



RF-LAMBDA

LEADER OF BROADBAND SOLUTIONS

RFSP3TA5M43G

Absorptive 0.5-43.5GHz Coaxial SP3T Switch



Features

- Ultra Wide Band Operation 0.5-43.5GHz
- TTL compatible driver include
- Fast Switching Speed
- Low Insertion Loss and High Isolation
- Customization available upon request
- Hermetically sealed package up to 60,000ft available upon request.

Electrical Specifications, TA = +25° C, With Vdd = +5V, Vss = -5V & VCTL = 0/ +5V

Description	PN: RFSP3TA5M43G									
	SP3T Absorptive Switch									
	Low Power Cold Switching									
Parameters	Min	Type	Max	Min	Type	Max	Min	Type	Max	Units
Frequency Range	0.5-18			18-30			30-43.5			GHz
Insertion Loss		3.5	4.5		5.0	5.5		5.5	6.0	dB
Insertion Loss Temperature Coefficient		0.003			0.003			0.003		dB/°C
Isolation	65			50			50			dB
Input VSWR		2	2.5		2.5	3		2.5	3	
Output VSWR		2	2.5		2.5	3		2.5	3	
RF Input power			+23			+23			+23	dBm
Power Dissipation (CW)		0.15			0.15			0.15		W
IM3		30			30			30		dBc
IIP3		50			45			45		dBm
0.1dB Compression Po.1dB			23			23			23	dBm
Switching Speed			50			50			50	ns
Weight	1.8									Ounces
Impedance	50									Ω
Biasing(+5V/-5V)	120/50									mA
Input /Output Connector	2.92mm-Female (Standard)									
Finishing	Gold Plating									
Material	Aluminum									
Seal	Hermetically Sealed (optional)									

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Absolute Maximum Ratings

Biasing	+5V±10%/-5V±10%
TTL Control Voltage	0~0.8V/2~5V
Operating Temperature(°C)	-45 ~ +85
Storage Temperature(°C)	-50 ~ +125

Ordering Information

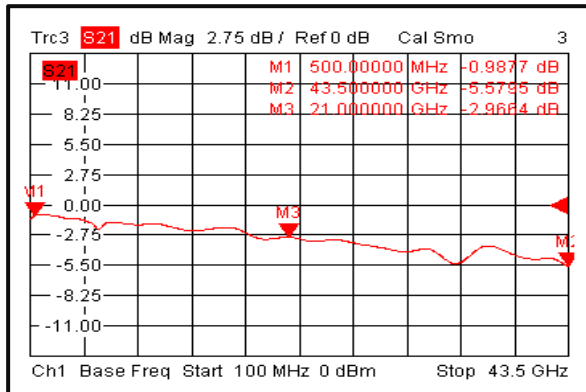
Part No	ECCN	Description
RFSP3TA5M43G	EAR99	SP3T 0.5-43.5PIN Diode Switch

Environment specifications

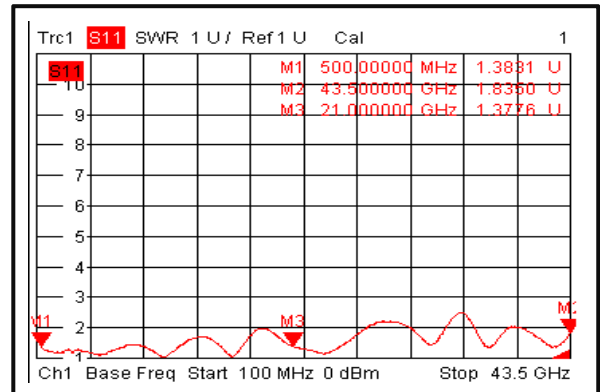
Operational Temperature (°C)	-45 ~ +85
Storage Temperature (°C)	-50 ~ +125
Altitude	30,000 ft. (Epoxy Seal Controlled environment) 60,000 ft 1.0psi min (Hermetically Seal Un-controlled environment) (Optional)
Vibration	25g rms (15 degree 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35c, 95%RH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

