



RF-LAMBDA

LEADER OF RF BROADBAND SOLUTIONS

RFSP4TR5M06GA

Reflective Coaxial SP4T Switch 0.6 – 6GHz



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

Features

- Wide Band Operation 0.6-6GHz
- TTL compatible driver included
- Fast Switching Speed
- Low Insertion Loss and High Isolation

Typical Applications

- Wireless Infrastructure
- Military and Aerospace
- Test and Measurement

Reflective Coaxial Single Pole Four Throw Switch 0.6 – 6GHz

Electrical Specifications, $T_A = +25^{\circ}\text{C}$, $V_{dd} = +5\text{V}/-28\text{V}$, $TTL = 0 / +5\text{V}$

Description	PN: RFSP4TR5M06GA						
	SP4T Reflective Switch						
	High Power Cold Switching						
Parameters	Min	Typ	Max	Min	Typ	Max	Units
Frequency Range	0.6 - 3			3 - 6			GHz
Insertion Loss		0.8			1.5		dB
Insertion Loss Temperature Coefficient		0.003			0.003		dB/°C
Isolation		65			55		dB
Input VSWR		1.5			1.5		: 1
Output VSWR		1.5			1.5		: 1
RF Input Power (CW)			100			100	W
DC Power Dissipation		1.8			1.8		W
0.1dB Compression Point ($P_{0.1\text{dB}}$)		50			50		dBm
IIP3		/			/		dBm
Switching Speed		1			1		us
Weight	/						ounces
Impedance	50						Ω
Bias Current (+5V/-28V)	200/70						mA
Input / Output Connectors	SMA - Female						
Finish	Gold Plated						
Material	Aluminum						
Seal	Hermetically Sealed (Optional)						



Absolute Maximum Ratings

Biasing	+5V±10%/-28V±10% 25°C
TTL Control Voltage	0~0.8V/2.8~5V

Ordering Information

Part No.	ECCN	Description
RFSP4TR5M06GA	EAR99	SP4T 0.6-6GHz PIN Diode Switch

Notes:

- TTL pins cannot be connected to the negative voltage otherwise the internal driver will be damaged.
- 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	Standard	Description
Operational Temperature	MIL-STD-39016	-40°C~+85°C (Case Temperature)
Storage Temperature		-50°C~+105°C
Thermal Shock		1 Hour@ -40°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)

