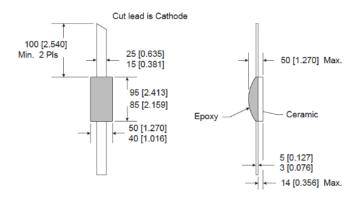
# **MBD1057-E28 Planar Tunnel Diode**

# ECLIPSEMOI microwave devices, inc

## E28 Non-Hermetic



## **Technical Characteristics**

## **Product Features**

Rugged Germanium Planar Construction

**Excellent Temperature Stability** 

No DC Bias Required

Wide Video Bandwidth

## **Product Description**

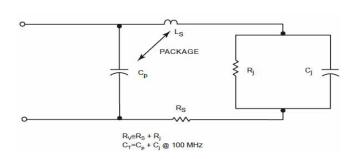
EclipseMDI MBD1057-E28, is a zero-bias, rugged Planar Tunnel Diode constructed with Germanium Planar. This tunnel diode exhibits excellent temperature stability, wide video bandwidth. The MBD1057 is also available in non-hermetic (E28X) ceramic packages.

## **Maximum Ratings**

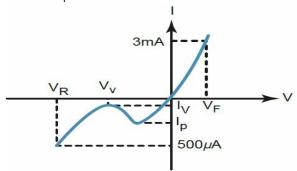
Storage Temperature.....-65° to +125°C
Operating Temperature...-65° to +110°C
Input Power Handling....+17dBm CW
or 3 ERG spike
Soldering Temperature...+160° C

	Specifications Specification Speci				
Parameters	Conditions	MIN	Typical	MAX	UNITS
lp		100		200	μΑ
Cj	Vr=Vv, f=100MHz			.30	pF
K[Y]	Pin=-20dBm		1000		mV/mW
Rv	R)Load)=10K, f=10GHz		180		Ω Ohms
lp/lv		2.5			
Vr	If=500μA		420		mV
Vf	If=3mA			135	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.

Quality products that serve the industry. Today and tomorrow.

## **Product Export Classificiation**

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



