



Absorptive 0.001-4.5GHz Coaxial SP2T Switch



Features

- Wide Band Operation 0.001-4.5GHz
- High Power Handle Capability up to 5W upon request.
- TTL compatible driver include
- Fast Switching Speed
- Low Insertion Loss and High Isolation
- Temperature Range -40°C~+85°C
- Customization available upon request

Specification	Absorptive type		
	PN: RFSP2TA0005G		
	Low	Med	High
Frequency Range(GHz)	0.001	2.25	4.5
Insertion Loss(dB)	1.5dB typ. @0.001GHz	2dB typ. @2.25GHz	2.5dB typ. @4.5GHz
VSWR	2.0	1.7	2.0
Isolation(dB)	50@<30MHz	70@>100MHz	
Switching Speed(ns)	50	100	150
P1dB Power (dBm)		27	
Absolutely max. Power (W)			5
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	J0-J1	
	1	J0-J2	



Absolute Maximum Ratings	
Biasing	+/-5 V
TTL Control Voltage	+5V/oV
Input RF power	20dBm
Storage Temperature (C°)	-50 ~ +125

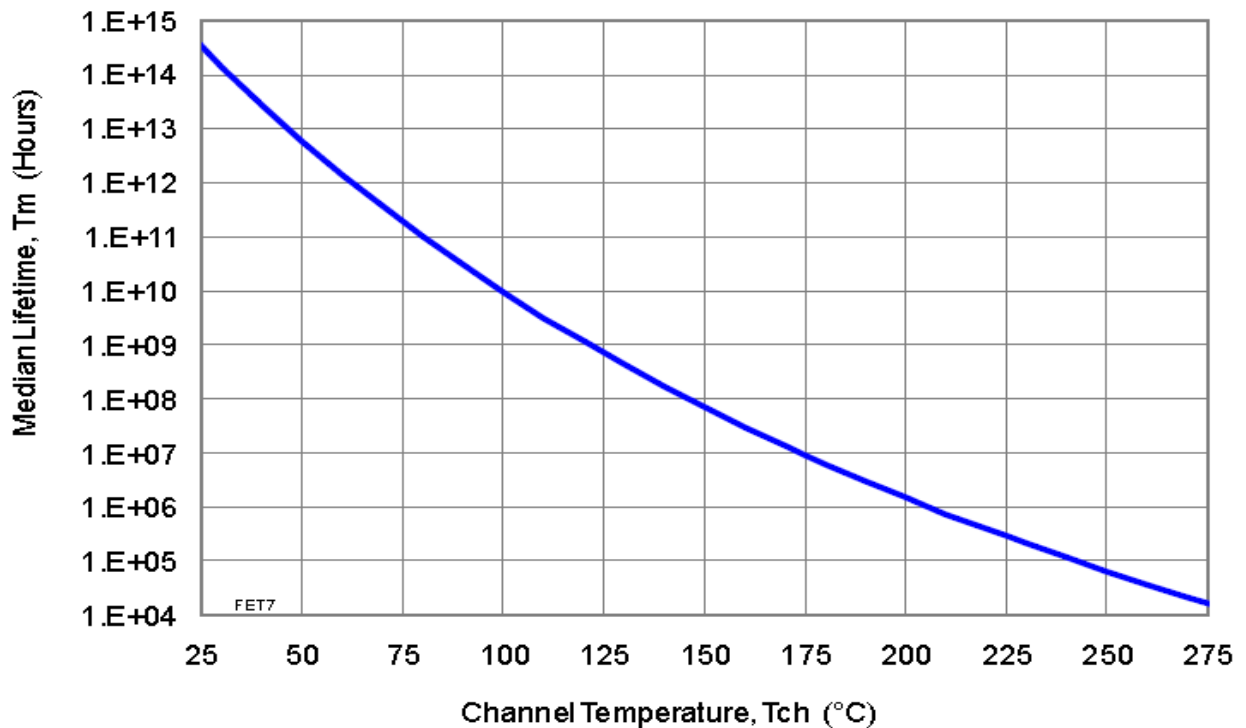
Biasing Up Procedure	
Step 1	-5V
Step 2	+5V
Step 3	TTL
Power OFF Procedure	
Step 1	+5V
Step 2	-5V
Step 3	TTL

