

PIN Diodes

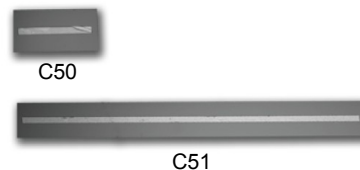
Rev. V2

Features

- High Isolation
- Broadband Performance up to 50 GHz

Description

The MMPN series are distributed PIN diodes that are integrated into a 50 Ω microstrip transmission line. These PIN diodes are designed to be operated as shunt, reflective attenuators.



Electrical Specifications: $T_A = +25^\circ\text{C}$

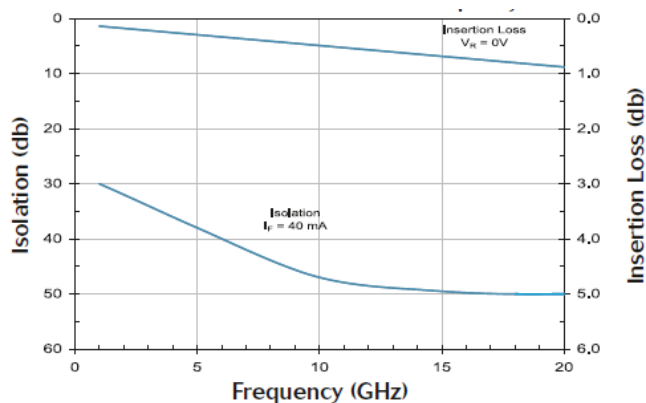
Model	Frequency (GHz)	Maximum Reversed Current (nA)	Minimum Breakdown Voltage (V)	Maximum Insertion Loss (dB)	Minimum Return Loss (dB)	Minimum Isolation (dB)	Outline
MMPN080045	2 - 20	100	200	1	12	30	C50
MMPN080150	2 - 35	200	200	3	12	50	C51
Test Conditions		$V_R = 30 \text{ V}$	$I_R = 10 \mu\text{A}$	$V_R = 0 \text{ V}$	$V_R = 0 \text{ V}$	$I_F = 40 \text{ mA}$	

Absolute Maximum Ratings

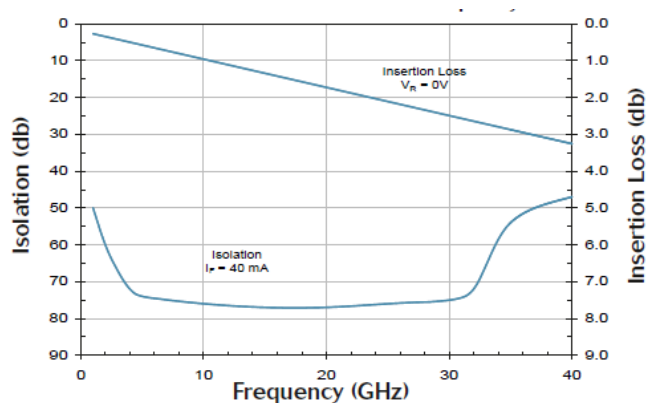
Parameter	Absolute Maximum
Reverse Voltage	200 V
Forward Current	150 mA
Thermal Resistance	60°C/W
Junction Temperature	+175°C
Storage Temperature	-65°C to +200°C
Mounting / Bonding Temperature	+320°C for 10 seconds

Typical RF Performance Curves @ +25°C

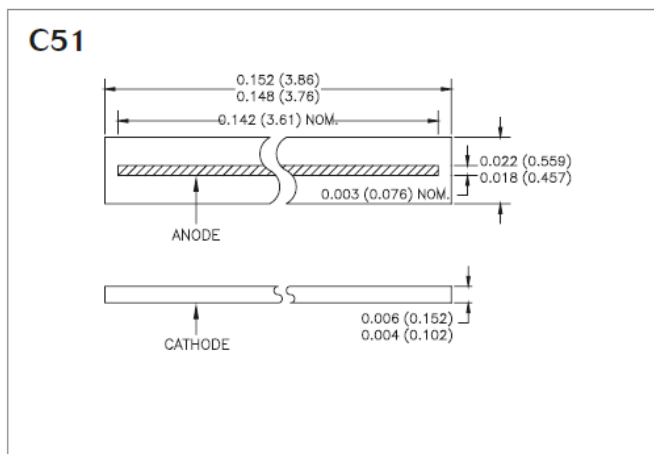
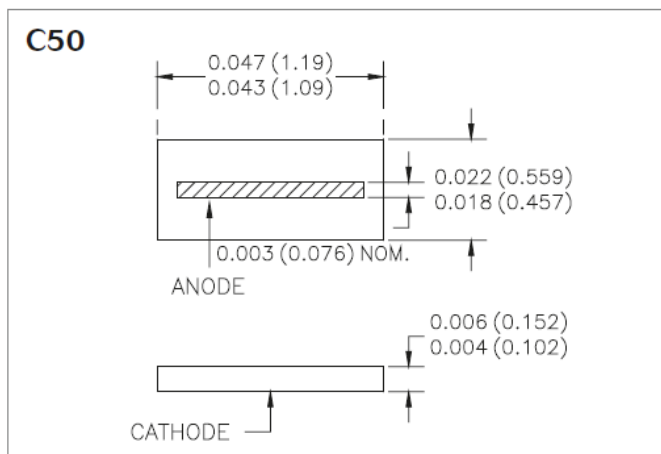
Insertion Loss & Isolation - MMPN080045



Insertion Loss & Isolation - MMPN080150



Outline Drawings



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