



Reflective Coaxial SP4T Switch 2 - 8GHz



Features

- Wide Band Operation 2-8GHz
- TTL compatible driver included
- Fast Switching Speed
- Low Insertion Loss and High Isolation
- Temperature Range -45°C~+85°C
- Customization available upon request
- Hermetically sealed package up to 60,000ft available upon request.

Reflective Coaxial Single Pole Four Throw Switch 2 - 8GHz

Electrical Specifications, $T_A = +25^\circ C$, $V_{dd} = +5V/-5V$, $TTL = 0 / +5V$

Description	PN: RFSP4TR0208G			
	SP4T Reflective Switch			
	Low Power Cold Switching			
Parameters	Min.	Typ.	Max.	Units
Frequency Range	2-8			GHz
Insertion Loss		1.5	2.0	dB
Insertion Loss Temperature Coefficient		0.003		dB/°C
Isolation	80	85		dB
Input VSWR		1.3	1.5	:1
Output VSWR		1.3	1.5	:1
RF Input power (CW)			30	dBm
DC Power Dissipation (CW)		0.8		W
0.1dB Compression Point (Po.1dB)		30		dBm
IIP3		55		dBm
Switching Speed			100	ns
Weight	1.06			ounces
Impedance	50			Ω
Bias Current (+5V / -5V)	150/50			mA
Input / Output Connectors	SMA-Female			
Finishing	Gold Plating			
Material	Aluminum			
Sealing	Hermetically Sealed (optional)			



Absolute Maximum Ratings

Biassing	+5V±10%/-5V±10%
TTL Control Voltage	0~0.8V/2.8~5V

Ordering Information

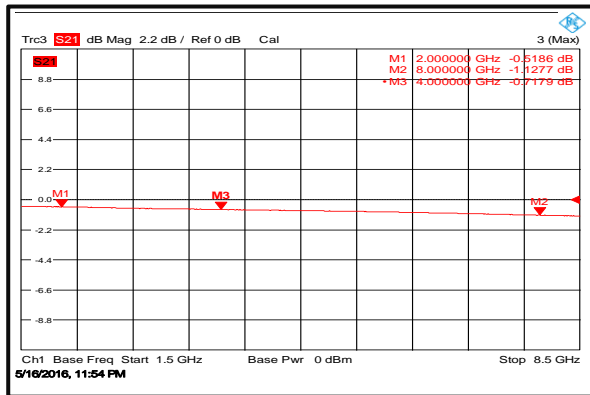
Part No.	ECCN	Description
RFSP4TR0208G	EAR99	SP4T 2-8GHz PIN Diode Switch

Environmental Specifications

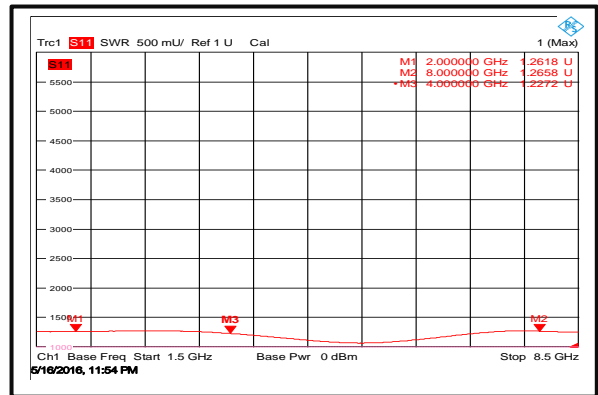
Operational Temperature (°C)	-45 ~ +85
Storage Temperature (°C)	-50 ~ +125
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Uncontrolled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35c, 95%RH at 40°C
Shock	20G for 11msec half sine wave, 3 axis both directions

