



Reflective Coaxial SP4T Switch 0.5- 6GHz

Features

- Wide Band Operation 0.5-6GHz
- Functional Bandwidth : DC to 6GHz
- TTL compatible driver included
- Fast Switching Speed
- Low Insertion Loss and High Isolation
- Customization available upon request



Electrical Specifications, $T_A = +25^\circ\text{C}$, $V_{dd} = +12\text{V}$, $TTL = 0 / +5\text{V}$

Description	PN: RFSP4TR5M06G						
	SP4T Reflective Switch						
	High Power Cold Switching						
Parameters	Min	Typ.	Max	Min	Typ.	Max	Units
Frequency Range	0.5~3			3-6			GHz
Insertion Loss		1.8			2.8		dB
Insertion Loss Temperature Coefficient		0.003			0.003		dB/°C
Isolation	35	42		34	40		dB
Input VSWR		1.2	1.3		1.35	1.5	: 1
Output VSWR		1.2	1.3		1.35	1.5	: 1
RF Input Power (Pulsed, 10% Duty Cycle, 20us pulse width)			50			50	dBm
DC Power Dissipation		2			2		W
0.1dB Compression $P_{0.1dB}$ ($P_{0.1dB}$)		50			50		dBm
IIP ₃		55			55		dBm
Switching Speed			100			100	ns
Weight	1.76						ounces
Impedance	50						Ω
Bias Current (+12V)	200						mA
Input / Output Connectors	SMA-Female						
Finish	Gold Plated						
Material	Aluminum						
Sealing	Hermetically Sealed (Optional)						

Reflective Coaxial Single Pole Four Throw Switch 0.5-6GHz



Absolute Maximum Ratings

Biasing	+12V±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
RFSP4TR5M06G	EAR99	SP4T 0.5-6GHz GaN Switch

Environmental Specifications and Test Standards

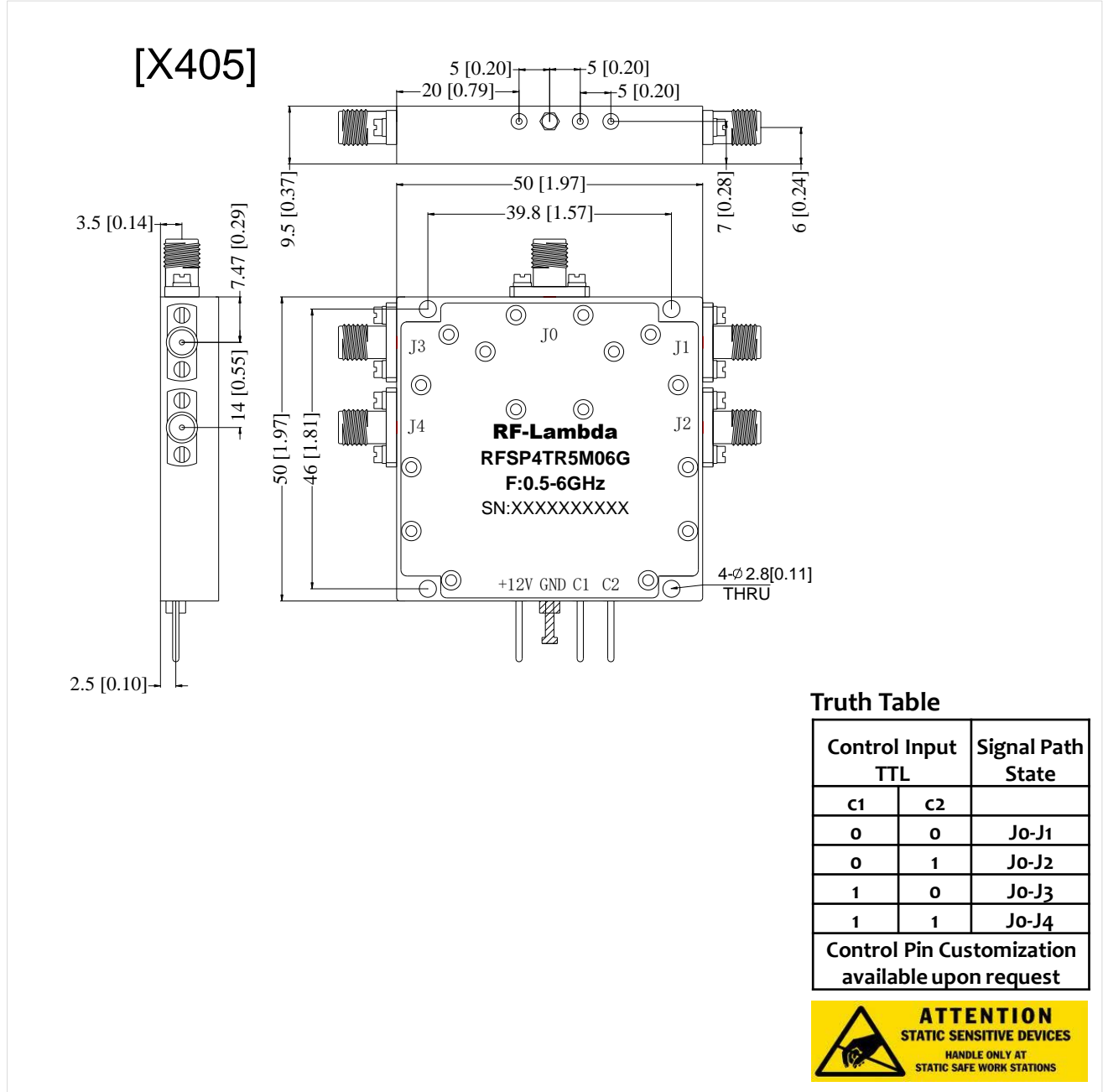
Parameter	Standard	Description
Operational Temperature	MIL-STD-39016	-45°C~+85°C (Case Temperature)
Storage Temperature		-50°C~+125°C
Thermal Shock		1 Hour@ -45°C → 1 Hour @ +85°C (5 Cycles)
Random Vibration		Acceleration Spectral Density 6 (m/s) Total 92.6 RMS
Electrical & Temperature Burn In		Temperature +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		Standard: 30,000 Ft (Epoxy Sealed Controlled Environment) Optional: Hermetically Sealed (60,000 ft. 1.0 PSI min)
Hermetically Sealed (Optional)	MIL-STD-883	MIL-STD-883 (For Hermetically Sealed Units)

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Outline Drawing:

All Dimensions in mm [inches]



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