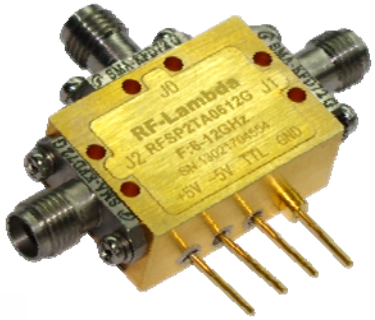
Absorptive 6-12GHz Coaxial SP2T Switch



RoHS Compliant

Features

- Wide Band Operation 6-12GHz
- High Power Handle Capability up to 5W upon request.
- TTL compatible driver include
- Fast Switching Speed
- Low Insertion Loss and High Isolation
- Temperature Range -45°C~+85°C
- Customization available upon request

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

Specification	Absorptive type		
	PN: RFSP2TA0612G		
	Low	Med	High
Frequency Range(GHz)	6	9	12
Insertion Loss(dB)	1.8dB typ. @6GHz	2dB typ. @9GHz	2.2dB typ. @12GHz
VSWR	1.3	1.3	1.5
Isolation(dB)	85	85	80
Switching Speed(ns)	50	100	150
P1dB Power (dBm)		24	
Absolutely max. Power (W)			1
Weight (g)	25		
IIP3 (Input IP3) dBm	42.92		
Impedance(Ohms)	50Ω		
Power Supply (V)	+/-5 V DC		
Current(mA)	80mA (+5V) 30mA (-5V)		
Input Connector	SMA-Female		
Output Connector	SMA-Female		
Finishing	Gold Plating		
Material	Brass		
Seal	Hermetically Sealed		
Control (TTL Driver Included)	TTL Control		
	TTL	Status	
	0	Jo-J2	
	1	Jo-J1	

Absorptive Coaxial Single Pole Double Throw Switch 6-12GHz

Absolute Maximum Ratings

Biasing	+/-5V
TTL Control Voltage	+5V/0V
RF Input power	+30dBm
Storage Temperature(C°)	-45 ~ +85
Operating Temperature(C°)	-50 ~ +125

Environment specifications

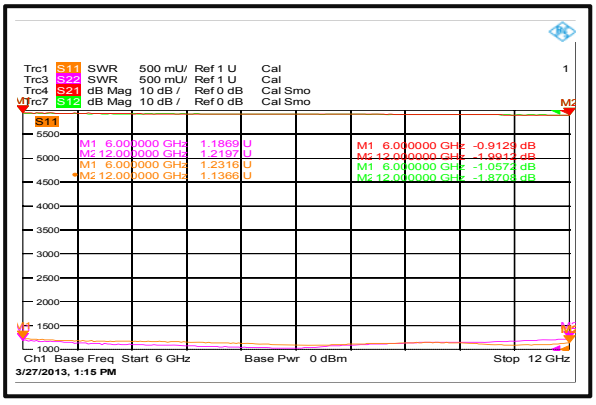
Operational Temperature (C°)	-45 ~ +85
Storage Temperature (C°)	-50 ~ +125
Altitude	30,000 ft. (Epoxy Seal Controlled environment) 60,000 ft 1.0psi min (Hermetically Seal Un-controlled environment) (Optional)
Vibration	25g rms (15 degree 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35c, 95%RH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

Ordering Information

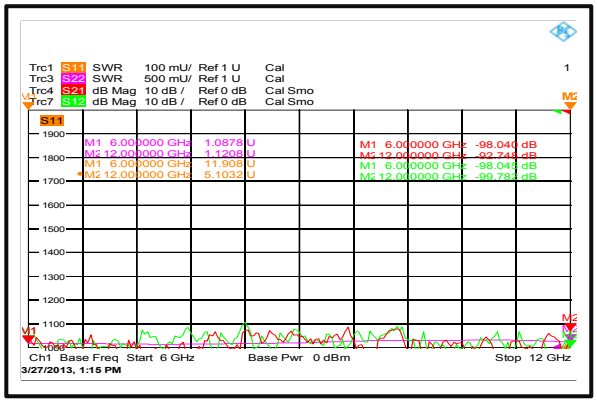
Part No	ECCN	Description
RFSP2TA0612G	EAR99	SP2T 6-12GHz PIN Diode Switch

