

## DESCRIPTION

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

## FEATURES

□ High Responsivity

- □ High Electrical Bandwidth/Fast response time
- High Reliability/Hermetic Package

## ABSOLUTE MAXIMUM RATINGS

□ Storage temperature $-55^{\circ}$ C to $+125^{\circ}$ C
$\Box$ Case operating temperature40°C to +100°C
□ Lead solder temperature
Reverse Breakdown Voltage 100 Volts

## **OUTLINE DIMENSIONS**

Tolerances are +/-0.005 inches, except as noted The case is electrically isolated from the pins.

PARAMETER	TEST CONDITION	SYMBOL	MIN	TYP	MAX	UNIT
Capacitance	Vr = 20 V, f = 1 MHz	С		3.0		рF
Responsivity (50 µm coupled)	$H = 10 \ \mu W$ , $Vr = 5 \ Volts$	R <sub>c</sub>	.45	.55		A/W
	50 $\mu$ m Core, $\lambda = 850$ nm	5				
Dark Current	Vr = 5 Volts, H = 0 mW	ld		2	10	nA
Response Time	10%-90%, Vr = 5 Volts	t <sub>r</sub>		6.0	10	nsec
	$R_{\rm I} = 50 \ \Omega$	t <sub>f</sub>		6.0	10	nsec
Spectral Response	-	λ	400		1100	nm
Electrical Bandwidth	Vr = 5 Volts	BWE		50		MHz

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