



TQ9152

DC - 10 GHz SPDT SWITCH (DRIVERLESS)

FEATURES

Broad Bandwidth	DC - 10 GHz
"On" Insertion Loss	< 2 dB
"Off" Isolation	> 25 dB
Input/Output VSWR	< 2 : 1
Switching Speed	< 3 ns

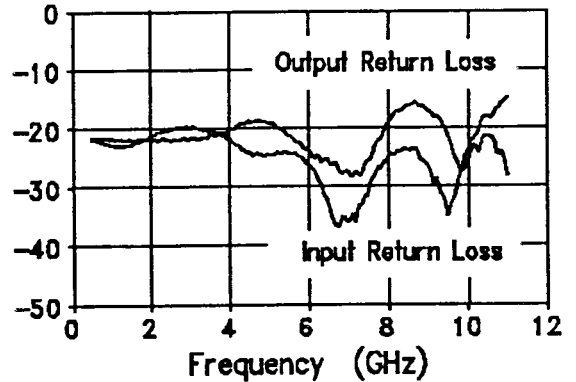
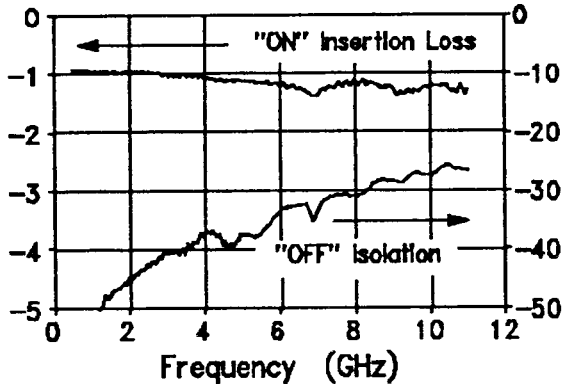
FUNCTIONAL DESCRIPTION

The TQ9152 is a fast, broadband microwave SPDT switch. Several switches can be cascaded together to implement multi-port configurations. The TQ9152 is available mounted in a high performance surface mount package or in die form. The die size is 43 x 54 mils.

SWITCH LOGIC

SW _A CTRL	SW _B CTRL	RF SW _A	RF SW _B
+0.5	-4.0	ON	OFF
-4.0	+0.5	OFF	ON

TYPICAL TQ9152 PACKAGED PERFORMANCE



APPLICATION NOTES

- AN-002 Recommendations for Handling and Packaging TriQuint Die
- AN-004 Mounting TriQuint's Micro-S Package to a Circuit Board

ELECTRICAL CHARACTERISTICS

Absolute Maximum Ratings

	MIN	MAX	UNIT
Control Voltage	-6	+1.0	V
Operating Temp	-55	+85	°C
Storage Temp	-55	+150	°C

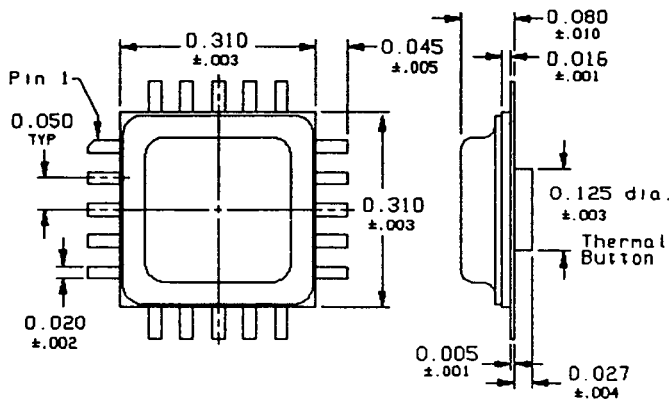
DC Characteristics at 25°C (T_C)

	MIN	TYP	MAX	UNIT
Switch Control Levels				
-High	0	0.5	0.7	V
-Low	-5	-4	-3	V

RF Characteristics at 25°C (T_C)

	MIN	TYP	MAX	UNIT
Frequency of Operation 1		10		GHz
"On" Insertion Loss		1.5	2.5	dB
"Off" Isolation - 1 GHz	45			dB
- 10 GHz	20	25		dB
Input/Output VSWR		1.7:1	2:1	
Switching Speed		< 3		ns
Maximum RF Input Power		> +20		dBm
Third Order Intercept		+35		dBm

PACKAGE OUTLINE



Pin Function

2	-
4	RF SW _{COM}
7	SW _B Control
9	RF SW _A N.C.
12	-
14	-
17	RF SW _B N.O.
19	SW _A Control

Pins 1, 3, 5, 6, 8,
10, 11, 13, 15, 16,
18, 20 are Ground.

For further information, please contact:

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