61111 TO - 46 HIGH SPEED PHOTODETECTOR

OPTOELECTRONIC PRODUCTS DIVISION

05/16/2011

Features:	**Applications:**
• Hermetically sealed • High speed • TTL compatible • Narrow acceptance angle	• Incremental encoding • Reflective sensors • Position sensors • Level sensors

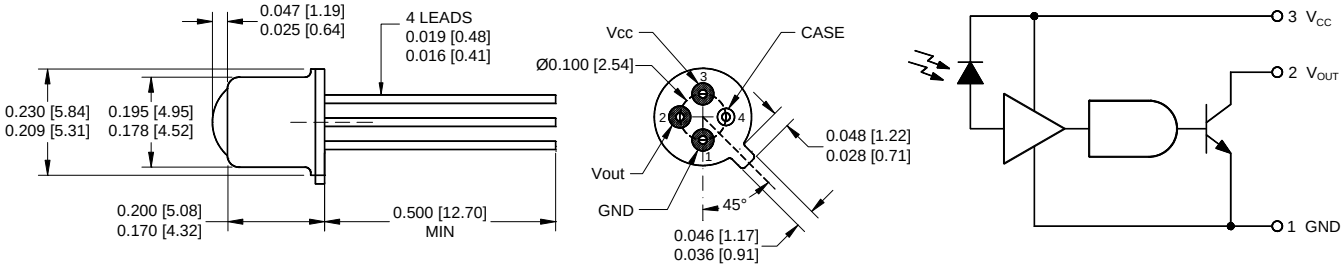
DESCRIPTION

The ***61111*** is a high speed, high gain, inverting photodetector in a lensed TO-46 four-lead package. The TTL compatible output is capable of switching with propagation delays of 55 ns typical. Available screened to customer specifications or screened to MIL-PRF-19500.

ABSOLUTE MAXIMUM RATINGS

Output Voltage	7 V
Supply Voltage	7 V
Continuous Collector Current	20 mA
Power Dissipation	175 mW
Storage Temperature	-65°C to +150°C
Operating Temperature	-55°C to +125°C
Lead Soldering Temperature (10 seconds, 1/16" from case)	240°C

Package Dimensions **Schematic Diagram**



ALL DIMENSIONS ARE IN INCHES [MILLIMETERS]

61111

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ELECTRICAL CHARACTERISTICS

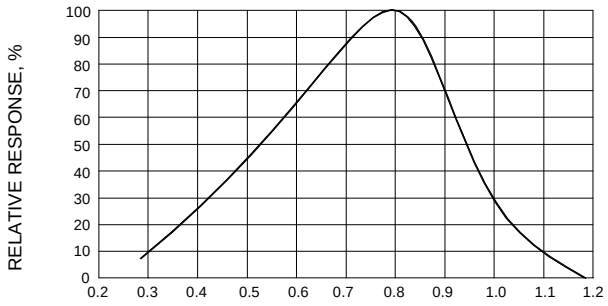
T_A = 25°C unless otherwise specified.

PARAMETER	SYMBOL	MIN	TYP	MAX	UNITS	TEST CONDITIONS	NOTE
High Level Output Current	I_{OH}		5	200	µA	V_{CC} = 5.5 V, V_O = 5.5 V, I_F = 250 µA	
Low Level Output voltage	V_{OL}		0.4	0.5	V	V_{CC} = 5.5 V, $I_{OL\ (Sinking)}$ = 10 mA	
High Level Supply Current	I_{CCH}		9	13	mA	V_{CC} = 5.5 V, I_F = 0	
Angular Response	θ		10		degrees		1

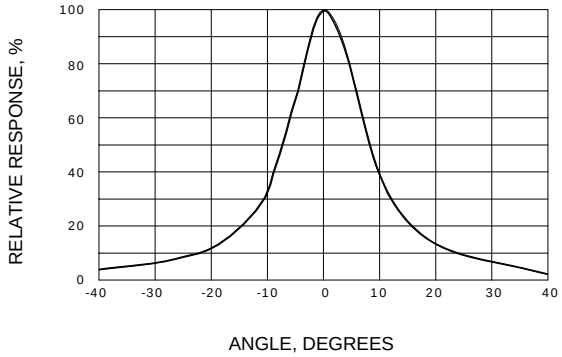
NOTES:

1. The angle between incidence for peak response and incidence for 50% of peak response.

RELATIVE SPECTRAL RESPONSE



ANGULAR RESPONSE



RECOMMENDED OPERATING CONDITIONS:

PARAMETER	SYMBOL	MIN	MAX	UNITS
Supply Voltage	V_{CC}	4.5	5.5	V

SELECTION GUIDE

PART NUMBER	PART DESCRIPTION
61111-001	Commercial
61111-101	Screened to TX level
61111-105	Screened to TXV level

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