



Absorptive Coaxial SP12T Switch 1.5 – 4.5GHz

Features

- Wide Band Operation 1.5-4.5GHz
- TTL compatible driver included
- Fast Switching Speed
- Low Insertion Loss and High Isolation
- Temperature Range -45°C~+85°C
- Customization available upon request
- Hermetically sealed package up to 60,000ft available upon request.



Electrical Specifications, T_A = +25° C, V_{dd} = +5V/-5V, TTL = 0 / +5V

Description	PN: RFSP12TA1545G			
	SP12T Absorptive Switch			
	Low Power Cold Switching			
Parameters	Min.	Typ.	Max.	Units
Frequency Range	1.5 – 4.5			GHz
Insertion Loss			2.5	dB
Insertion Loss Temperature Coefficient		0.003		dB/°C
Loss Imbalance			0.5	dB
Isolation	60			dB
Input VSWR			1.8	: 1
Output VSWR			1.8	: 1
RF Input power			30	dBm
DC Power Dissipation(CW)		2.8		W
0.1dB Compression Point (P _{0.1dB})			30	dBm
IIP ₃		55		dBm
Switching Speed			250	ns
Weight	/			ounces
Impedance	50			Ω
Bias Current (+5V / -5V)	500 / 50			mA
Input / Output Connectors	SMA-Female			
Finishing	Gold Plating			
Material	Aluminum			
Sealing	Hermetically Sealed (optional)			

Absorptive Coaxial Single Pole Twelve Throw Switch 1.5 – 4.5GHz



Absolute Maximum Ratings

Biassing	+5V±10%/-28V±10%
TTL Control Voltage	0~0.8V/2.8~5V

Ordering Information

Part No.	ECCN	Description
RFSP12TA1545G	EAR99	SP12T 1.5-4.5GHz PIN Diode Switch

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 35c, 95%RH at 40°C
Shock	20G for 11msec half sine wave, 3 axis both directions



Outline Drawing:

All Dimensions in mm [inches]

Truth Table

Control Input TTL				Signal Path State
c4	c3	c2	c1	
0	0	0	0	J0-J1
0	0	0	1	J0-J2
0	0	1	0	J0-J3
0	0	1	1	J0-J4
0	1	0	0	J0-J5
0	1	0	1	J0-J6
0	1	1	0	J0-J7
0	1	1	1	J0-J8
1	0	0	0	J0-J9
1	0	0	1	J0-J10
1	0	1	0	J0-J11
1	0	1	1	J0-J12

Control Pin Customization available upon request

ATTENTION
STATIC SENSITIVE DEVICES
HANDLE ONLY AT
STATIC SAFE WORK STATIONS

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