

High Speed Back-Illuminated InGaAs PIN Photodiode

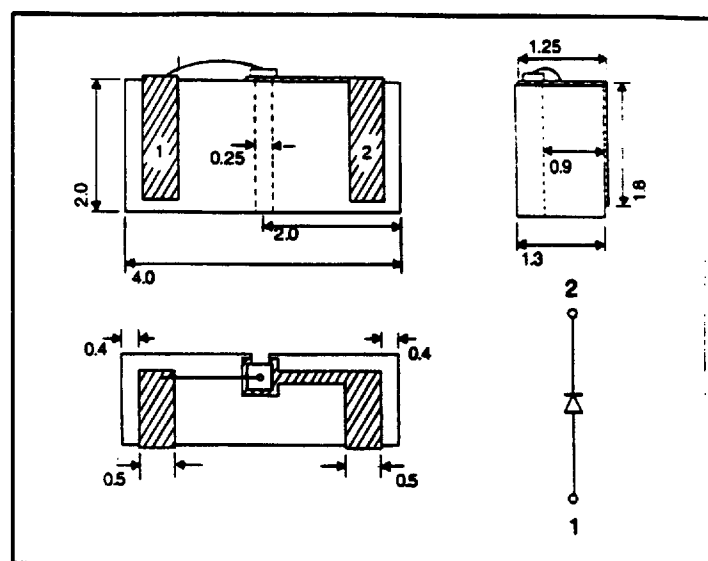
Description:

EPITAXX ETX 25B is a small area planar InGaAs photodiode mounted on a ceramic subcarrier. The device is illuminated through the substrate and its very low capacitance allows direct modulation at microwave frequencies.

Features:

- 25 μ m active diameter
- grooved carrier
- optional custom submounts
- low dark current, low capacitance
- planar, passivated chip

Dimensions:



Maximum Ratings:

Parameter	Rating
Reverse Voltage	25V
Reverse Current	1mA
Forward Current	10mA
Operating Temperature	- 40/ + 85C
Storage Temperature	- 40/ + 100C

Optical/Electrical Characteristics (@ 25c)

Parameter	Conditions	Min	Typ	Max	Unit
Active Diameter			25		μ m
Responsivity	$\lambda=1300$ nm	0.70	0.80		A/W
Dark Current	$V_R=5$ V		0.05		nA
Noise Current	$f=10$ kHz		0.1		pA/ $\sqrt{\text{Hz}}$
Total Capacitance	$V_R=5$ V		0.1	0.2	pF
Bandwidth	$V_R=5$ V, 50Ω , -3dB		8000		MHz
Rise/Fall time	$V_R=5$ V, $R_L=50\Omega$			0.05	nS

Corporate Headquarters

West Coast Sales Office

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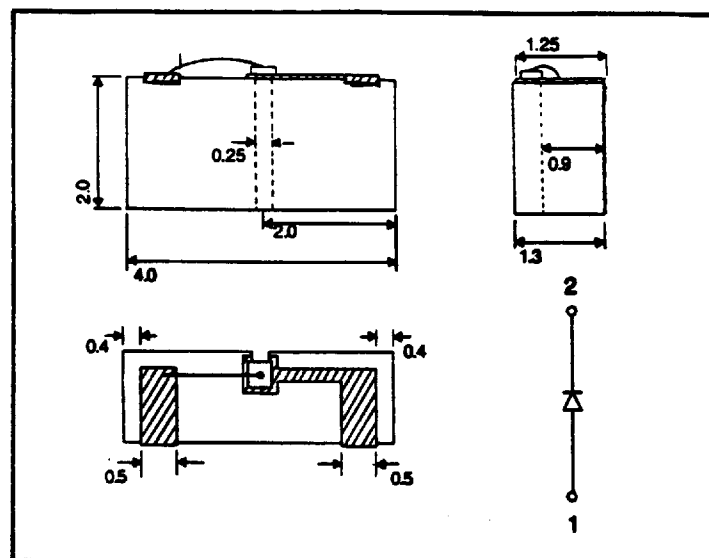
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Active Diameter			25		μ m
Responsivity	$\lambda = 1300\text{nm}$	0.70	0.80		A/W
Dark Current	$V_R = 5\text{V}$		0.05		nA
Noise Current	$f = 10\text{kHz}$		0.1		$\text{pA}/\sqrt{\text{Hz}}$
Total Capacitance	$V_R = 5\text{V}$		0.1	0.2	pF
Bandwidth	$V_R = 5\text{V}, 50\Omega, -3\text{dB}$	9000	10,000		MHz
Rise/Fall time	$V_R = 5\text{V}, R_L = 50\Omega$			0.05	nS

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