



RF-LAMBDA

LEADER OF RF BROADBAND SOLUTIONS

RFSP2TA5M50G

Absorptive Coaxial SP2T Switch 0.1 - 50GHz



Features

- Ultra Wide Band Operation 0.1-50GHz
- TTL compatible driver included
- Fast Switching Speed
- Low Insertion Loss and High Isolation
- Customization available upon request

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

Description	PN: RFSP2TA5M50G									
	SP2T Absorptive Switch									
	Low Power Cold Switching									
	Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	Units
Frequency Range	0.1-18			18-43.5			43.5-50			GHz
Insertion Loss		3.3	4		4.5	5		6.2	7.5	dB
Insertion Loss Temperature Coefficient		0.003			0.003			0.003		dB/°C
Isolation	50	65		40	50		50	55		dB
Input VSWR		1.8	2.5		2.5	3		2	2.5	:1
Output VSWR		1.8	2.5		2.5	3		2	2.5	:1
RF Input Power			23			23			23	dBm
DC Power Dissipation		0.8			0.8			0.8		W
0.1dB Compression Point (Po.1dB)		23			23			23		dBm
IIP3		55			50			45		dBm
Switching Speed	50									ns
Weight	0.35									Ounces
Impedance	50									Ω
Bias Current (+5V / -5V)	100/50									mA
Input / Output Connectors	2.4mm-Female									
Finish	Gold Plated									
Material	Aluminum									
Sealing	Hermetically Sealed (Optional)									

Absorptive Coaxial Single Pole Double Throw Switch 0.1 - 50GHz



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.

Environmental Specifications

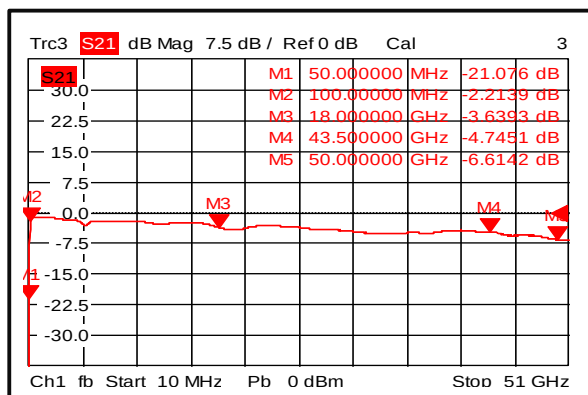
Operational Temperature(°C)	-45 ~ +85
Storage Temperature(°C)	-50 ~ +125
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Un-controlled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35°C,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

Ordering Information

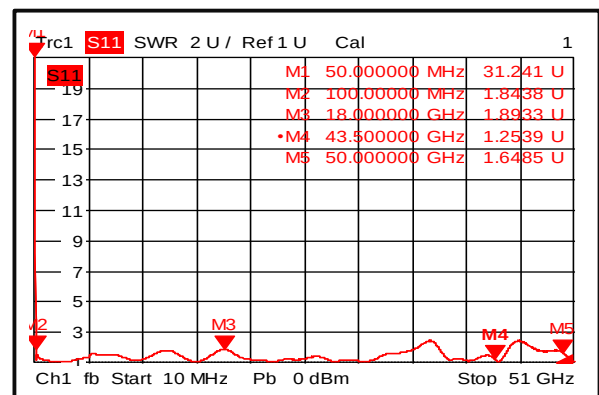
Part No.	ECCN	Description
RFSP2TA5M50G	EAR99	SP2T 0.1-50G PIN Diode Switch

Typical Performance Plots

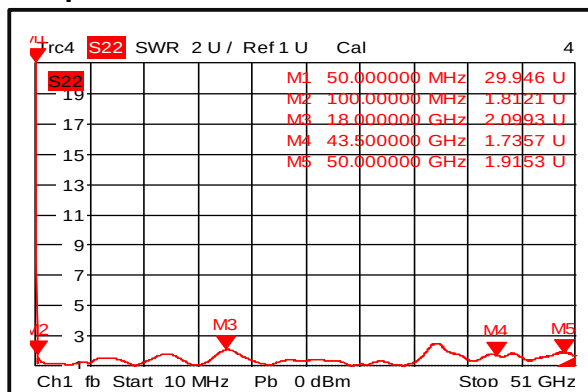
Insertion Loss



Input VSWR



Output VSWR



Isolation