Typical Performance Plots

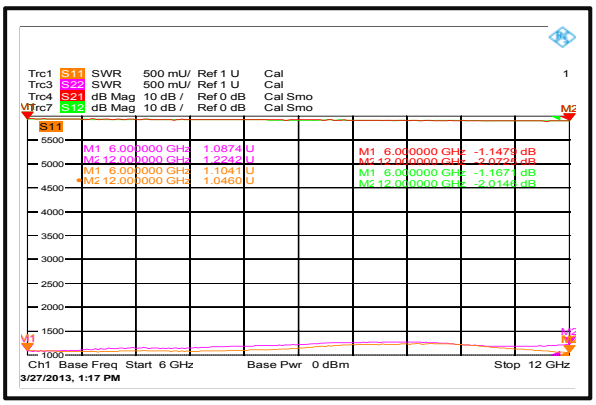
LOSS and VSWR Temperature ＋25℃



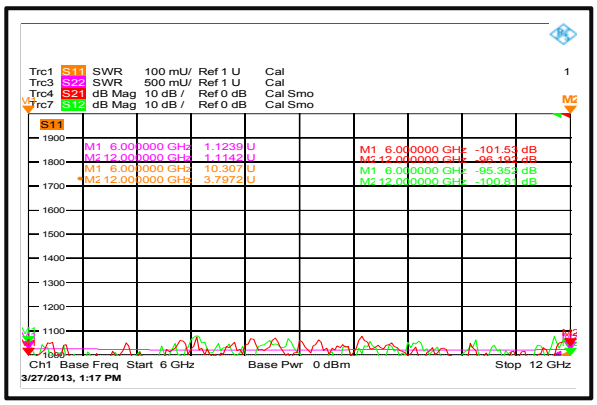
VSWR and ISO Temperature+25℃



LOSS and VSWR Temperature -45℃

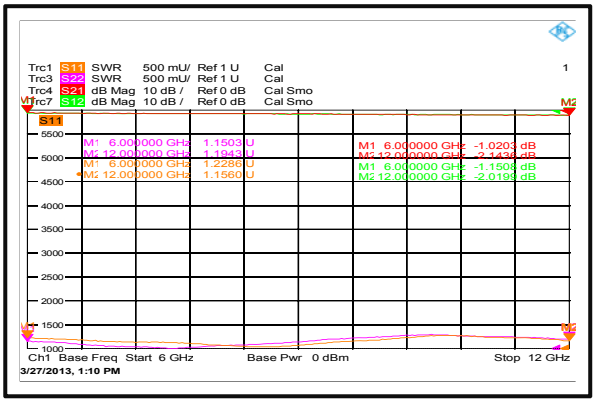


VSWR and ISO Temperature -45℃

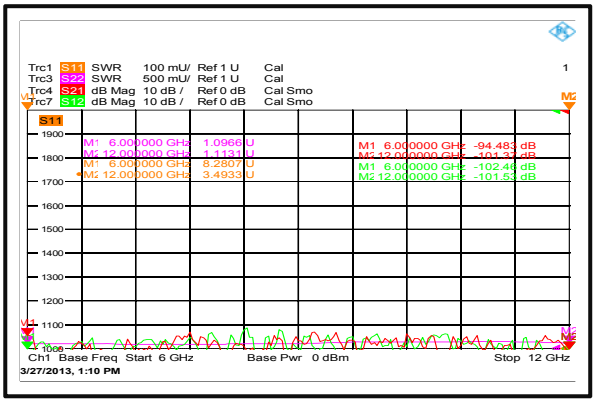


Absorptive Coaxial Single Pole Double Throw Switch 6-12GHz

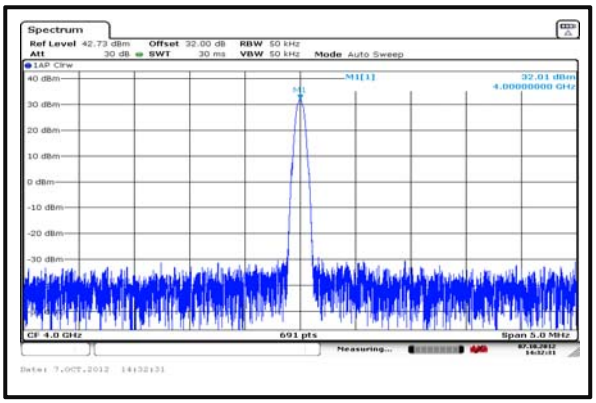
