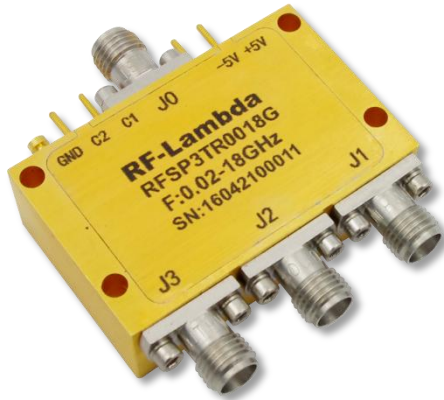




Reflective Coaxial SP3T Switch 0.02 - 18GHz



Features

- Ultra Wide Band Operation 0.02-18GHz
- TTL compatible driver included
- Fast Switching Speed
- Low Insertion Loss and High Isolation
- Customization available upon request

Electrical Specifications, TA = +25 °C, Vdd=+5V / -5V, TTL= 0/ +5V

Description	PN: RFSP3TR0018G									
	SP3T Reflective Switch									
	Low Power Cold Switching									
Parameters	Min	Typ.	Max	Min	Typ.	Max	Min	Typ.	Max	Units
Frequency Range	0.02~6			6~12			12~18			GHz
Insertion Loss		1.8	2.5		3.8	4.5		4.2	4.8	dB
Insertion Loss Temperature Coefficient		0.003			0.003			0.003		dB/°C
Isolation	60	80		70	85		70	85		dB
Input VSWR		1.5	1.8		1.6	1.8		1.6	1.8	:1
Output VSWR		1.5	1.8		1.6	1.8		1.6	1.8	:1
RF Input power			1			1			1	W
DC Power Dissipation (CW)		0.6			0.6			0.6		W
0.1dB Compression Point (Po.1dB)		30			30			30		dBm
IIP3		55			55			55		dBm
Switching Speed	200									ns
Weight	1.06									ounces
Impedance	50									Ω
Bias Current (+5V / -5V)	120/50									mA
Input / Output Connectors	SMA-Female									
Finishing	Gold Plating									
Material	Aluminum									
Sealing	Hermetically Sealed (Optional)									

Reflective Coaxial Single Pole Three Throw Switch 0.02 - 18GHz



Absolute Maximum Ratings

Biasing	+5V±10%/-5V±10%
TTL Control Voltage	0~0.8V/2~5V

Ordering Information

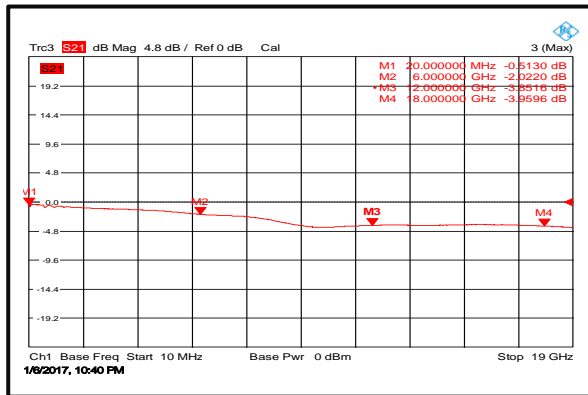
Part No.	ECCN	Description
RFSP3TR0018G	EAR99	SP3T 0.02-18GHz PIN Diode Switch

Environmental Specifications

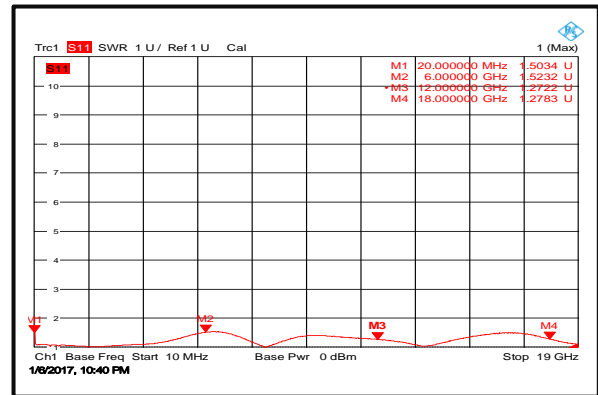
Operational Temperature (°C)	-45 ~ +85
Storage Temperature (°C)	-50 ~ +125
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Uncontrolled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35c,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

