



RF-LAMBDA

The power beyond expectations

RFSP4TR0220G

Reflective 2-20GHz Coaxial SP4T Switch



Features

- Wide Band Operation 2-20GHz
- 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

Specification	Reflective type		
	PN: RFSP4TR0220G		
	Low	Med	High
Frequency Range(GHz)	2	11	20
Insertion Loss(dB)	2.0dB typ. @2GHz	2.4dB typ. @11GHz	2.9dB typ. @20GHz
VSWR	2	1.8	2
Isolation(dB)	80	80	70
Switching Speed(ns)	150	200	200
P1dB Power (dBm)		27	
Absolutely max. Power			1W
Weight (g)	35		
IIP3 (Input IP3) dBm	40		
Impedance(Ohms)	50Ω		
Power Supply (V)	+/-5 V DC		
Current(mA)	100mA (+5V) 50mA (-5V)		
Input Connector	SMA-Female		
Fail Safe	Fail Safe (maintain same state after 100ms power off)		
Output Connector	SMA-Female		
Finishing	Gold Plating		
Material	Aluminum		
Seal	Hermetically Sealed		
Control (TTL Driver Included)	TTL Control		
	C2	C1	Status
	0	0	Jo-J1
	0	1	Jo-J2
	1	0	Jo-J3
	1	1	Jo-J4

Reflective Coaxial Single Pole Four Throw Switch 2-20GHz



Absolute Maximum Ratings	
Biasing	+/-5 V
TTL Control Voltage	+5V/oV
Input RF power	+27dBm
Storage Temperature (C°)	-50 ~ +125

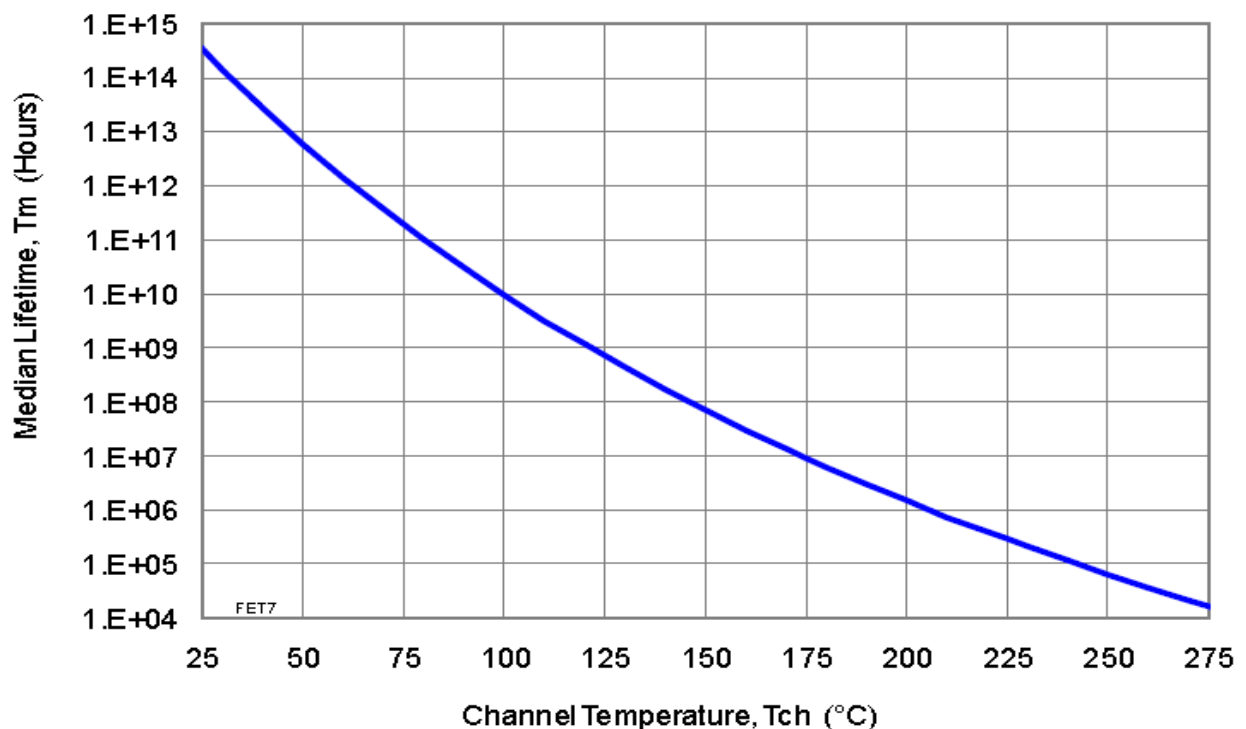
Biasing Up Procedure	
Step 1	-5V
Step 2	+5V
Step 3	TTL
Power OFF Procedure	
Step 1	+5V
Step 2	-5V
Step 3	TTL

