# MMPN Series PIN Diodes





# **Description**

The Aeroflex / Metelics MMPN series are distributed PIN diodes that are integrated into a 50  $\Omega$  microstrip transmission line. They are designed to be operated as a shunt, reflective attenuators.

### **Features**

- High isolation
- Broadband performance to 50 GHz

# **Absolute Maximum Ratings**

Parameters	Rating	
Reverse Voltage	200 Volts	
Forward Current	150 mA	
Thermal Resistance, Junction to Case	6.0, 2.5 °C/W <sup>(1)</sup>	
Junction Temperature	-65 °C to +175 °C	
Storage Temperature	-65 °C to +200 °C	
Mounting / Bonding Temperature	+320 °C for 10 seconds	

# **RF Specifications,** $T_A = +25$ °C

Model	I <sub>R</sub> MAX	V <sub>BR</sub> MIN	Insertion Loss MAX	Return Loss MIN	Isolation MIN	Outline
	nA	V	dB	dB	dB	
MMPN080150	100	200	3.0	12	50	C51
MMPN080045	100	200	1.0	12	30	C50
Test $V_R = 30 \text{ V}$		$V_R = 0 V$		$I_F = 40 \text{ mA}$		
	$I_R = 10 \mu A$	F = 2 - 35  GHz		F=2-35 GHz		
			F=2-	20 GHz	F = 2 - 20 GHz	

#### Notes:

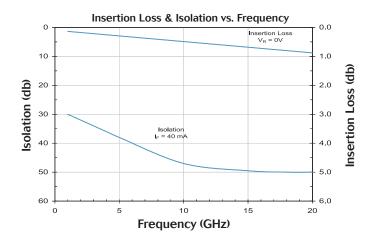
1. 6.0 °C/W for C50 and 2.5 °C/W for C51.



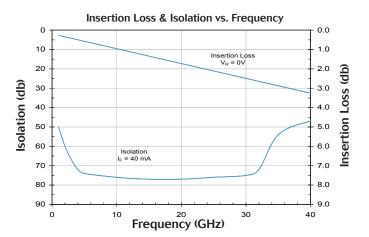


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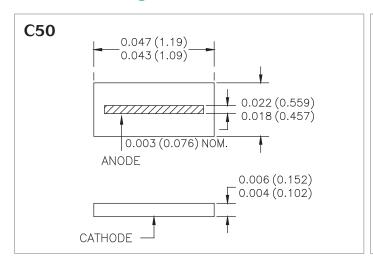
## MMPN080045

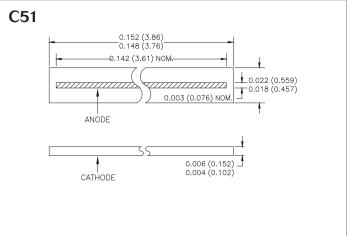


### MMPN080150



# **Outline Drawings**





#### Aeroflex / Metelics Inc.

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

54 Grenier Field Road Londonderry, NH 03053 TEL: 603-641-3800

#### Sales

888-641-SEMI (7364)

metelics-sales@aeroflex.com

www.aeroflex.com/Microwave www.aeroflex.com/Metelics

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