

Reflective Coaxial SP4T Switch 6 – 18GHz



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

Features

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

Typical Applications

- Wireless Infrastructure
- Test and Measurement
- Military and Aerospace

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

Description	PN: RFSP4TR0618GW20			
	SP4T Reflective Switch			
	High Power Cold Switching			
Parameters	Min.	Typ.	Max.	Units
Frequency Range	6-18			GHz
Insertion Loss			3.5	dB
Insertion Loss Temperature Coefficient		0.003		dB/°C
Isolation	45			dB
Input VSWR			2.0	: 1
Output VSWR			2.0	: 1
RF Input Power (CW)			20	W
RF Input Power (Pulsed, 10% Duty Cycle, 10us pulse width)			250	W
DC Power Dissipation		1.2		W
0.1dB Compression Point (P 0.1dB)		43		dBm
IIP3		55		dbm
Switching Speed			800	ns
Weight	/			Ounces
Impedance	50			Ω
Bias Current (+5V)	230			mA
Input / Output Connectors	SMA-Female			
Finish	Gold Plated			
Material	Copper			
Sealing	Epoxy Sealed (Standard)			
	Hermetically Sealed (Optional)			

Absolute Maximum Ratings

Biasing	+5V±10%
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Ordering Information

Part No.	Description
RFSP4TR0618GW20	SP4T 6-18GHz PIN Diode Switch

Notes:

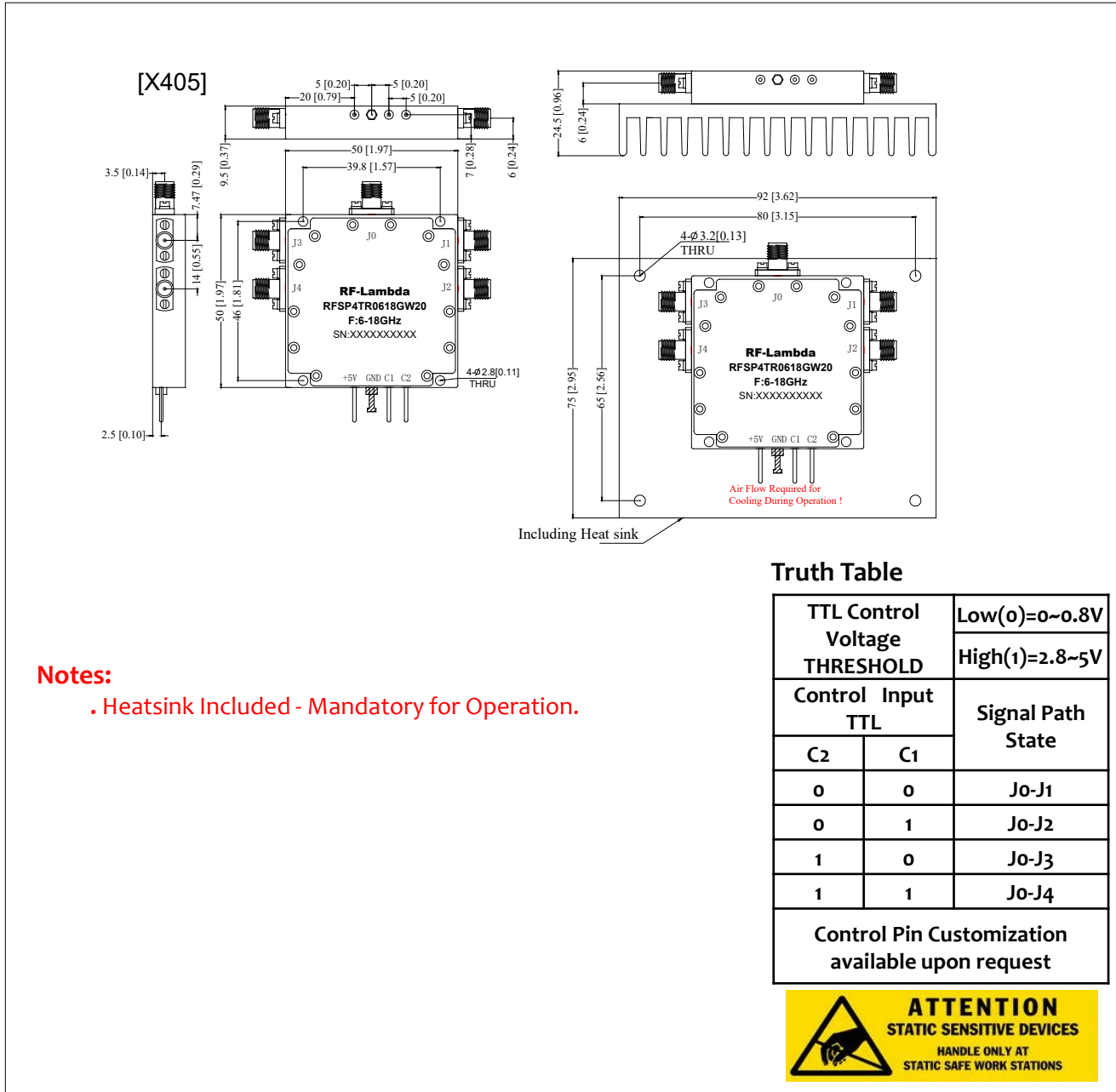
1. If the device operates in high power state, case temperature must be lower than 60°C.
2. Cold Switching: Before changing any TTL signal(s), the RF input power must be blanked or the switch could be damaged.

Environmental Specifications and Test Standards

Parameter	Description
Operational Temperature	-40°C~+85°C (Case Temperature)
Storage Temperature	-50°C~+105°C
Thermal Shock	-40°C → +85°C (5 Cycles / 10 hours)
Random Vibration	MIL-STD-202G Table 214-I, Test Condition Letter C 1.5 Hours Per Axis
High 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 (For Hermetically Sealed Units)

Outline Drawing:

All Dimensions in mm [inches]
Housing Tolerances ± 0.1 [0.004]



Reflective Coaxial Single Pole Four Throw Switch 6 - 18GHz

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