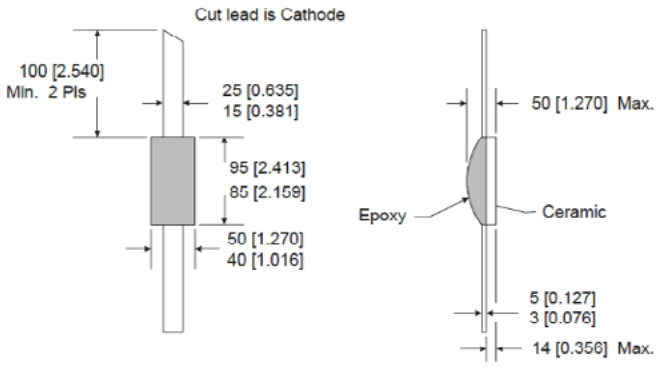
MBD1037-E28 Planar Tunnel Diode



Technical Characteristics

Product Features
Rugged Germanium Planar Construction
Excellent Temperature Stability
No DC Bias Required
Wide Video Bandwidth
MIL-STD-190500 & 883 Qualified

Product Description

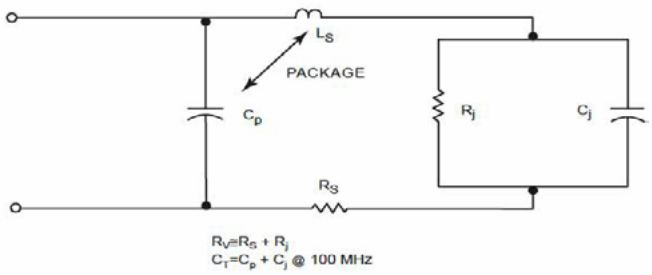
EclipseMDI MBD1037-E28, is a zero-bias, rugged Planar Tunnel Diode constructed with Germanium Planar. This tunnel diode exhibits excellent temperature stability, wide video bandwidth and is MIL STD-190500 & MIL-STD-883C qualified. The MBD1037 is also available in non-hermetic (E28X) ceramic packages.

Maximum Ratings

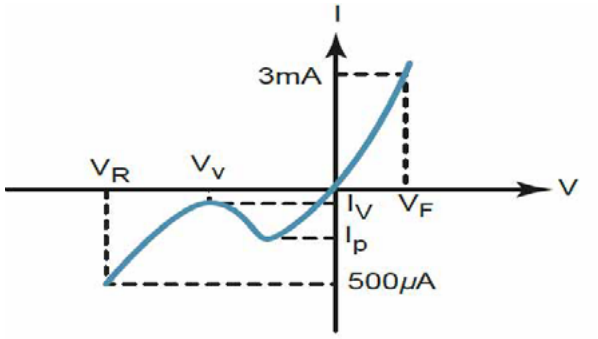
Storage Temperature.....-65° to +125°C
Operating Temperature.....-65° to +110°C
Input Power Handling.....+17dBm CW
or 3 ERG spike
Soldering Temperature.....+160° C

Parameters	Specifications				
	Conditions	MIN	Typical	MAX	UNITS
Ip		50		100	µA
Cj	Vr=Vv, f=100MHz			.30	pF
K[Y]	Pin=-20dBm R)Load)=10K, f=10GHz		1200		mV/mW
Rv			200		Ω Ohms
Ip/Iv		2.5			
Vr	If=500µA		430		mV
Vf	If=3mA			140	mV

Diode equivalent circuit



Back diode parameters



About EclipseMDI

ECLIPSE Microdevices is located in San Jose, California. ECLIPSE has been developing high performance analog semiconductors for use in wireless radio frequency (RF), microwave, and millimeter wave for commercial and industrial applications. ECLIPSE has formed a strategic alliances - with foundries that features leading state-of-the-art process technologies and with manufacturing facilities for high-volume production of innovative RFIC's.

Product Export Classification

ECCN: EAR 99 (unless otherwise specified)
HTS: 8542330000

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