Environment specifications	
Operational Temperature (C°)	-45 ~ +85
Storage Temperature (C°)	-50 ~ +125
Altitude	30,000 ft (Controlled environment)
Vibration	35g 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
RFSP4TR0220G	EAR99	SP4T 2-20GHz PIN Diode Switch



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





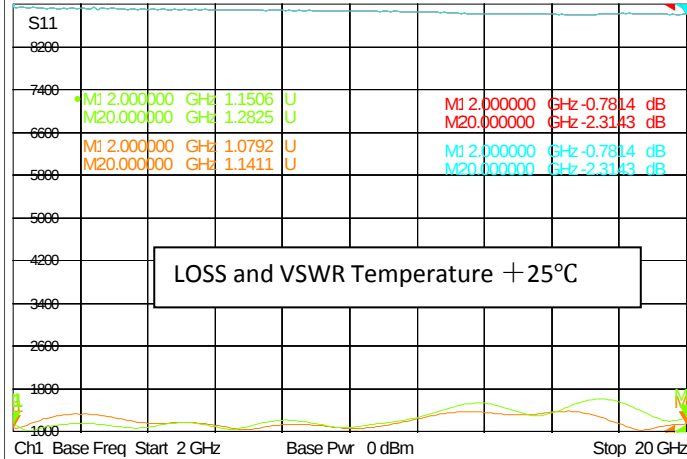
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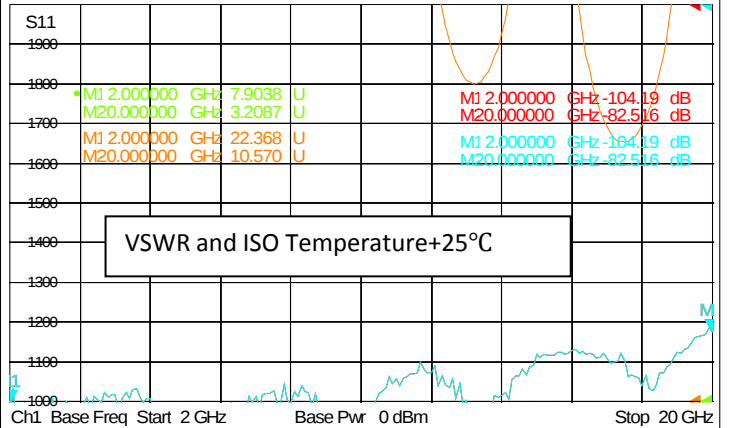
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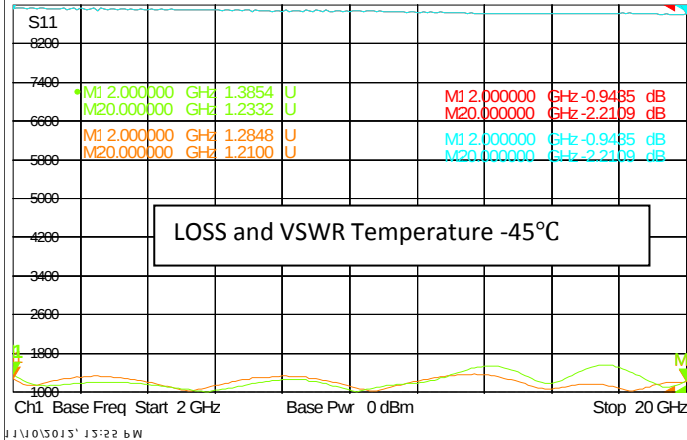
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Trc2 dB Mag 10 dB / Ref 0 dB Cal
Trc3 SWR 800 mU/ Ref 1 U Cal
Trc4 dB Mag 10 dB / Ref 0 dB Cal



