



Reflective 2-4GHz Coaxial SP2T Switch



Features

- Wide Band Operation 2-4GHz
- TTL compatible driver include
- 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 Double Throw Switch 2-4GHz

Electrical Specifications, TA = +25° C, With Vdd = +28V, & VCTL = 0/ +5V

Description	PN: RFSP2TR0204GH			
	SP2T Reflective Switch			
	Low Power Cold Switching			
Parameters	Min	Typ.	Max	Units
Frequency Range	2~4			GHz
Insertion Loss		1.2	1.5	dB
Insertion Loss Temperature Coefficient		0.01		dB/°C
Isolation	50			dB
Input VSWR		1.4	1.5	ratio
Output VSWR (ON State)		1.4	1.5	ratio
Output VSWR (OFF State)	18			ratio
Power Dissipation (CW)		15		W
1dB Compression P1dB		46		dBc
IM3		55		dBm
Switching Speed			1	us
Weight	1.3			ounces
Impedance	50			Ω
Biasing(+28V)	100			mA
Input /Output Connector	SMA-Female/SMA-Female (Standard)			
Finishing	Gold Plating			
Material	Aluminum			
Seal	Hermetically Sealed (optional)			



Absolute Maximum Ratings

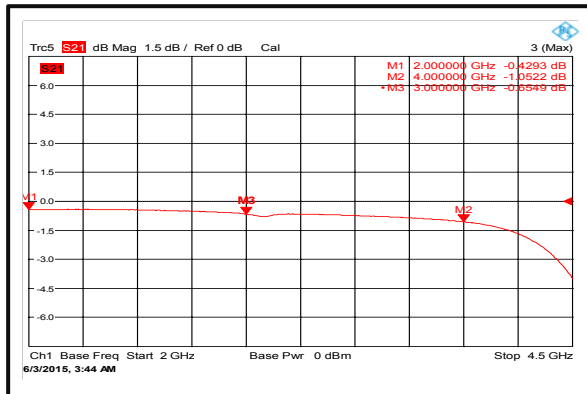
Biassing	+28V
TTL Control Voltage	0~0.8V/2~5V
RF Input power	+47dBm
Operating Temperature(°C)	-45 ~ +85
Storage Temperature(°C)	-50 ~ +125

