



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

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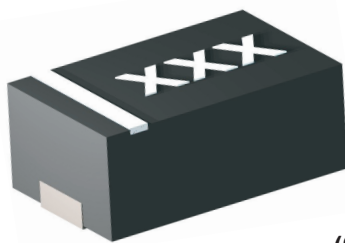
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MSWSE-050-17

Silicon PIN Diode Switch Element



(0805P)
non-hermetic



Description

The MSWSE-050-17 is a PIN diode SPST switch element designed for medium incident power applications, up to 40W C.W. It has low insertion loss.

Features

- Broadband performance up to 3.0 GHz
- Low Insertion Loss
- Cost effective choice for switch applications

Maximum Ratings

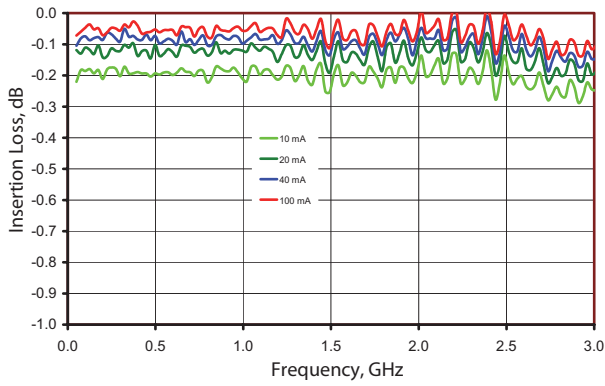
RATING	LIMITS	UNITS
V_R	500	V
I_F	500	mA
θ_{JC}	10	°C / W
T_J	+175	°C
T_{STG}	-55 to +150	°C
T_{SOLDER}	+260 °C per JEDEC STD-J-20C	

Electrical Characteristics, $T_C = +25\text{ °C}$

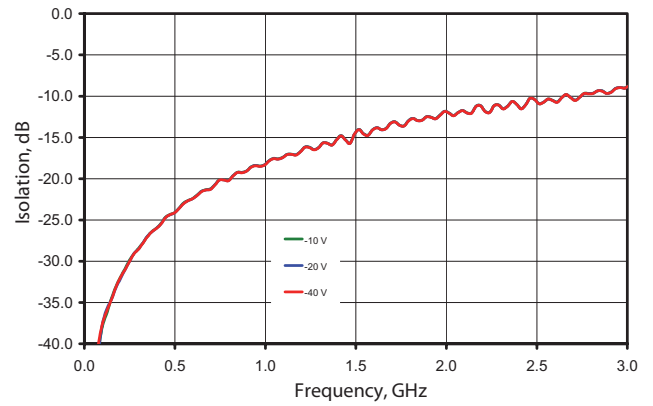
SYMBOL	TEST CONDITIONS			MIN	TYPICAL	MAX	UNITS
V_{BR}	$I_R = 10\ \mu\text{A}$			500	–	–	V
V_F	$I_F = 50\ \text{mA}$			–	850	950	mV
C_T	$V_R = 50\ \text{V}$	F = 1 MHz		–	0.20	0.25	pF
R_S	$I_F = 100\ \text{mA}$	F = 100 MHz		–	0.75	–	Ω
τ	$I_F = 10\ \text{mA}$	$I_R = 6\ \text{mA}$	measured at 50%	–	1600	–	ns
W	I-Layer			–	80	–	μm
I_L	$I_F = 50\ \text{mA}$	F < 0.5 GHz		–	0.06	0.2	dB
		F < 2.0 GHz		–	0.1	0.2	dB
IRL / ORL	$I_F = 50\ \text{mA}$	F < 0.5 GHz		25	33	–	dB
		F < 2.0 GHz		20	25	–	dB
I_{SO}	$V_R = 50\ \text{V}$	F < 0.5 GHz		22	24	–	dB
		F < 2.0 GHz		20	12	–	dB