Environment specifications	
Operational Temperature (C°)	-45 ~ +85
Storage Temperature (C°)	-50 ~ +125
Altitude	30,000 ft (Controlled environment)
Vibration	25g rms (15 degree 2KHz)
Humidity	100% RH at 35c, 95%RH at 40 deg c
Shock	20G for 11msc

Ordering Information		
Part No	ECCN	Description
RFSP2TA0005G	EAR99	SP2T 0.001-4.5GHz PIN Diode Switch



Median Lifetime (Tm) vs. Channel Temperature (Tch)



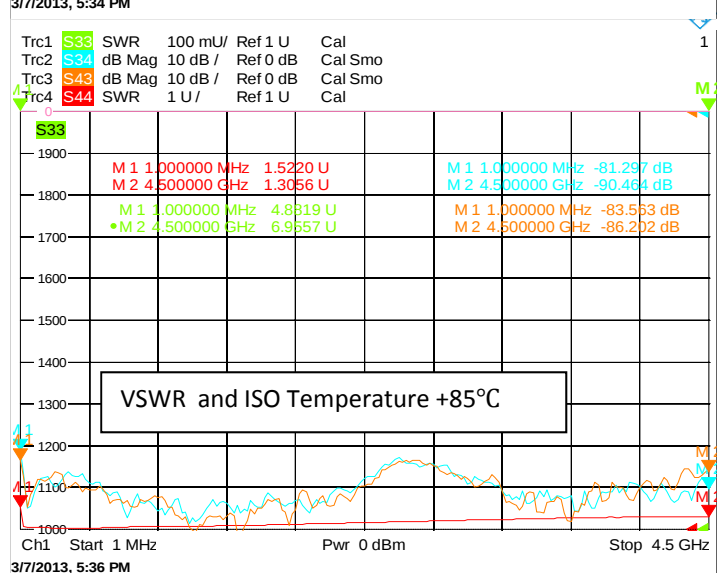
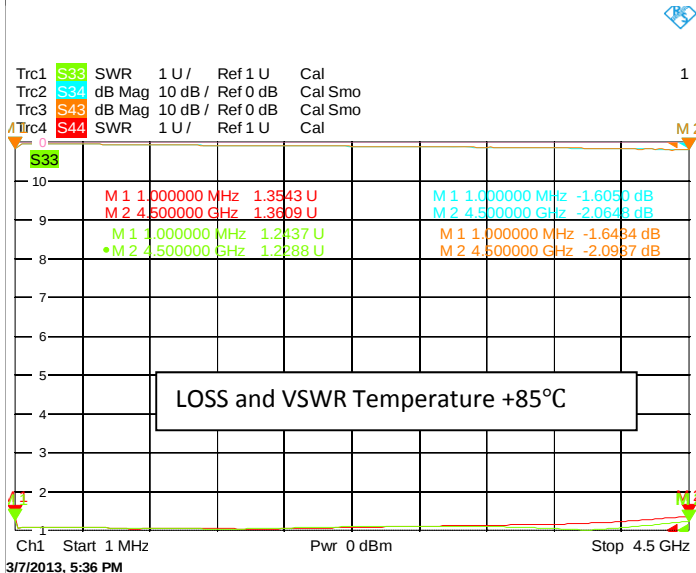
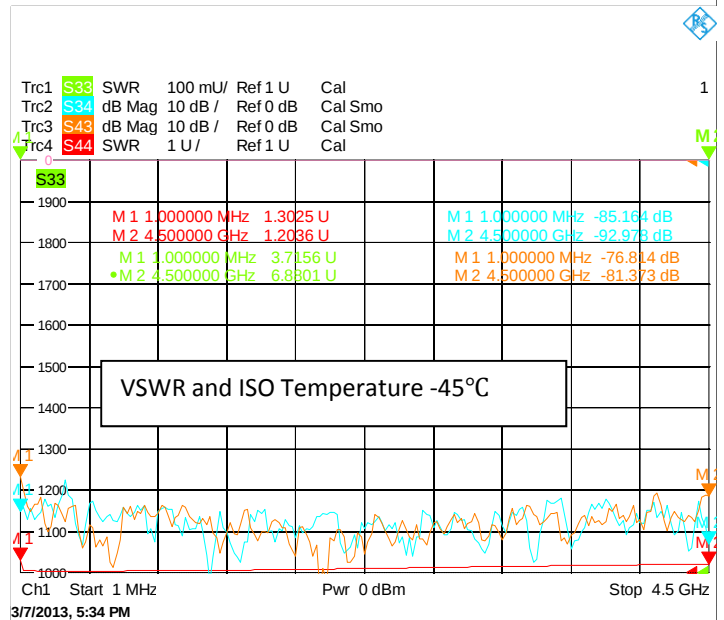
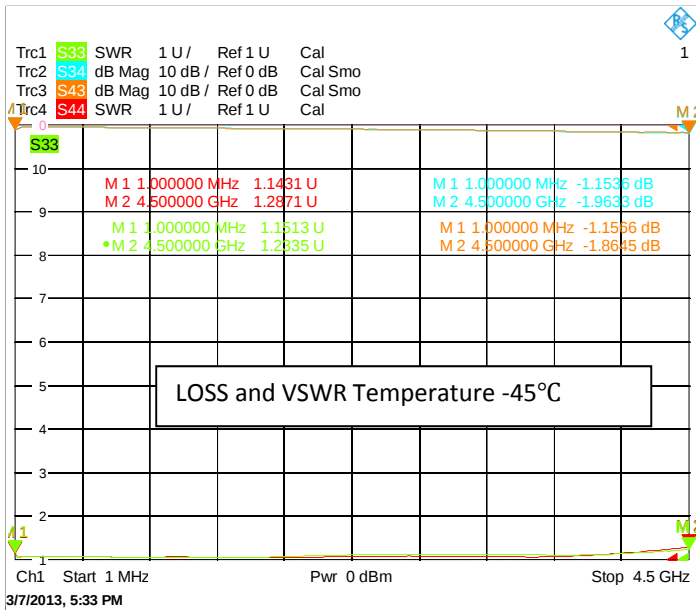
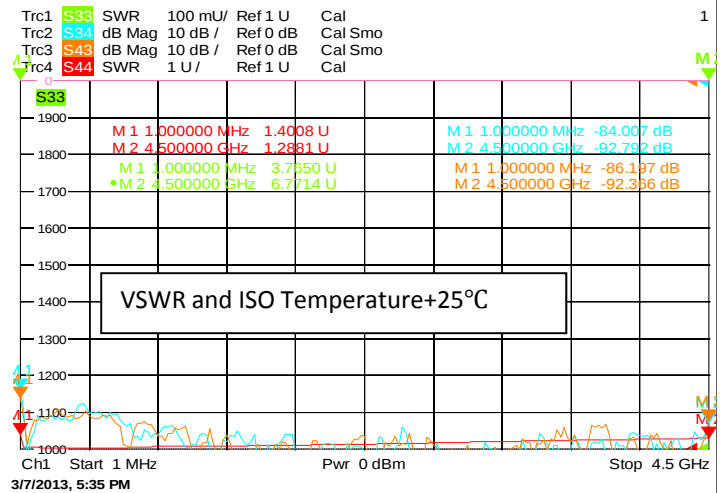
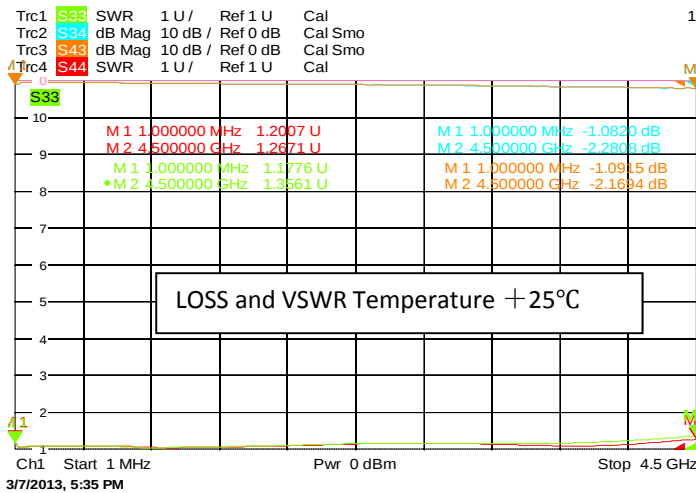


