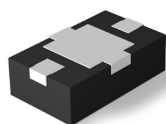


MSWSHC-040-40

PIN DIODE SWITCH ELEMENT



(2615)
Molded Plastic DFN



Description

A broadband, high linearity, medium power shunt switch element in a 2.6 X 1.5 mm DFN package. This device is designed for wireless telecommunications infrastructure and test instrument applications. It is also suited for other applications in 0.05 ~ 10 GHz.

Features

- Support up to 40 watts power
- Low Insertion Loss: 0.2 dB at 2.7 GHz Typical
0.4 dB at 8.0 GHz Typical
- High Isolation 55 dB typical to 2.7 GHz

Maximum Ratings

RATING	LIMITS	UNITS
V_R	300	V
I_F	200	mA
θ_{JC}	9	°C/W
T_J	+175	°C
T_{STG}	-65 to +150	°C
T_{SOLDER}	+260 °C per JEDEC STD-J-20C	

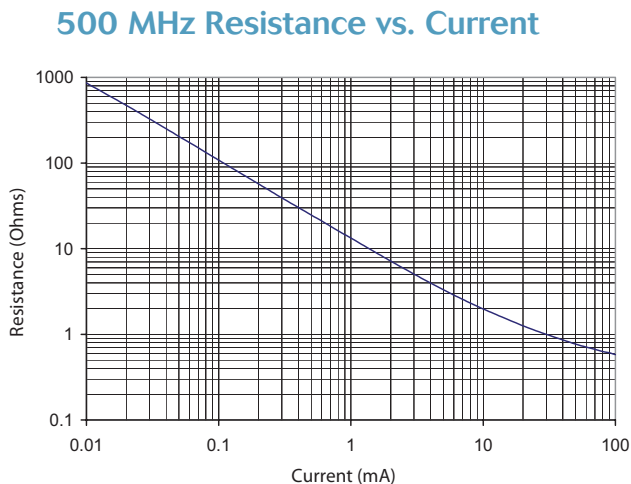
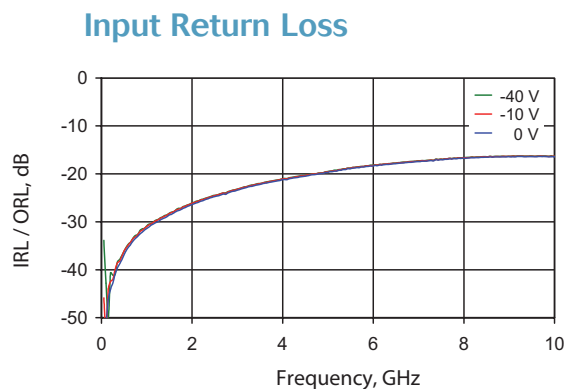
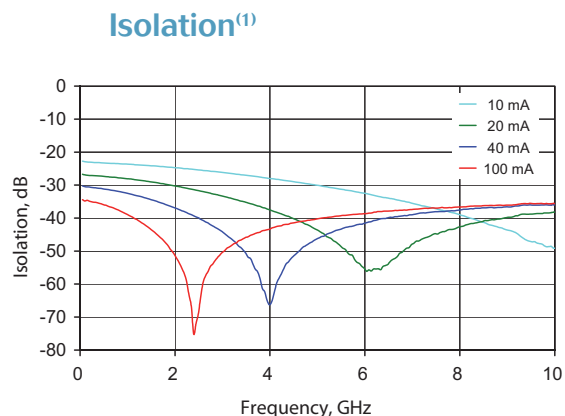
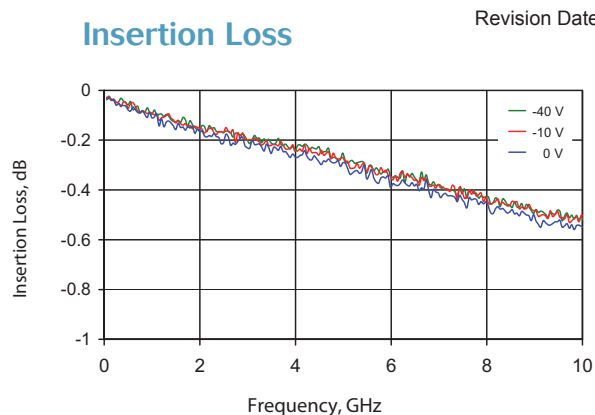
Electrical Characteristics, $T_C = +25\text{ °C}$

SYMBOL	TEST CONDITIONS			MIN	TYPICAL	MAX	UNITS
V_{BR}	$I_R = 10\text{ }\mu\text{A}$			300	–	–	V
τ	$I_F = 10\text{ mA}$	$I_R = 6\text{ mA}$	measured at 50%	–	3000	–	ns
I_L	$V_R = 50\text{ V}$		$F = 2.3 - 2.7\text{ GHz}$	–	0.2	0.3	dB
			$F = < 6.0\text{ GHz}$	–	0.4	0.5	dB
IRL / ORL	$I_F = 100\text{ mA}$		$F = 2.3 - 2.7\text{ GHz}$	20	25	–	dB
			$F = < 6.0\text{ GHz}$	14	16	–	dB
I_{SO}	$V_R = -10\text{ V}$		$F = 2.3 - 2.7\text{ GHz}$	50	55	–	dB
			$F = < 6.0\text{ GHz}$	35	40	–	dB