Typical performance plots

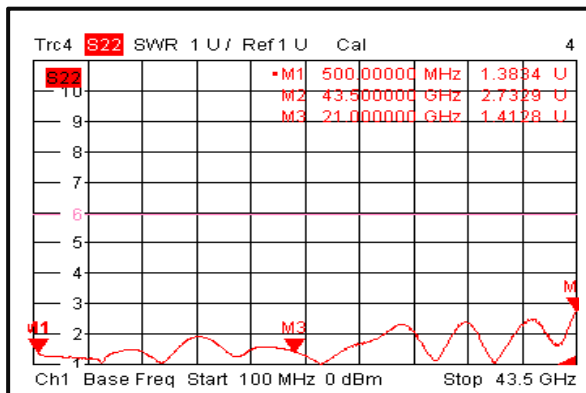
Insertion Loss



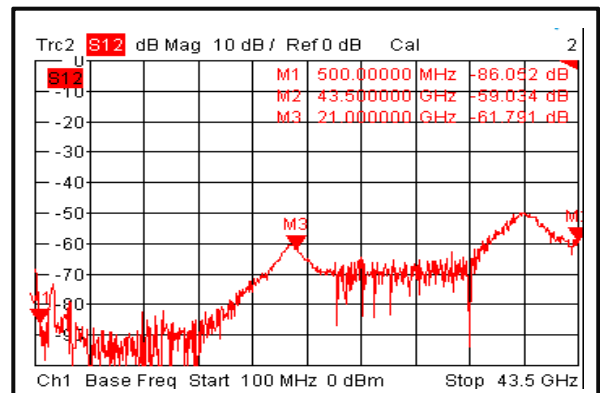
Input VSWR



Output VSWR



Isolation



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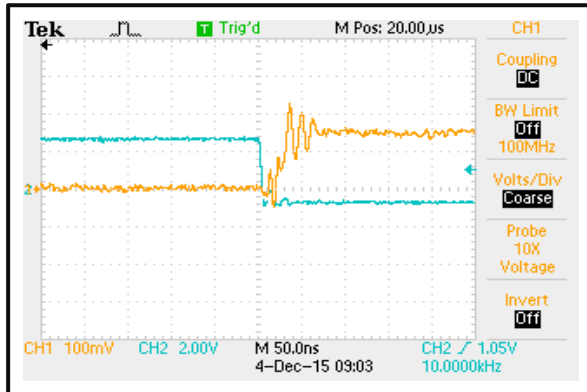


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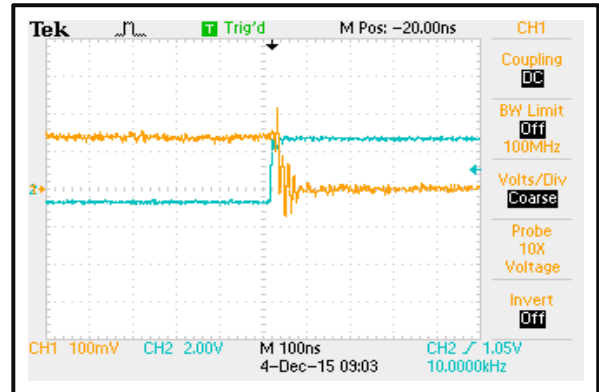
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Switching Speed

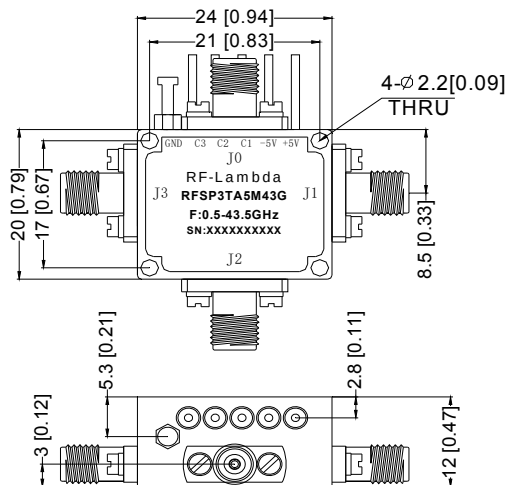


Switching Speed



Outline Drawing:

All Dimensions in mm (inches)



Truth Table

Control Input TTL			Signal Path State
C3	C2	C1	
1	1	0	Jo-J1
1	0	1	Jo-J2
0	1	1	Jo-J3
0	0	0	All ON
1	1	1	All OFF

Control Pin Customization
available upon request



Important Notice

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