Typical Performance Plots

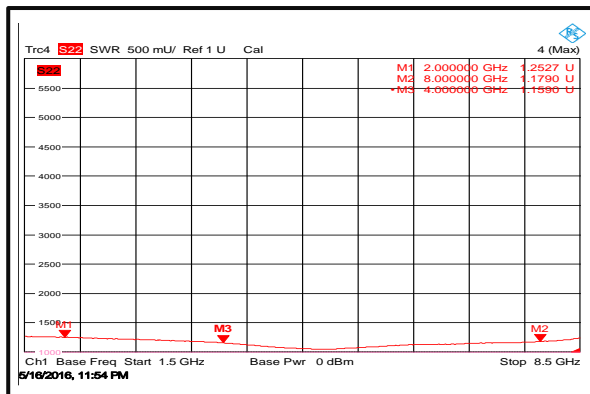
Insertion Loss



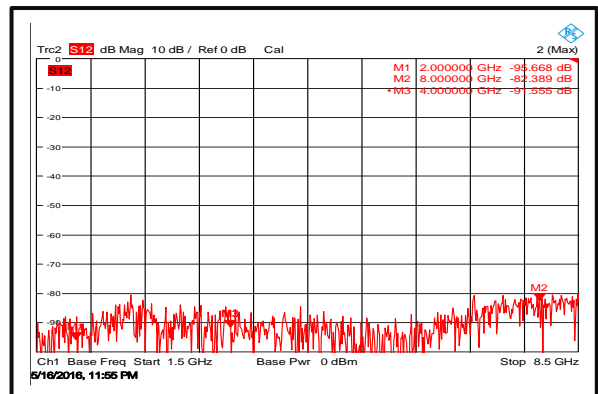
Input VSWR



Output VSWR



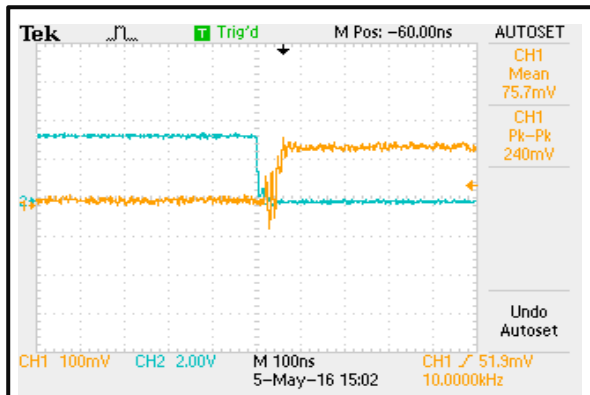
Isolation



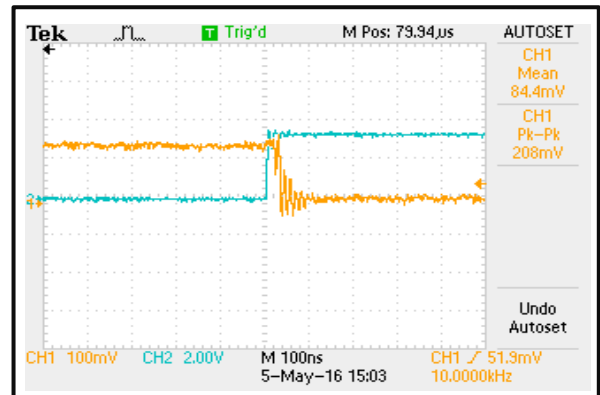
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Switching Speed



Switching Speed



Outline Drawing:

All Dimensions in mm [inches]

[X401]

RF-Lambda
RFSP4TR0208G
F:2-8GHz
SN:XXXXXXXXXX

Truth Table

Control Input TTL				Signal Path State
C4	C3	C2	C1	
0	0	0	0	NC
1	1	1	0	Jo-J1
1	1	0	1	Jo-J2
1	0	1	1	Jo-J3
0	1	1	1	Jo-J4
1	1	1	1	OFF

Control Pin Customization available upon request

ATTENTION
STATIC SENSITIVE DEVICES
HANDLE ONLY AT
STATIC SAFE WORK STATIONS

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