Revision Date: 6/22/2011

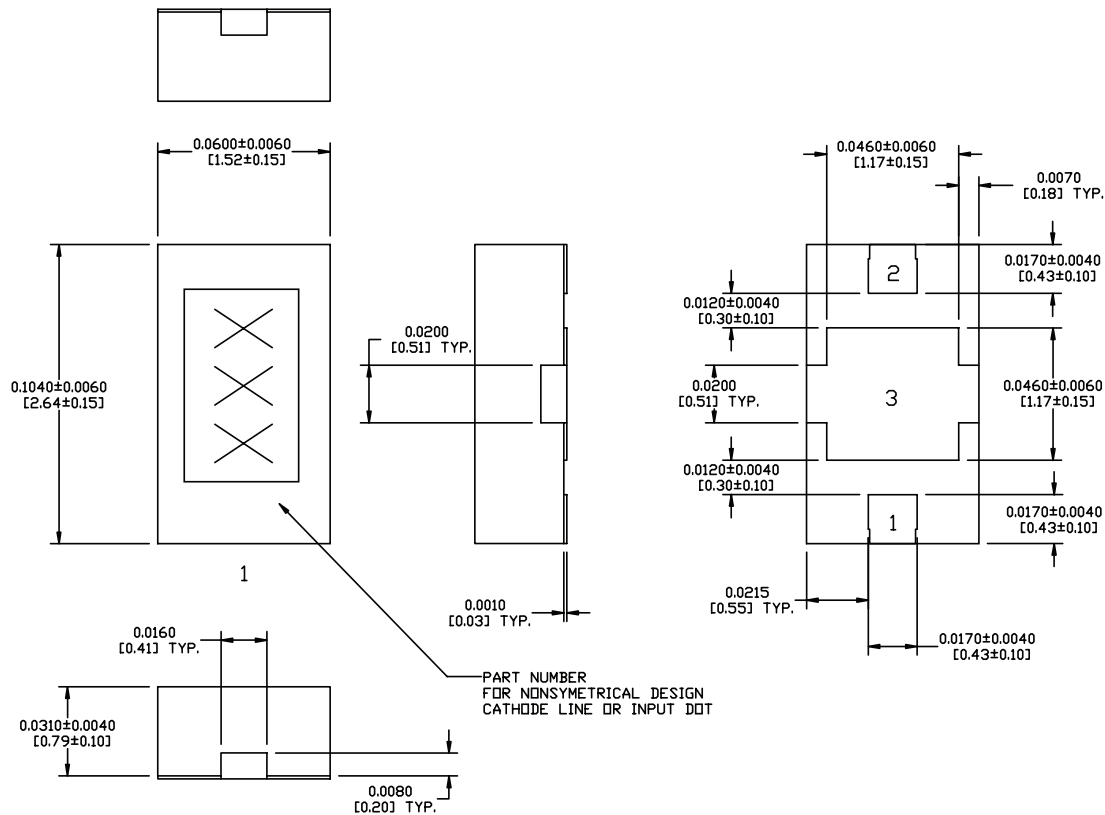
Typical RF Performance at 25° C Ambient (Unless Otherwise Specified)



Notes:

1. Resonant frequencies vary with PCB layout. This performance measured on 20 mils Rogers RO3006 and with the printed circuit board layout shown on page 3.

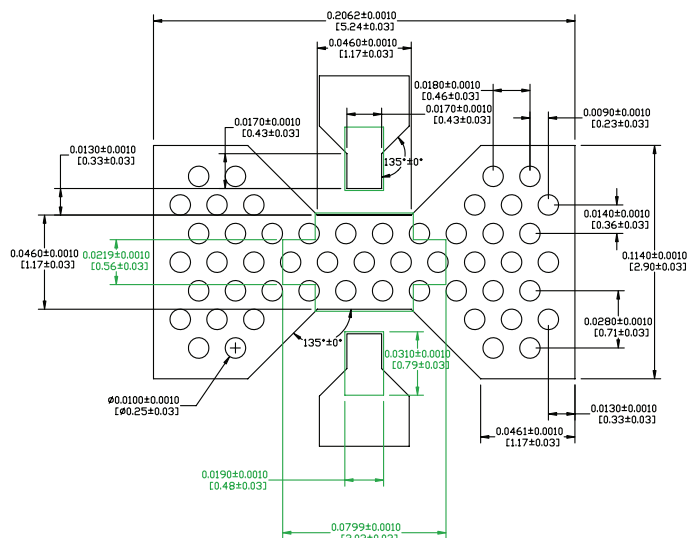
Package Outline (2615)



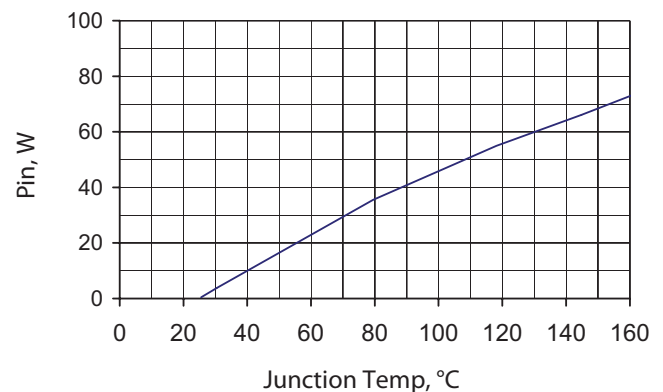
Dimensions: inches [mm]

Finish: 300 micro inches matte Tin, annealed at 150 °C

Printer Circuit Board Layout



Junction Temperature vs Input Power Mounted on Heat Sink 25°C Ambient, Amb 1.3 GHz



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**

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 2011 Aeroflex / Metelics. All rights reserved.

ISO 9001:2008 certified companies



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