Typical Performance Plots

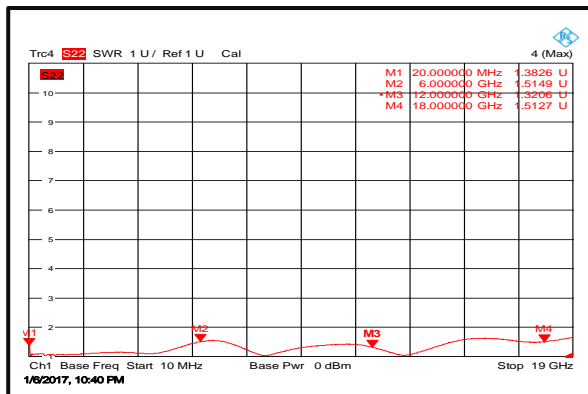
Insertion Loss



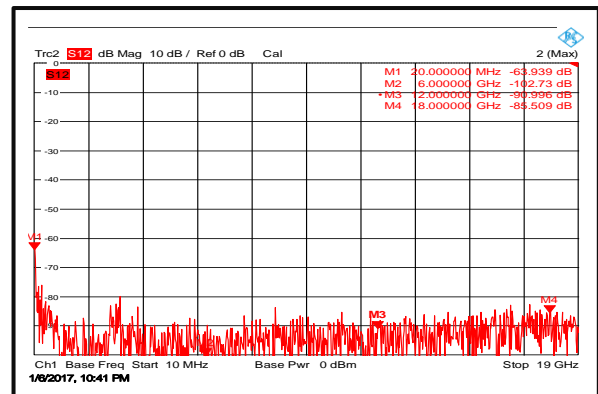
Input VSWR



Output VSWR



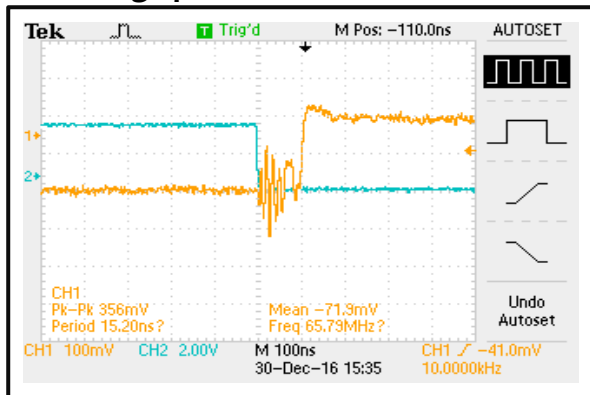
Isolation



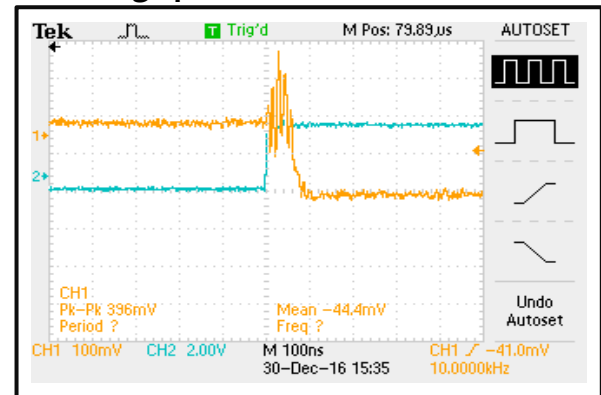
Reflective Coaxial Single Pole Three Throw Switch 0.02 - 18GHz



Switching Speed



Switching Speed



Outline Drawing:

All Dimensions in mm [inches]

[X301]

Truth Table

Control Input TTL		Signal Path State
C1	C2	
0	0	J0-J1
0	1	J0-J2
1	0	J0-J3
1	1	OFF

Control Pin Customization available upon request

ATTENTION
STATIC SENSITIVE DEVICES
HANDLE ONLY AT
STATIC SAFE WORK STATIONS

Important Notice

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Reflective Coaxial Single Pole Three Throw Switch 0.02 - 18GHz