# **Beam Lead PIN Diodes**

#### Description

The **MicroMetrics** MPN 1000 series Beam Lead PIN diodes features a unique glass and beam construction which allows for mechanical strength and stability during assembly. They are designed for low resistance, low capacitance and fast switching time.

**MicroMetrics** Mesa Beam Lead pins are suitable for microstrip or stripline circuits and for circuits requiring high isolation from series mounted diodes as in broadband multi-throw switches, phase shifters, attenuators, limiters and modulators.

#### Applications

The MPN series of beam leads are ideally suited for microstrip or stripline circuits and for circuits requiring high isolation from a series mounted diode such as multi-throw switches, phase shifters, limiters, attenuators and modulators.

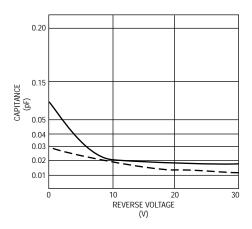
#### Features

- Fast Switching Speed
- Low Capacitance
- Low Resistance
- Rugged Construction

#### Packaging

• Beam Lead

## **Typical Performance**



**Control Devices** 

V <sub>b</sub> @ 10 μA MIN (V)	Cj -10 Vdc MAX (pF)	R <sub>S</sub> 10 mA MAX (Ohms)	R <sub>s</sub> 50 mA MAX (Ohms)	T <sub>I</sub> 6 mA/10 mA TYP (nS)	T <sub>S</sub> 20% - 80% MAX (nS)	Part Number
100	.020	6.5	4.0	80	5	MPN1000-12
100	.027	6.0	3.5	80	5	MPN1001-12
100	.030	5.5	3.2	80	5	MPN1002-12
100	.035	5.0	2.9	80	5	MPN1003-12
100	.040	5.0	2.7	80	5	MPN1004-12
100	.048	5.0	2.5	80	5	MPN1005-12
100	.055	4.0	2.3	80	5	MPN1006-12
100	.065	4.0	2.1	80	5	MPN1007-12
50	.025	6.0	3.7	50	3	MPN1100-12
50	.030	5.0	3.5	50	3	MPN1101-12
50	.040	4.5	2.9	50	3	MPN1102-12
50	.060	4.0	2.5	50	3	MPN1103-12

### **Electrical Characteristics**

Notes:

Typical forward voltage at 50 mA .90 to 1.05.

## **Maximum Ratings**

Operating Temperature	-55°C to + 150°C		
Storage Temperature	-65°C to + 200°C		
Power Dissipation	250 mW		
Typical Lead Strength	6 grams		

