

MBD2057-H20 Planar Tunnel Diode

Technical Characteristics

Product Features

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

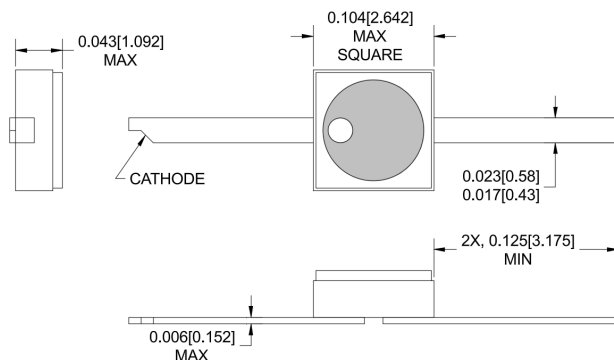
Product Description

EclipseMDI MBD2057-H20, is a zero-bias, rugged Planar Tunnel Diode constructed with Germanium Planar. This tunnel diode exhibits excellent temperature stability, wide video bandwidth. The MBD2057 is also available in a non-hermetic (H20X) ceramic packages.

Maximum Ratings

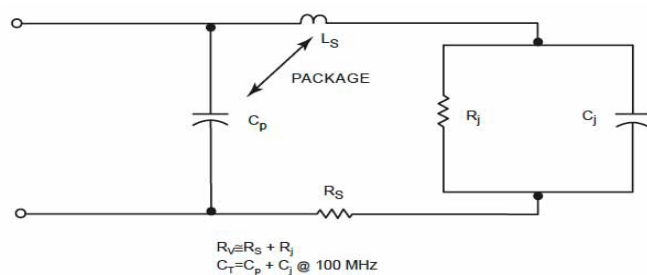
Storage Temperature.....-65° to +125°C
 Operating Temperature.....-65° to +110°C
 Input Power Handling.....+17dBm CW
 or 3 ERG spike
 Soldering Temperature.....+160° C

H20
 [HERMETIC]

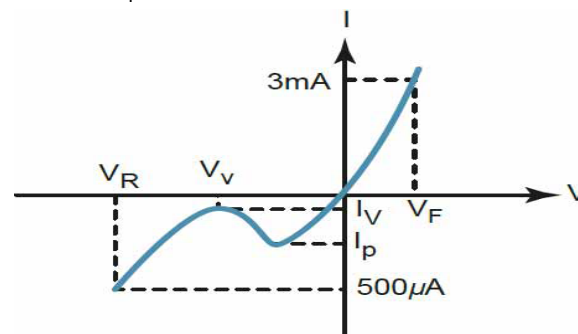


Parameters	Specifications				
	Conditions	MIN	Typical	MAX	UNITS
I_p		200		300	μA
C_j	$V_r = V_v$, $f = 100\text{MHz}$			.30	pF
$K[Y]$	$P_{in} = -20\text{dBm}$ $R(\text{Load}) = 10K$, $f = 10\text{GHz}$		750		mV/mW
R_v			130		Ω Ohms
I_p/I_v		2.5			
V_r	$I_f = 500\mu A$		410		mV
V_f	$I_f = 3\text{mA}$			130	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: 8541.10.0060