LOSS and VSWR Temperature +85℃



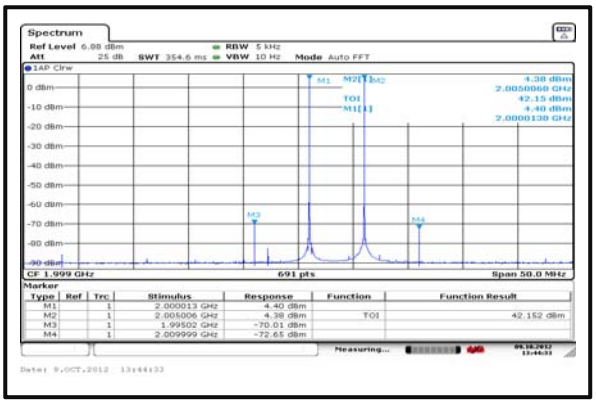
VSWR and ISO Temperature+85℃



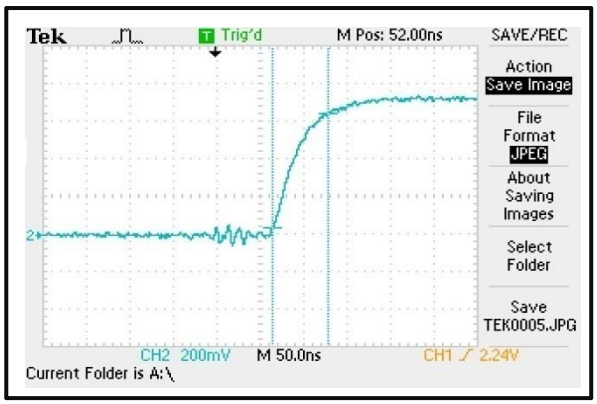
1dB Compression Point



IP3 – INPUT IP3 Point

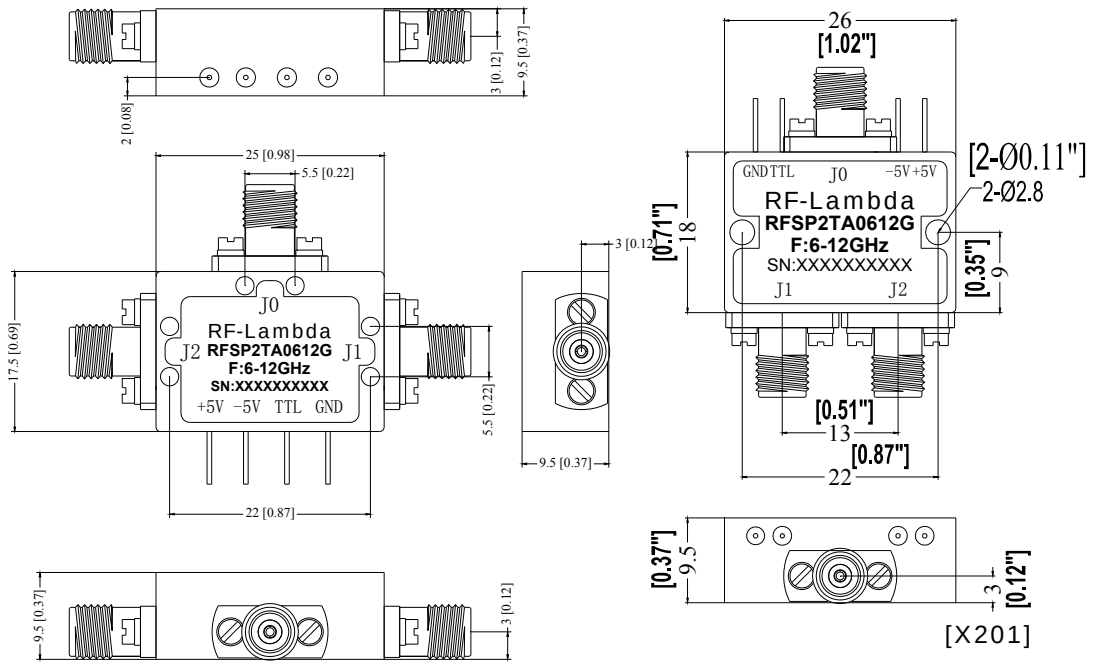


Switching Speed Test



Outline Drawing:

All Dimensions in mm（inches）



[X202 –Standard Package]

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