RF-LAMBDA

The power beyond expectations

RFSP2TA0005G

Absorptive Coaxial Single Pole Double Throw Switch 0.001-4.5GHz





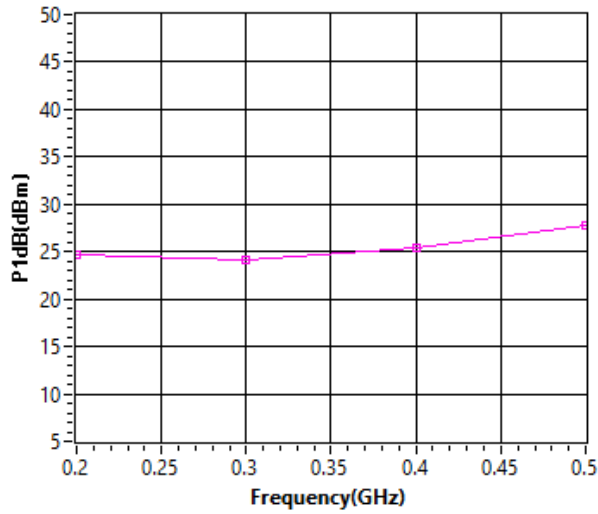
RF-LAMBDA

The power beyond expectations

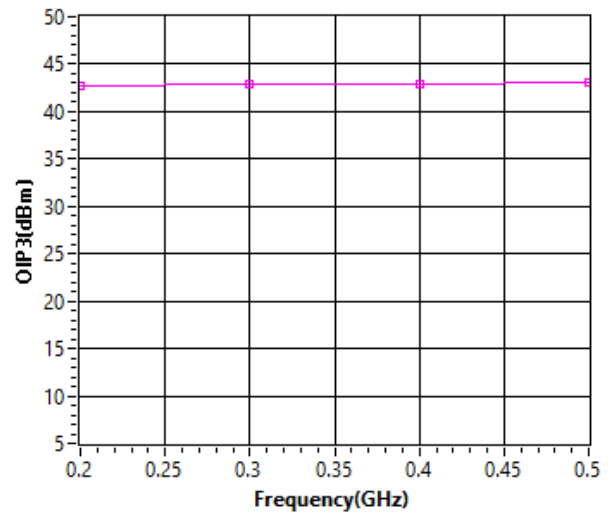
RFSP2TA0005G

