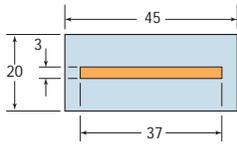


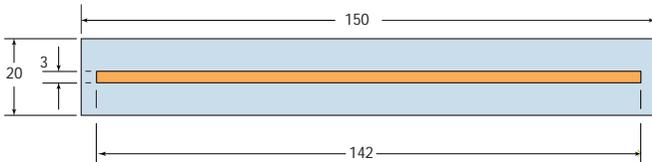
# MICROSTRIP PIN DIODES FOR HIGH ISOLATION



C50



C51



## Description:

Aeroflex / Metelics MicroStrip PIN diode is designed as a 50 microstrip line when bias at zero or a negative bias. When forward biased the device is a reflective attenuator. Maximum isolation is achieved at 40mA forward bias.

## Features:

- Low Insertion Loss
- High Isolation
- Oxide/Nitride Passivation for High Reliability

## RF Specifications @ +25 °C:

PART NUMBER	STYLE	Max. Ir @ 30 V nA	Min. Vbr @ 10uA V	Insertion Loss 20 GHz 0 Volts in dB	Return Loss (minimum) 0.5-20 GHz dB	Isolation @ 40 mA, 10 GHz	Isolation @40 mA, 20 GHz
MMPN-080150-C51	MicroStrip PIN	100	200	2.0	-15	-65	-55
MMPN-080045-C50	MicroStrip PIN	100	200	1.0	-15	-45	-48

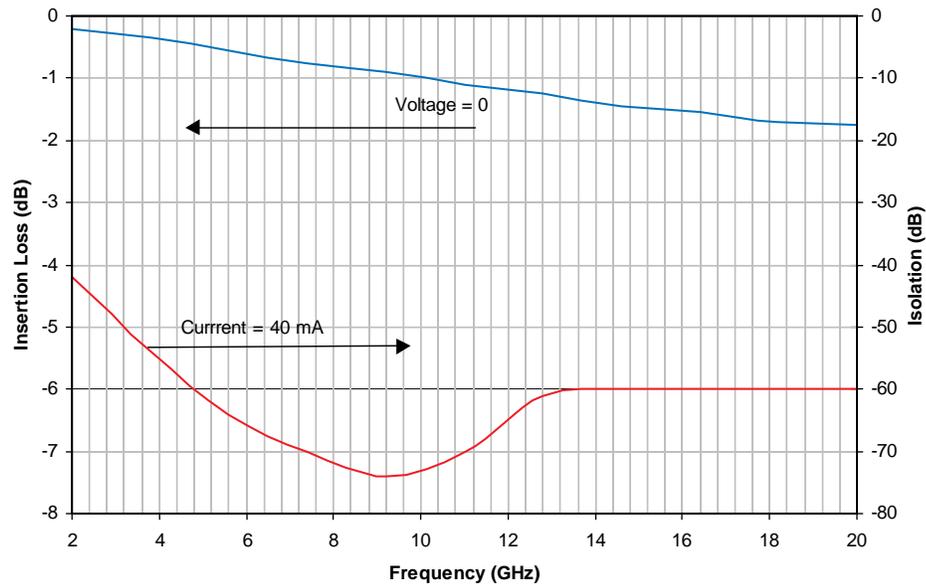
## Maximum Ratings:

Parameters	Rating
Total Power Dissipation	1/2 watt @ +25 °C
Derate linearly	0 at +175°C
Maximum reverse voltage	200 volts
Operation Temperature	-65 to +175 °C
Storage Temperature	-65 to +200 °C

