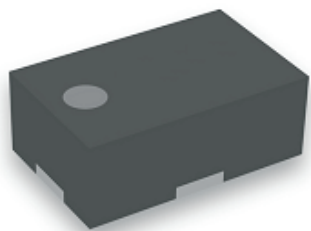


# MSWSHB-020-30

## PIN DIODE SHUNT SWITCH ELEMENT



(2012)  
Molden Plastic DFN



### Description

A broadband, high linearity, medium power shunt switch element in a 1.9 X 1.1 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 typical 0.2 dB to 2.7 GHz
- Low insertion loss typical 0.4 dB to 10.0 GHz
- High Isolation 30 dB typical to 10.0 GHz

### Maximum Ratings

RATING	LIMITS	UNITS
$V_R$	200	V
$I_F$	200	mA
$\theta_{JC}$	15	°C / W
$T_J$	+175	°C
$T_{STG}$	-65 to +150	°C
$T_{SOLDER}$	+260 °C per JEDEC STD-J-20C	

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

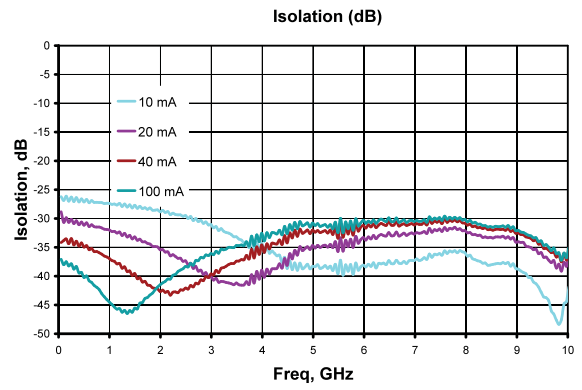
SYMBOL	TEST CONDITIONS			MIN	TYPICAL	MAX	UNITS
$V_{BR}$	$I_R = 10\ \mu\text{A}$			200	-	-	V
$\tau$	$I_F = 10\ \text{mA}$	$I_R = 6\ \text{mA}$	measured at 50%	-	4000	-	ns
$I_L$	$V_R = 10\ \text{V}$	F < 2.7 GHz		-	0.08	0.2	$I_L$
		F < 10.0 GHz		-	0.4	0.5	$I_L$
IRL/ORL	$V_R = 10\ \text{V}$	F < 2.7 GHz		25	28	-	dB
		F < 10.0 GHz		15	20	-	dB
$I_{50}$	$I_f = 20\ \text{mA}$	F < 2.7 GHz		33	40	-	dB
		F < 10.0 GHz		28	32	-	dB



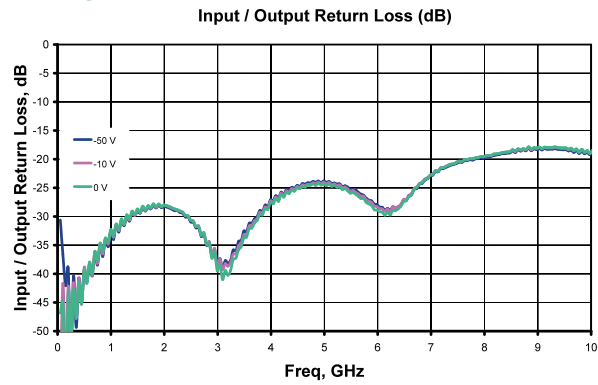
## Insertion Loss



## Isolation



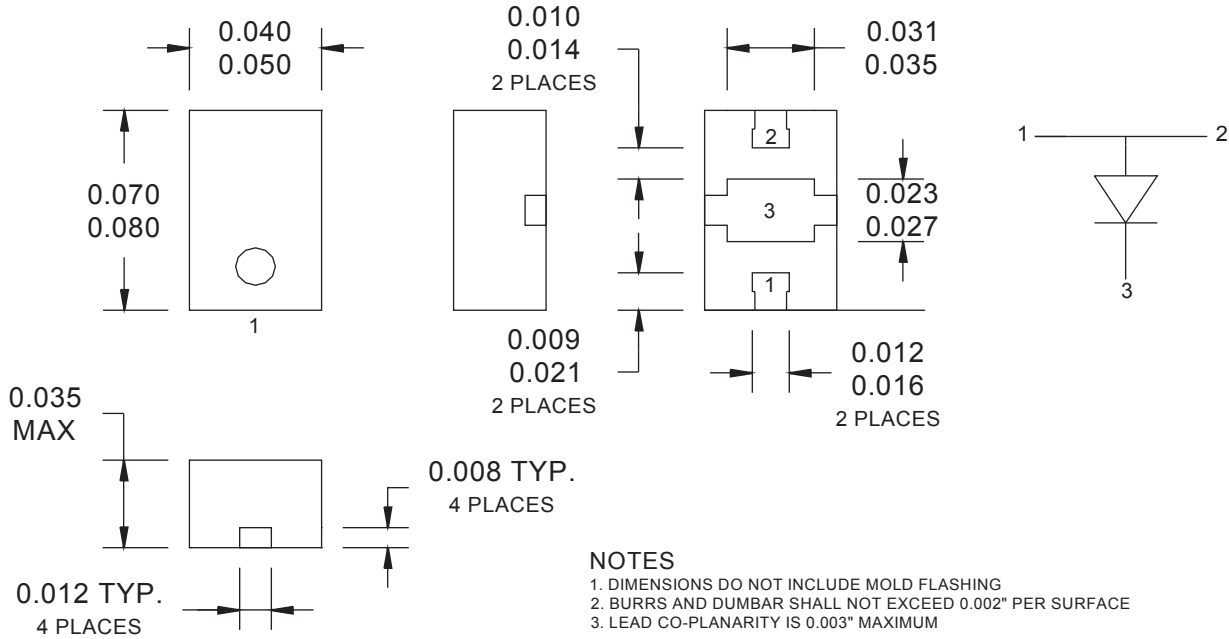
## Input Return Loss



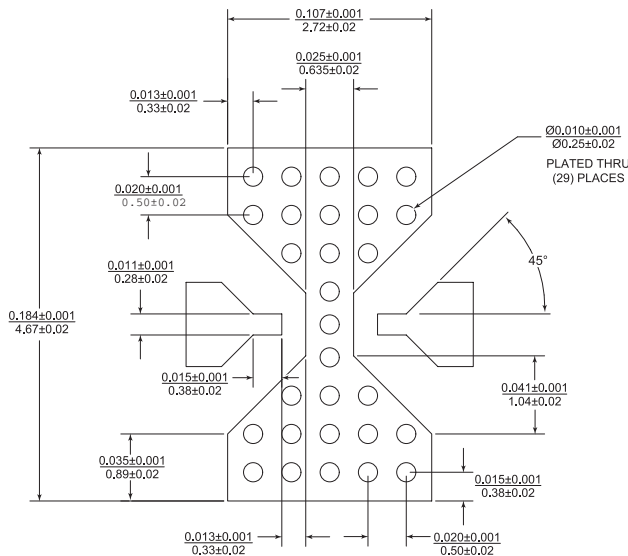
# MSWSHB-020-30



## Package Outline



## Printed Circuit Board Layout



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