

T.41.41

High Speed InGaAs PIN Photodiode

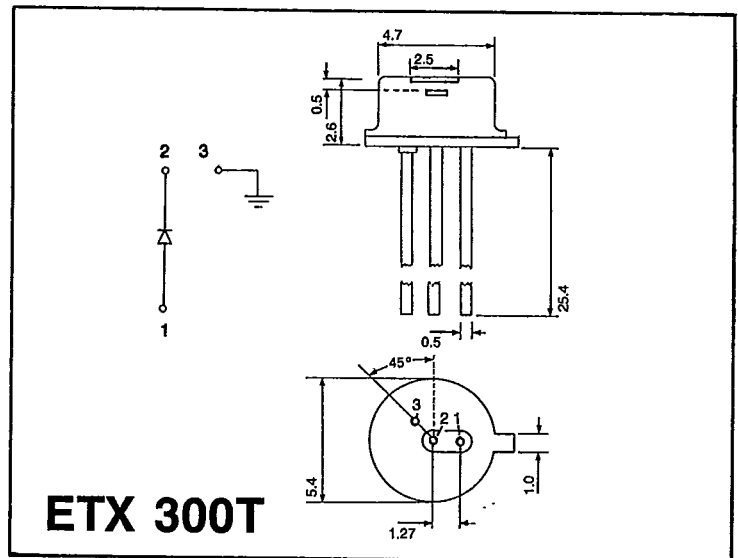
Description:

EPITAXX ETX 300T is a general purpose InGaAs planar pin photodiode. The device incorporates a 300 μ m chip in a flat window TO46 can. It is well suited for both optical communications and infrared sensing. The same chip can also be mounted on custom submounts for back facet power monitoring in fiber optics laser modules (ETX 300CER-CUS).

Features:

- 300 μ m active diameter
- hermetic TO46 can
- low dark current, low capacitance
- planar, passivated chip
- high reliability
- optional custom submounts

Dimensions:



Maximum Ratings:

Parameter	Rating
Reverse Voltage	15V
Reverse Current	5mA
Forward Current	10mA
Operating Temperature	-40/ + 125C
Storage Temperature	-40/ + 125C

Optical/Electrical Characteristics (@ 25C)

Parameter	Conditions	Min	Typ	Max	Unit
Active Diameter					μ m
Responsivity	$\lambda=1300$ nm	0.65	0.80		A/W
Dark Current	$V_R=5$ V		0.5	15	nA
Noise Current	$f=10$ kHz		0.5		$\text{pA}/\sqrt{\text{Hz}}$
Total Capacitance	$V_R=5$ V		5	10	pF
Bandwidth	$V_R=5$ V, 50Ω , -3dB		700		MHz
Rise/Fall time	$V_R=5$ V, $R_L=50\Omega$		0.5		nS

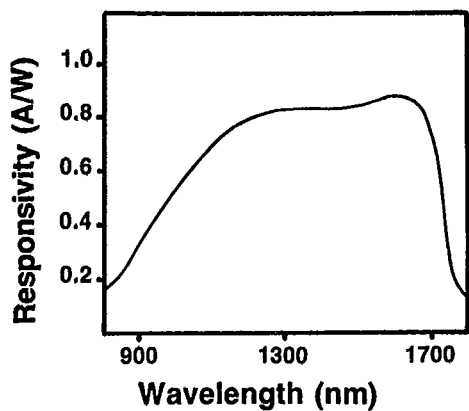
Corporate Headquarters

West Coast Sales Office

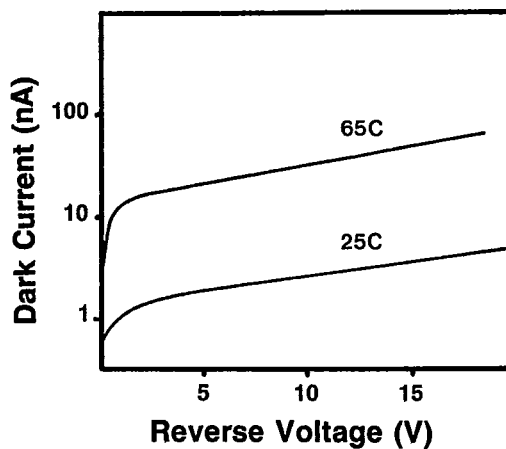
3490 US Route 1 • Princeton, NJ 08540
 (609) 452-1188 • TLX: 759363 • FAX: (609) 452-0824

2121 Ave. of the Stars, 6 Fl • Los Angeles, CA 90067
 (213) 551-6507 • FAX (213) 551-6577

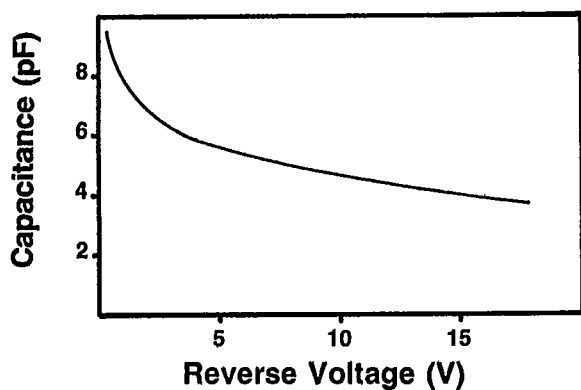
SPECTRAL RESPONSE



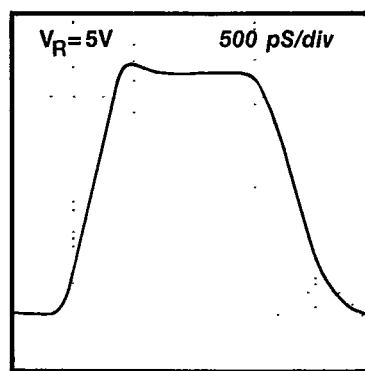
I-V CHARACTERISTIC



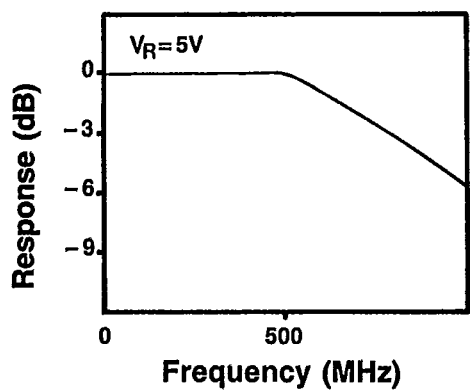
C-V CHARACTERISTIC



PULSE RESPONSE



BANDWIDTH



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