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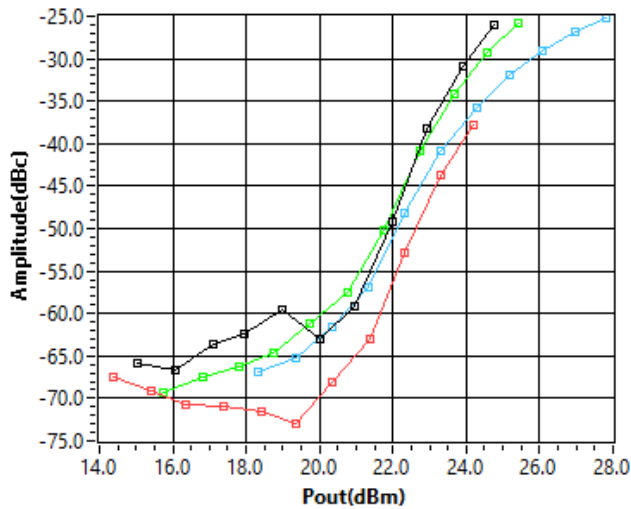
P1dB vs. Frequency



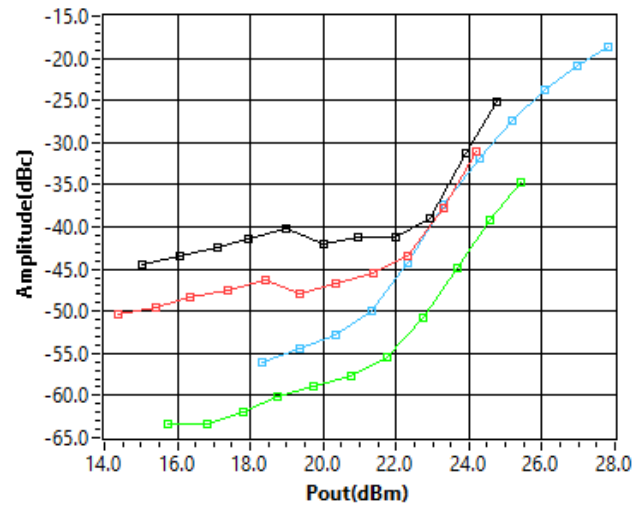
OIP3 vs. Frequency



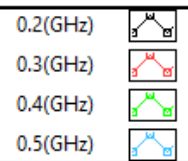
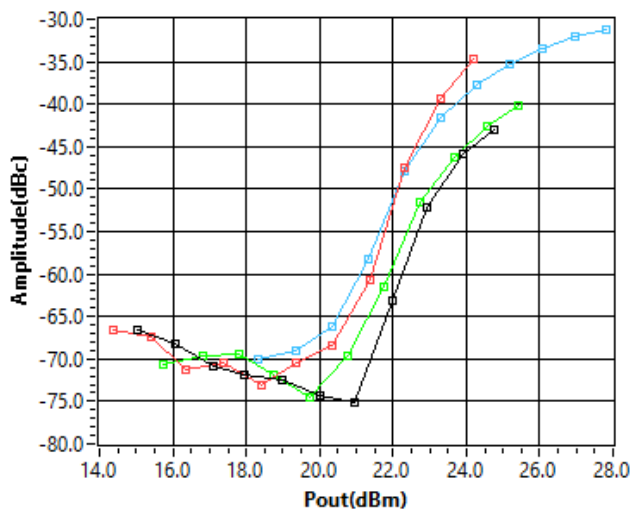
3rd Harmonic Wave vs. Pout