Ordering Information

Part No	ECCN	Description
RFSP2TR0204GH	EAR99	SP2T 2-4GHz PIN Diode Switch

Typical performance plots

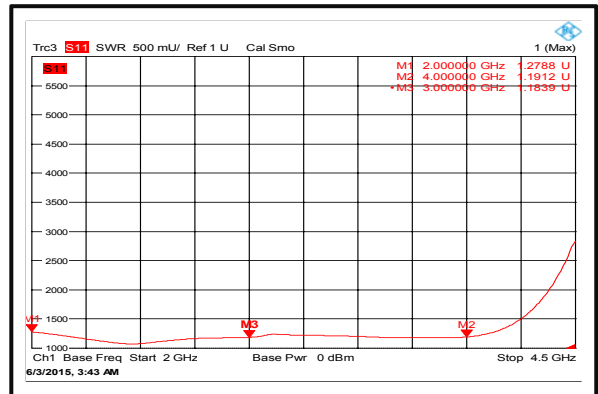
Insertion Loss



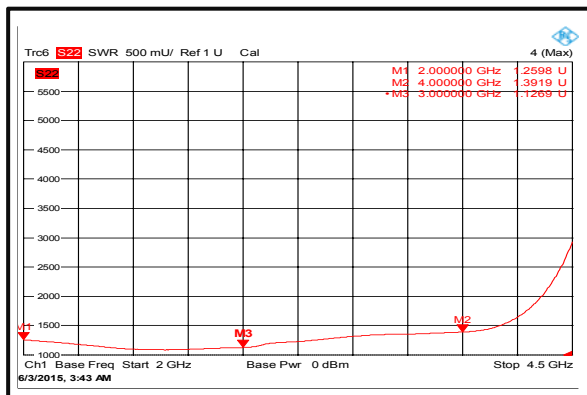
Environment specifications

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

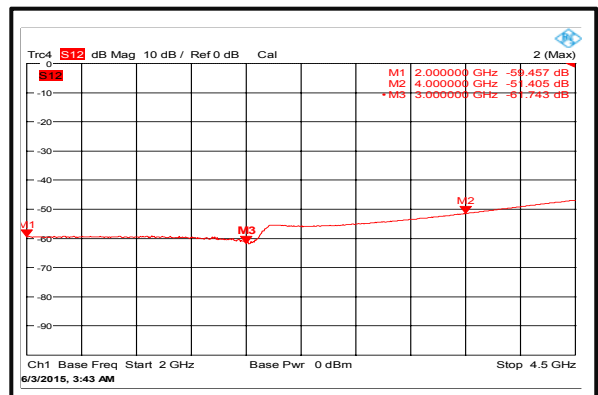
Input VSWR



Output VSWR

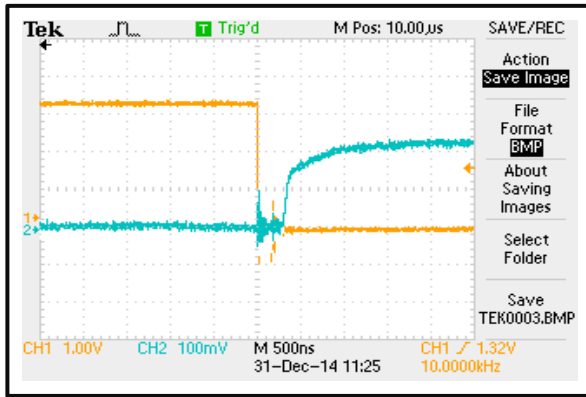


Isolation

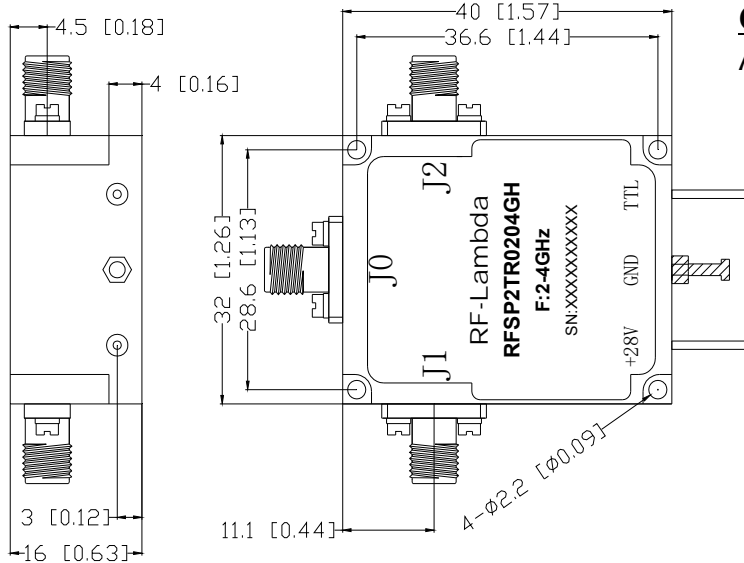
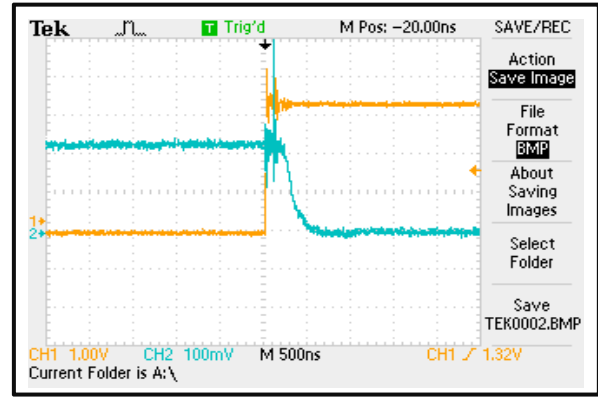




Switching Speed



Switching Speed



Outline Drawing:

All Dimensions in mm (inches)



Truth Table

Control Input TTL	Signal Path State
0	J0-J1
1	J0-J2
Control Pin Customization available upon request	

Important Notice

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