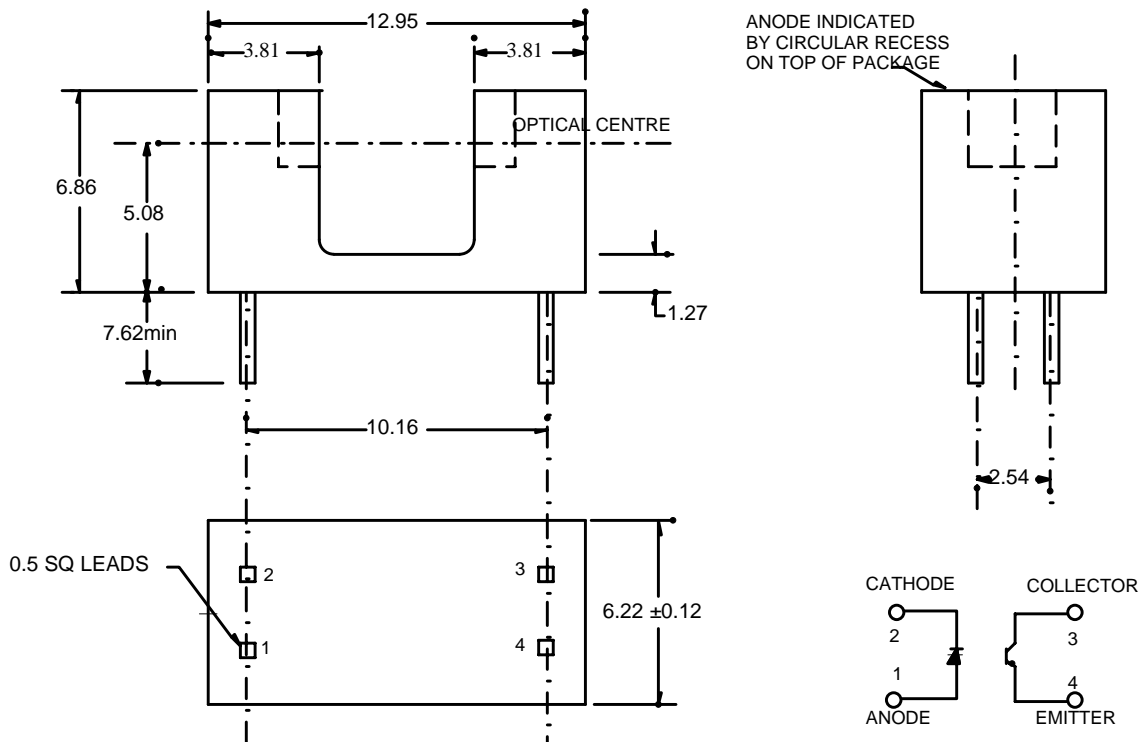
## FEATURES

BOS052 is a compact optical switch with a 5.2mm slot width. It uses a plastic packaged Gallium Arsenide light emitter and NPN silicon phototransistor.

- Low profile.
- Min/Max sensitivity
- Opaque housing.
- 5.2mm slot width.
- Equivalent to Optek OPB855 and Honeywell HOA1882

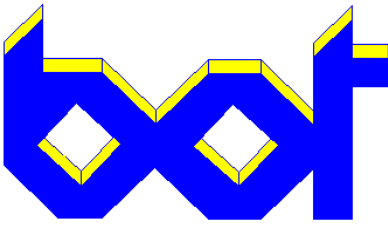


## MECHANICAL DATA



NOTES  
1. DIMENSIONS IN mm.  
2. TOLERANCE +/- 0.25 UNLESS STATED

**BEDFORD OPTO TECHNOLOGY LTD**  
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# BOS052 Slotted Optical Switch

## ABSOLUTE MAXIMUM RATINGS (25 °C)

<b>INPUT DIODE</b> FORWARD DC CURRENT REVERSE DC VOLTAGE POWER DISSIPATION DERATING FACTOR ABOVE 25°C	50mA 3V 100mW 1.6mW
<b>OUTPUT SENSOR</b> COLLECTOR-EMITTER VOLTAGE EMITTER-COLLECTOR VOLTAGE POWER DISSIPATION	30V 5V 100mW
<b>OPERATING TEMP</b>	-40°C to +85°C
<b>STORAGE TEMP</b>	-40°C to +85°C
<b>LEAD SOLDERING TEMP ( t = 3 sec 1.6mm from body)</b>	250 °C

## ELECTRICAL CHARACTERISTICS at 25 °C

SYMBOL	PARAMETER	MIN	MAX	UNITS	TEST CONDITION
<b>INPUT DIODE</b> Vf	Forward Voltage		1.5	Volts	If = 20 mA
Ir	Reverse Leakage Current		100	uA	Vr = 2V
<b>DETECTOR</b> BV <sub>CEO</sub>	Collector-emitter breakdown	30		Volts	Ic = 10uA
BV <sub>Eco</sub>	Emitter-Collector breakdown	5		Volts	Ic = 10uA
I <sub>CEO</sub>	Collector-Emitter dark current		100	nA	V <sub>CE</sub> = 10V, If=0
<b>COUPLED</b> Ic (ON)	On-State Collector Current	1.8	14.0	mA	Vce =5V If = 20 mA
Vce(sat)	Collector-emitter Saturation Volts		0.40	Volts	Ic=0.23mA If=20mA

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