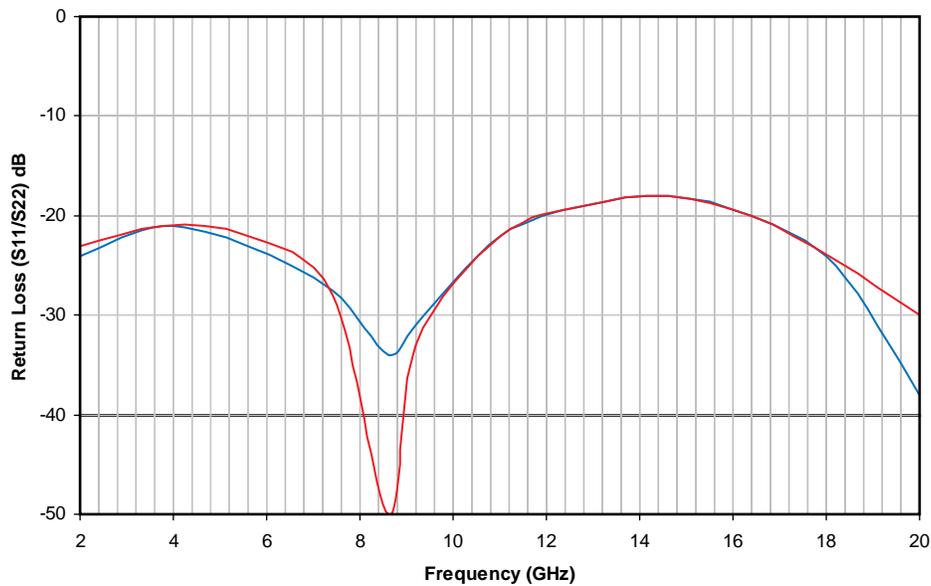


RF Performance, C51

MMPN-080150-C51 Insertion loss and Isolation



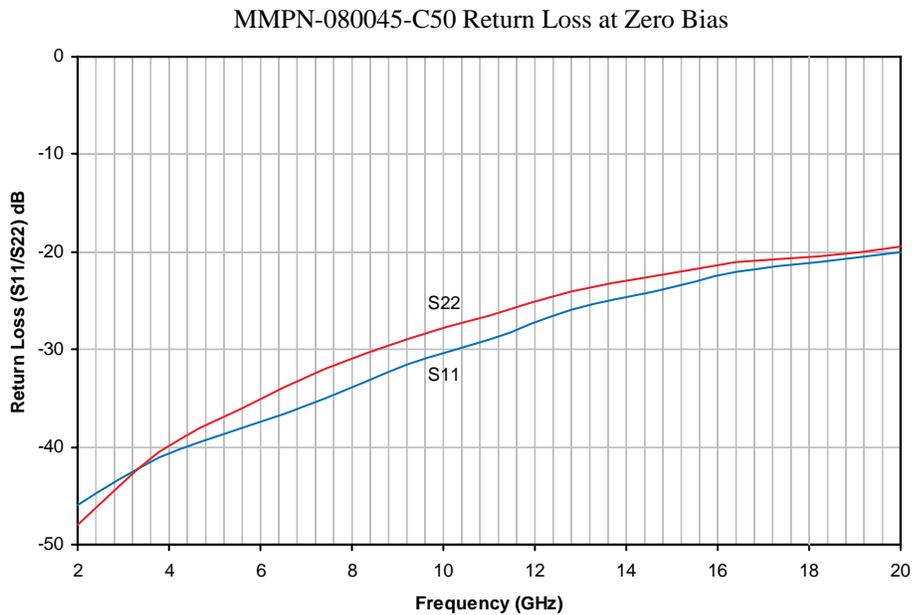
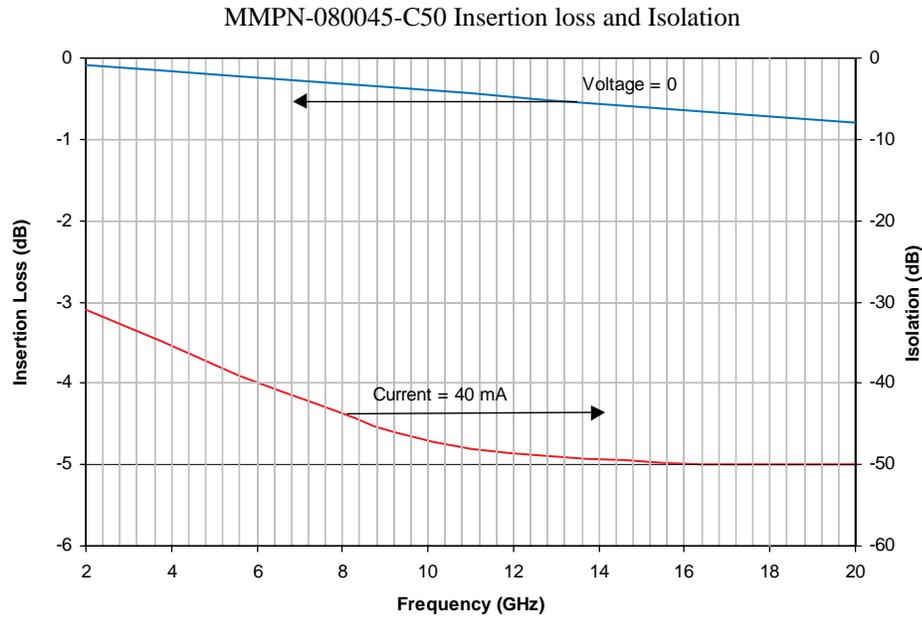
MMPN-080150-C51 Return loss at Zero bias



# MICROSTRIP PIN DIODES FOR HIGH ISOLATION



## RF Performance, C50:



**Aeroflex / Metelics**

Aeroflex Microelectronic Solutions  
975 Stewart Drive, Sunnyvale, CA 94085  
TEL: 408-737-8181  
Fax: 408-733-7645

[www.aeroflex-metelics.com](http://www.aeroflex-metelics.com)      [sales@aeroflex-metelics.com](mailto:sales@aeroflex-metelics.com)

Aeroflex / Metelics, Inc. reserves the right to make changes to any products and services herein at any time without notice. Consult Aeroflex or an authorized sales representative to verify that the information in this data sheet is current before using this product. Aeroflex does not assume any responsibility or liability arising out of the application or use of any product or service described herein, except as expressly agreed to in writing by Aeroflex; nor does the purchase, lease, or use of a product or service from Aeroflex convey a license under any patent rights, copyrights, trademark rights, or any other of the intellectual rights of Aeroflex or of third parties.

Copyright 2003 Aeroflex / Metelics. All rights reserved.



Our passion for performance is defined by three attributes represented by these three icons: solution-minded, performance-driven and customer-focused.