

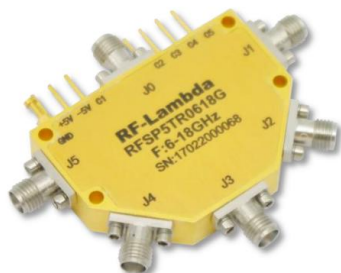


RF-LAMBDA

LEADER OF RF BROADBAND SOLUTIONS

RFSP5TA0005M

Absorptive Coaxial SP5T Switch 20 – 500MHz



Note: Drawing is for illustration purposes only.
Please refer to the outline drawing.

Features

- Ultra Wide Band Operation 20-500MHz
- TTL compatible driver included
- Fast Switching Speed
- Low Insertion Loss and High Isolation
- Customization available upon request

Typical Applications

- Wireless Infrastructure
- Military and Aerospace
- Test and Measurement

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

Description	PN: RFSP5TA0005M			
	SP5T Absorptive Switch			
	Low Power Cold Switching			
Parameters	Min.	Typ.	Max.	Units
Frequency Range	20-500			MHz
Insertion Loss			1.6	dB
Insertion Loss Temperature Coefficient		0.003		dB/°C
Isolation	80			dB
Input VSWR			1.5	: 1
Output VSWR			1.5	: 1
RF Input power			30	dBm
DC Power Dissipation		0.3		dBm
0.1dB Compression Point ($P_{0.1dB}$)		30		dBm
IIP3		55		dBm
Switching Speed			50	ns
Weight	1.06			ounces
Impedance	50			Ω
Bias Current (+5V / -5V)	200 / 50			mA
Input / Output Connectors	SMA-Female			
Finish	Gold Plated			
Material	Aluminum			
Sealing	Hermetically Sealed (Optional)			

Absorptive Coaxial Single Pole Five Throw Switch 20-500MHz



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Absolute Maximum Ratings

Biasing	+5V±10%/-5±10%
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Ordering Information

Part No.	ECCN	Description
RFSP5TA0005M	EAR99	SP5T 20-500MHz PIN Diode Switch

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

Environmental Specifications and Test Standards

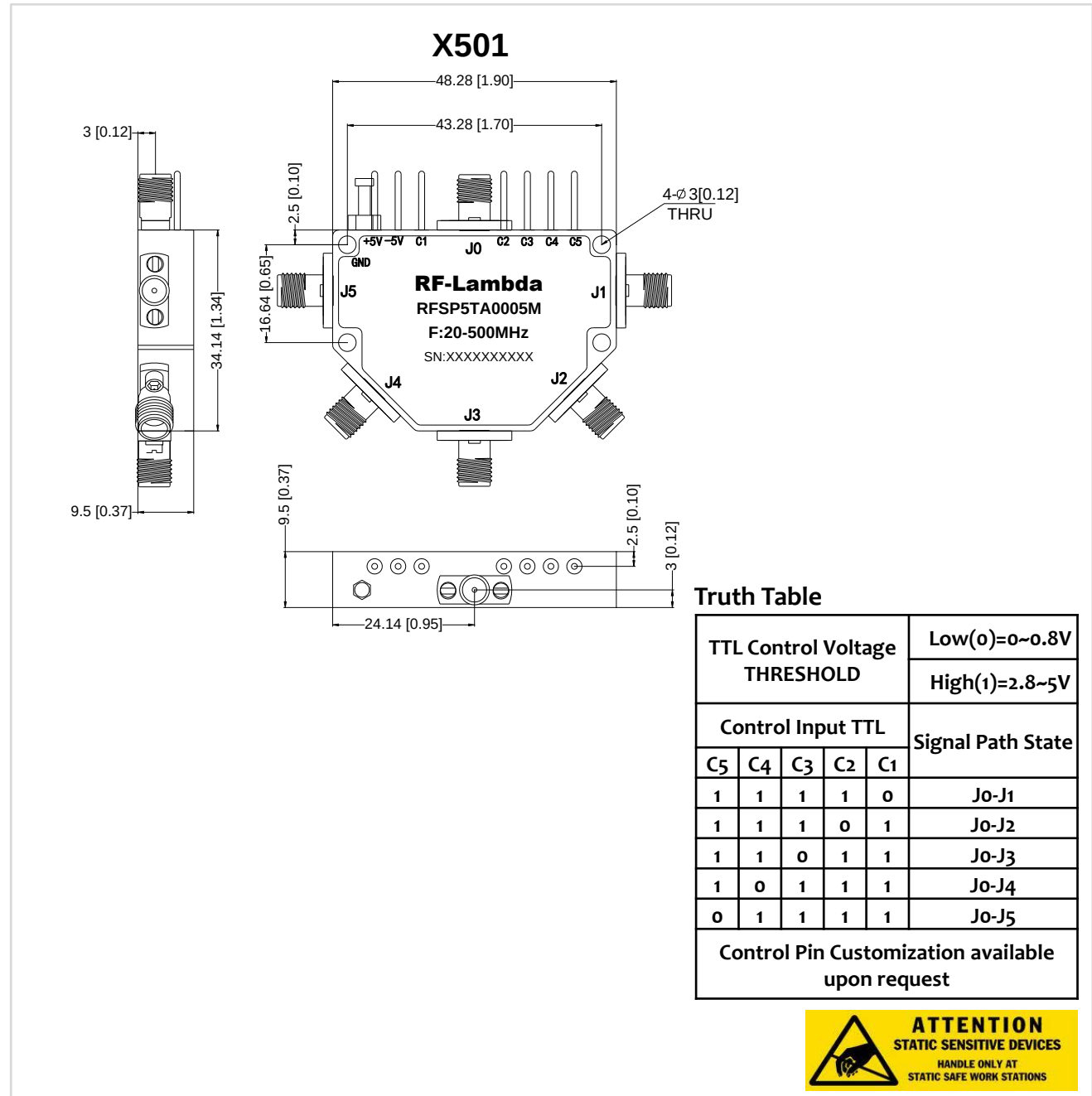
Parameter	Standard	Description
Operational Temperature	MIL-STD-39016	-45°C~+85°C (Case Temperature)
Storage Temperature		-50°C~+125°C
Thermal Shock		1 Hour@ -45°C → 1 Hour @ +85°C (5 Cycles)
Random Vibration		Acceleration Spectral Density 6 (m/s) Total 92.6 RMS
Electrical & Temperature Burn In		Temperature +85°C for 72 Hours
Shock		1. Weight >20g, 50g half sine wave for 11ms, Speed variation 3.44m/s 2. Weight <=20g, 100g Half sine wave for 6ms, Speed variation 3.75m/s 3. Total 18 times (6 directions, 3 repetitions per direction).
Altitude	MIL-STD-883	Standard: 30,000 Ft (Epoxy Sealed Controlled Environment) Optional: Hermetically Sealed (60,000 ft. 1.0 PSI min)
Hermetically Sealed (Optional)		MIL-STD-883 (For Hermetically Sealed Units)

Absorptive Coaxial Single Pole Five Throw Switch 20-500MHz



Outline Drawing:

All Dimensions in mm [inches]



Absorptive Coaxial Single Pole Five Throw Switch 20-500MHz

Important Notice

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