

**67060**

**TWO EAR SLOTTED OPTICAL INTERRUPTER  
PROTON AND TOTAL DOSE TOLERANT**



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**Features:**

- Non-contact switching
- 0.130" wide slot
- 0.300" lead spacing

**Applications:**

- Position sensing
- Open sensing
- Rotation sensing

**DESCRIPTION**

The **67060** consists of GaAlAs light emitting diode and an NPN silicon phototransistor in hermetic coaxial packages, mounted in a plastic housing on opposite sides of a 0.125" wide slot. Phototransistor switching takes place whenever an opaque object passes through the slot. The components are available screened in accordance with MIL-PRF-19500. Available with single or dual mounting flange(s).

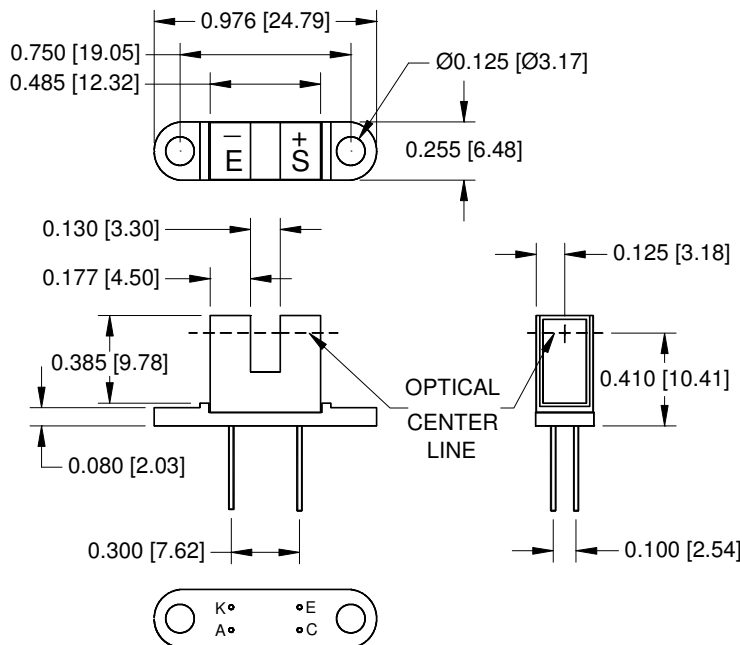
**ABSOLUTE MAXIMUM RATINGS**

Continuous Forward Current .....	100 mA
Reverse Voltage .....	3 V
LED Power Dissipation (Note 2).....	50 mW
Collector – Emitter Voltage .....	30 V
Emitter – Collector Voltage .....	5 V
Power Dissipation (Note 1).....	100 mW
Storage Temperature.....	-55°C to + 100°C
Operating Temperature .....	-55°C to + 100°C
Lead Soldering Temperature (5 seconds, 1/16" from case) .....	240°C

**Notes:**

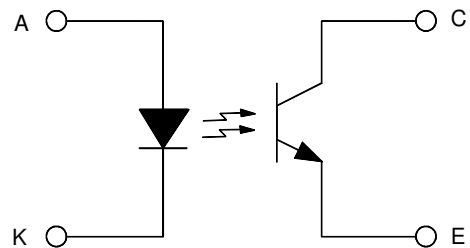
1. Derate linearly at the rate of 1.33 mW/°C above 25°C.
2. Derate linearly at the rate of 0.66 mW/°C above 25°C.

**Package Dimensions**



ALL DIMENSIONS ARE IN INCHES (MILLIMETERS)

**Schematic Diagram**



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**OPTICAL/ELECTRICAL CHARACTERISTICS**

At 25°C unless otherwise specified.

PARAMETER	SYMBOL	MIN	TYP	MAX	UNITS	TEST CONDITIONS
Input Diode Forward Voltage	$V_F$			2.0	V	$I_F = 20 \text{ mA}$
Input Diode Reverse Current	$I_R$			100	$\mu\text{A}$	$V_R = 3 \text{ V}$

**OUTPUT PHOTOTRANSISTOR**

At 25°C unless otherwise specified.

PARAMETER	SYMBOL	MIN	TYP	MAX	UNITS	TEST CONDITIONS
Collector – Emitter Breakdown Voltage	$V_{(BR)CEO}$	30			V	$I_C = 1 \text{ mA}$
Emitter – Collector Breakdown Voltage	$V_{(BR)ECO}$	5			V	$I_E = 100 \mu\text{A}$
Collector – Emitter Dark Current	$I_{CEO}$			100	nA	$V_{CE} = 10 \text{ V}$

**COUPLED CHARACTERISTICS**

At 25°C unless otherwise specified.

PARAMETER	SYMBOL	MIN	TYP	MAX	UNITS	TEST CONDITIONS
Collector – Emitter Saturation Voltage	$V_{CE(SAT)}$			0.40	V	$I_C = 2 \text{ mA}, I_F = 20 \text{ mA}$
Collector Current	$I_{C(ON)}$	4			mA	$V_{CE} = 5 \text{ V}, I_F = 20 \text{ mA}$

**SELECTION GUIDE**

PART #	PART DESCRIPTION
67060-011	Commercial
67060-111	Screened