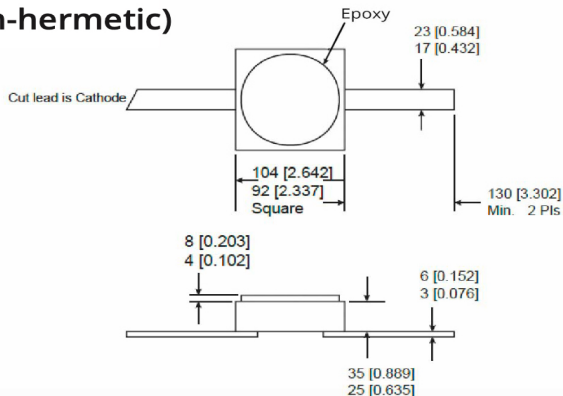


MBD4057-H20X Planar Tunnel Diode

H20X (non-hermetic)



Technical Characteristics

Product Features

- Rugged Germanium Planar Construction
- Excellent Temperature Stability
- No DC Bias Required
- Wide Video Bandwidth

Product Description

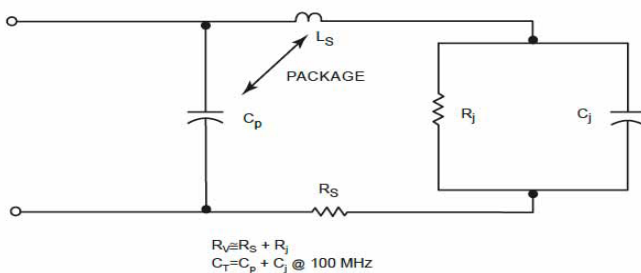
EclipseMDI MBD4057-H20X, is a zero-bias, rugged Planar Tunnel Diode constructed with Germanium Planar. This tunnel diode exhibits excellent temperature stability, wide video bandwidth. The MBD4057 is also available in hermetic (H20) ceramic packages.

Maximum Ratings

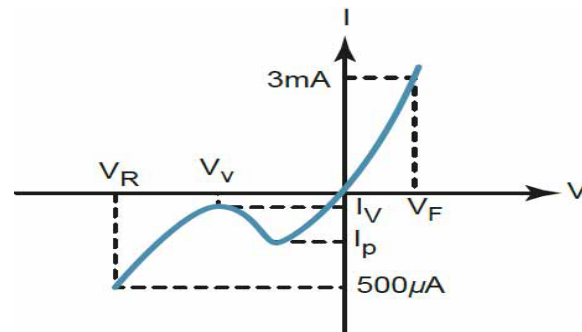
- Storage Temperature.....-65° to +125°C
- Operating Temperature.....-65° to +110°C
- Input Power Handling.....+17dBm CW or 3 ERG spike
- Soldering Temperature.....+160° C

Parameters	Specifications				
	Conditions	MIN	Typical	MAX	UNITS
I_p		400		500	μA
C_j	$V_r = V_v$, $f = 100 \text{ MHz}$			.30	pF
$K[Y]$	$P_{in} = -20 \text{ dBm}$ $R_{Load} = 10K$, $f = 10 \text{ GHz}$		275		mV/mW
R_v			65		Ω Ohms
I_p/I_v		2.5			
V_r	$I_f = 500 \mu A$		400		mV
V_f	$I_f = 3 \text{ mA}$			120	mV

Diode equivalent circuit



Back diode parameters



Product Export Classification

ECCN: EAR 99 (unless otherwise specified)
HTS: 8541.10-0060

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.