2nd Harmonic Wave vs. Pout



4th Harmonic Wave vs. Pout



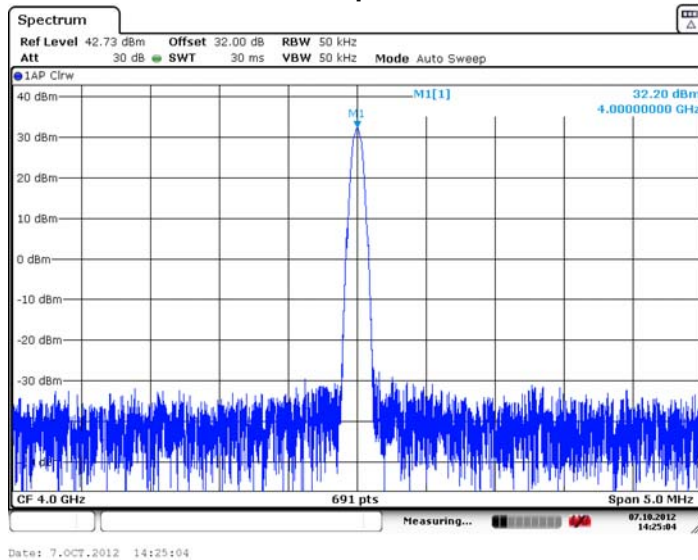


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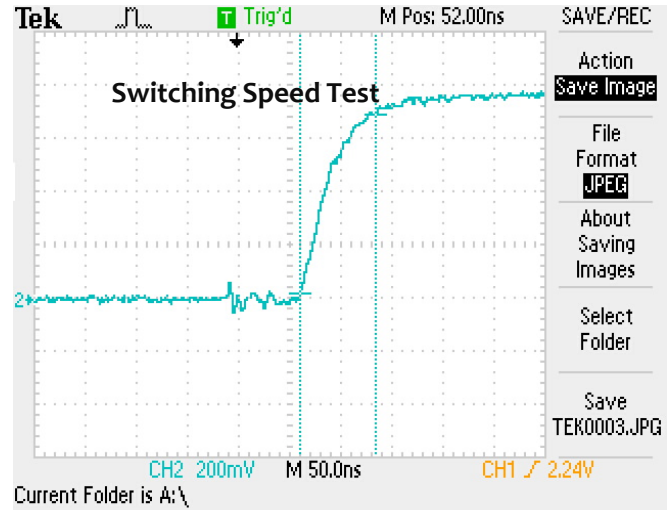
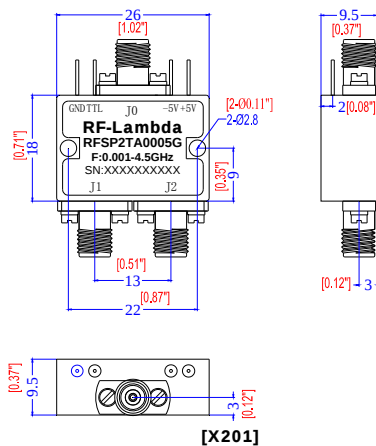
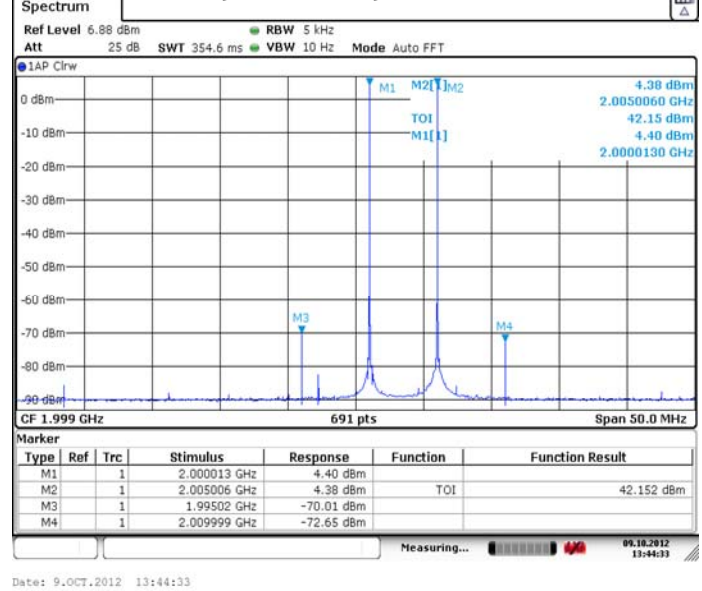
The power beyond expectations

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1dB Compression Point



IP3 – INPUT IP3 Point



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Absorptive Coaxial Single Pole Double Throw Switch 0.001-4.5GHz