

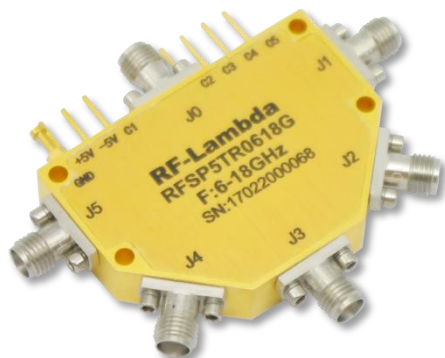


RF-LAMBDA

LEADER OF RF BROADBAND SOLUTIONS

RFSP5TR0618G

Reflection Coaxial SP5T Switch 6 - 18GHz



Features

- Wide Band Operation 6-18GHz
- TTL compatible driver included
- Fast Switching Speed
- Low Insertion Loss and High Isolation
- Customization available upon request

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

Description	RFSP5TR0618G						
	SP5T Reflective Switch						
	Low Power Cold Switching						
	Min.	Typ.	Max.	Min.	Typ.	Max.	Units
Parameters							
Frequency Range	6-12			12-18			GHz
Insertion Loss		1.8	2.5		2.5	3.0	dB
Insertion Loss Temperature Coefficient		0.003			0.003		dB/ $^\circ\text{C}$
Isolation	60	75		60	75		dB
Input VSWR		1.3	1.5		1.5	1.7	:1
Output VSWR		1.3	1.5		1.5	1.7	:1
RF Input power			30			30	dBm
DC Power Dissipation(CW)		1			1		W
0.1dB Compression Point ($P_{0.1\text{dB}}$)		30			30		dBm
IIP3		55			55		dBm
Switching Speed		50	100		50	100	ns
Weight	1.56						Ounces
Impedance	50						Ω
Bias Current (+5V / -5V)	200/50						mA
Input / Output Connectors	SMA-Female						
Finishing	Gold Plating						
Material	Aluminum						
Sealing	Hermetically Sealed (Optional)						

Reflection Coaxial Single Pole Five Throw Switch 6 - 18GHz



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Absolute Maximum Ratings

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

Note: TTL pins cannot be connected to the negative voltage otherwise the internal driver will be damaged.

Ordering Information

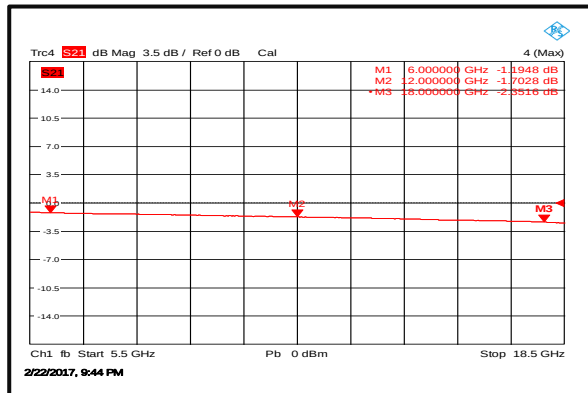
Part No.	ECCN	Description
RFSP5TR0618G	EAR99	SP5T 6-18GHz PIN Diode Switch

Environmental Specifications

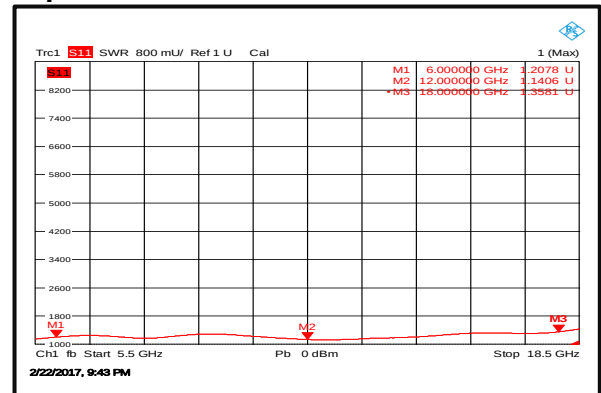
Operational Temperature (°C)	-45 ~ +85
Storage Temperature (°C)	-50 ~ +125
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Un-controlled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35°C,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

