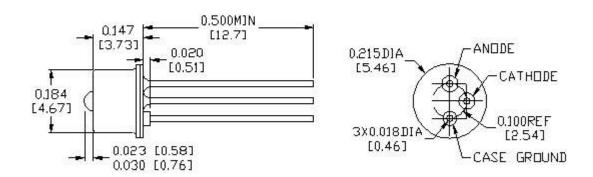


## **DESCRIPTION**

This is a high speed InGaAs detector optimized for fiber optic applications requiring high Responsivity and a fast response time.

## **FEATURES**

- ☐ High Responsivity
- ☐ High Electrical Bandwidth/Fast response time
- ☐ High Reliability/Hermetic Package
- ☐ Similar to AMP 259007-2



## **ABSOLUTE MAXIMUM RATINGS**

## **OUTLINE DIMENSIONS**

☐ Storage temperature	-55°C to +125°C
<b>7</b> 0	

☐ Case operating temperature..... -40°C to +85°C

☐ Lead solder temperature...... 260°C, 10 seconds

☐ Reverse Breakdown Voltage..... 18 Volts

Tolerances are  $\pm$  -0.005 inches, except as noted The case is electrically isolated from the pins.

PARAMETER	TEST CONDITION	SYMBOL	MIN	TYP	MAX	UNIT
Reverse Breakdown Voltage	Ir = 10 μA	BVR	3.0			Volts
Capacitance	$Vr = 0 \dot{V}, f = 1 MHz$	С		1.15	1.9	рF
Responsivity (50 µm coupled)	$H = 10 \mu W$ , $Vr = 5 Volts$	$R_{c}$	.75	.85		A/W
	$50 \mu m$ Core, $\lambda = 1.3 \mu m$	· ·				
Responsivity (62.5 µm coupled)	$H = 10 \mu W$ , $Vr = 5 Volts$	$R_{c}$	.65	.8		A/W
	62.5 $\mu$ m Core, $\lambda = 1.3 \mu$ m					
Dark Current	Vr = 5  Volts, H = 0  mW	ld		2	5	nA
Response Time	10%-90%, Vr = 5 Volts	t <sub>r</sub>		0.5	1	nsec
		t <sub>f</sub>		0.5	1	nsec
Spectral Response		λ	800		1700	nm
Electrical Bandwidth		BWE		1.5		GHz

ELECTRO-OPTICAL CHARACTERISTICS (Case  $T = 25^{\circ}C$ )