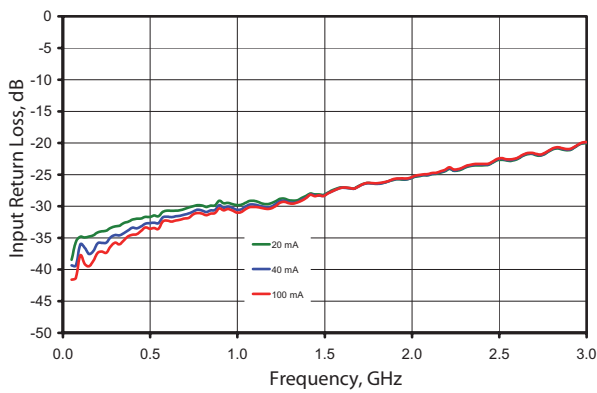
Insertion Loss



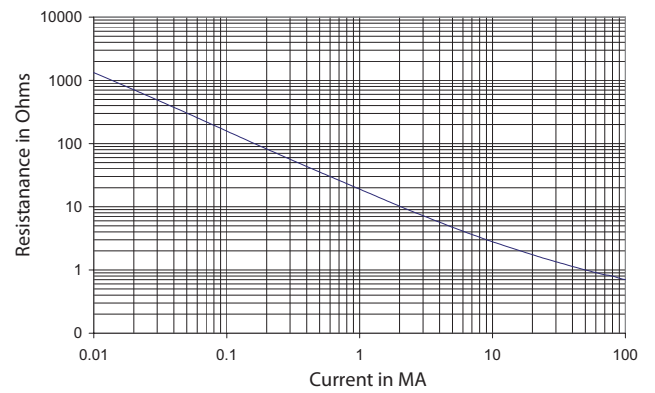
Isolation



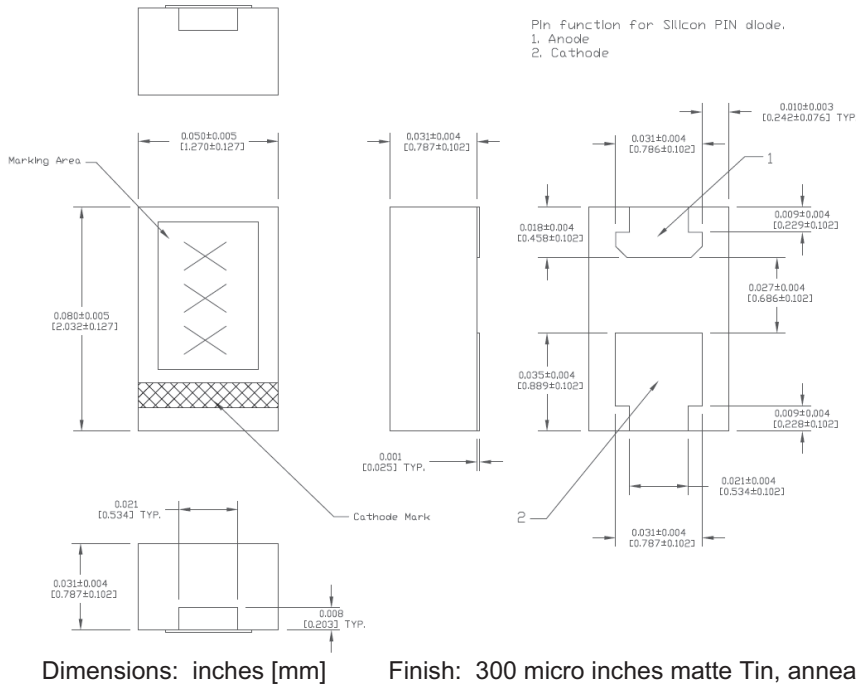
Input Return Loss



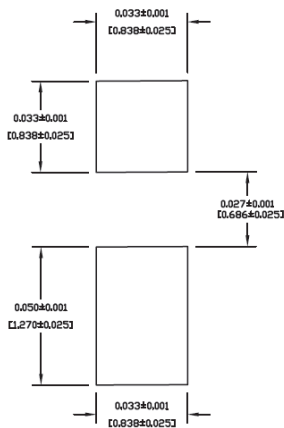
Series Resistance vs. Current



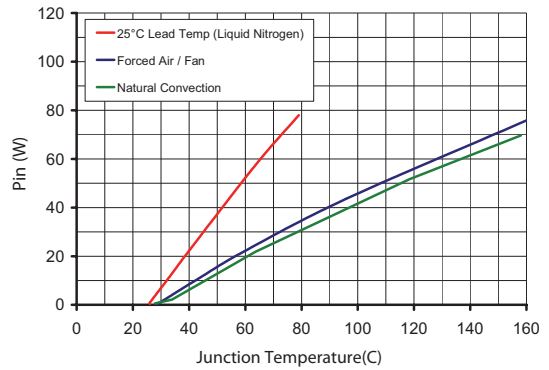
Package Outline



Printed Circuit Board Layout



Junction Temperature vs Power 20 Mil PCB Mounted on Heat Sink 25°C Ambient 1.3 GHz



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