Typical Performance Plots

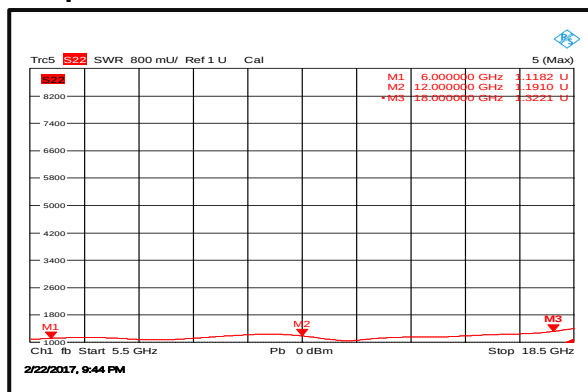
Insertion Loss



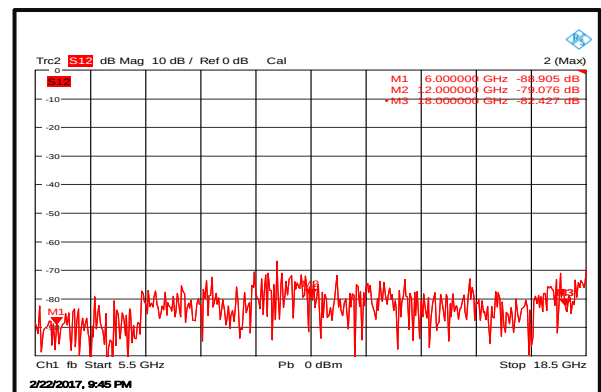
Input VSWR



Output VSWR



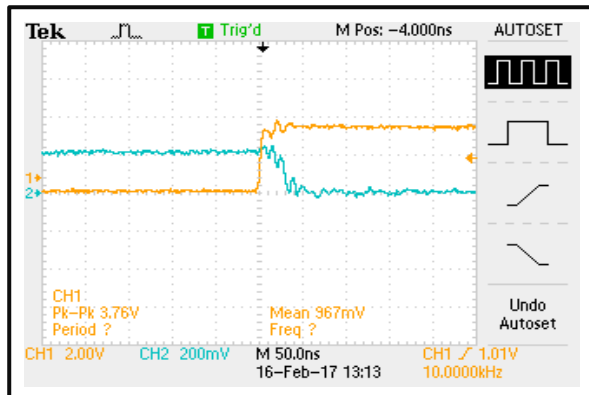
Isolation



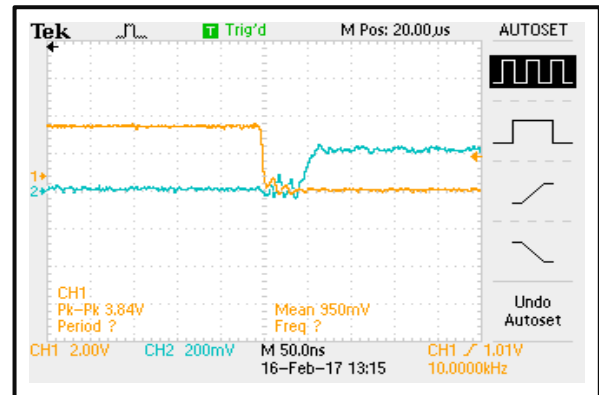
Reflection Coaxial Single Pole Five Throw Switch 6 - 18GHz



Switching Speed

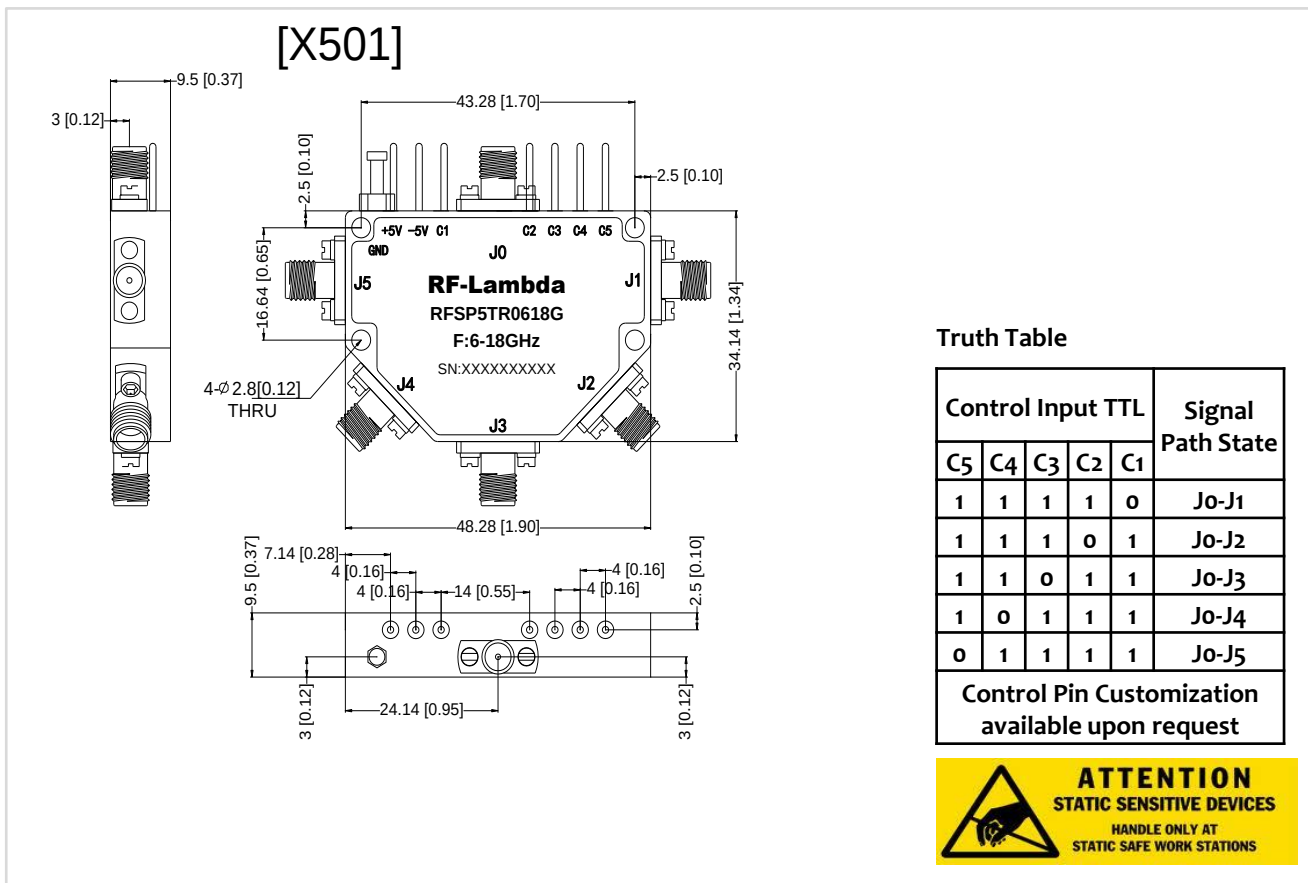


Switching Speed



Outline Drawing:

All Dimensions in mm [inches]



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