# MBD4057-H20X Planar Tunnel Diode

## **Technical Characteristics**

## **Product Features**

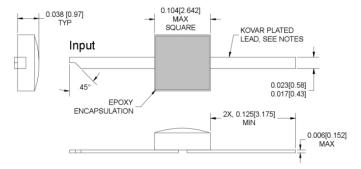
Rugged Germanium Planar Construction

**Excellent Temperature Stability** 

No DC Bias Required

Wide Video Bandwidth

## H20X Non-Hermetic



## **Product Description**

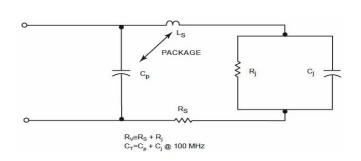
EclipseMDI MBD4057-H20X, is a zero-bias, rugged Planar Tunnel Diode constructed with Germanium Planar. This tunnel diode exhibits excellent temperature stability, wide video bandwidth. The MBD4057 is also available in hermetic (H20) ceramic packages.

# **Maximum Ratings**

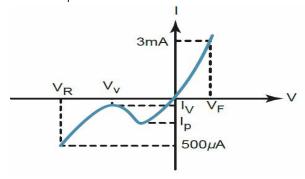
Storage Temperature.....-65° to +125°C Operating Temperature.....-65° to +110°C Input Power Handling.....+17dBm CW or 3 ERG spike Soldering Temperature.....+160° C

	Specifications				
Parameters	Conditions	MIN	Typical	MAX	UNITS
lp		400		500	μΑ
Cj	Vr=Vv, f=100MHz			.30	pF
K[Y]	Pin=-20dBm		275		mV/mW
Rv	R)Load)=10K, f=10GHz		65		Ω Ohms
lp/lv		2.5			
Vr	If=500μA		400		mV
Vf	If=3mA			120	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 Classificiation**

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