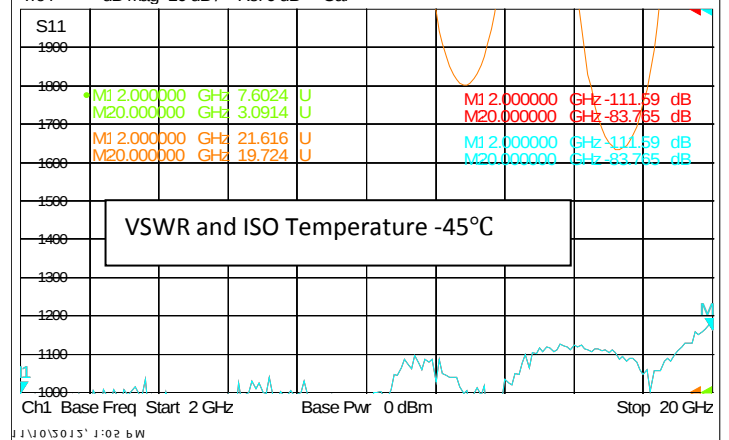
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Trc3 SWR 800 mU/ Ref 1 U Cal
Trc4 dB Mag 10 dB / Ref 0 dB Cal



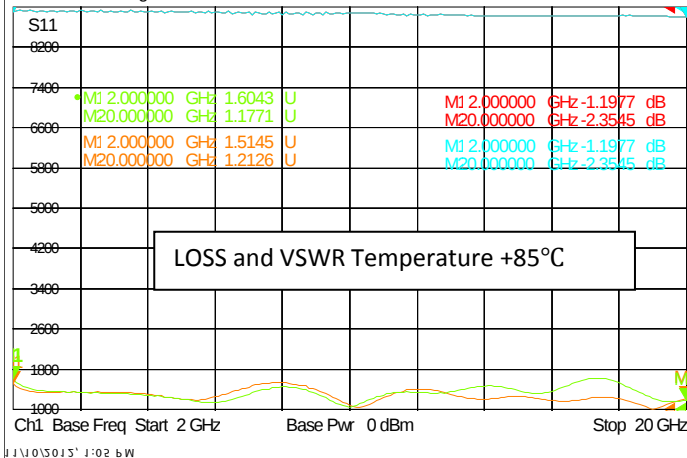
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Trc4 dB Mag 10 dB / Ref 0 dB Cal



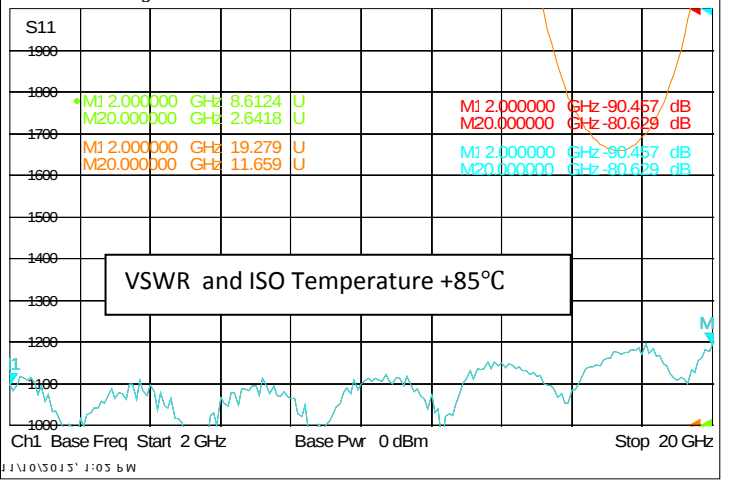
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Trc2 dB Mag 10 dB / Ref 0 dB Cal
Trc3 SWR 800 mU/ Ref 1 U Cal
Trc4 dB Mag 10 dB / Ref 0 dB Cal



Trc1 SWR 800 mU/ Ref 1 U Cal
Trc2 dB Mag 10 dB / Ref 0 dB Cal
Trc3 SWR 800 mU/ Ref 1 U Cal
Trc4 dB Mag 10 dB / Ref 0 dB Cal



Trc1 SWR 100 mU/ Ref 1 U Cal
Trc2 dB Mag 10 dB / Ref 0 dB Cal
Trc3 SWR 800 mU/ Ref 1 U Cal
Trc4 dB Mag 10 dB / Ref 0 dB Cal



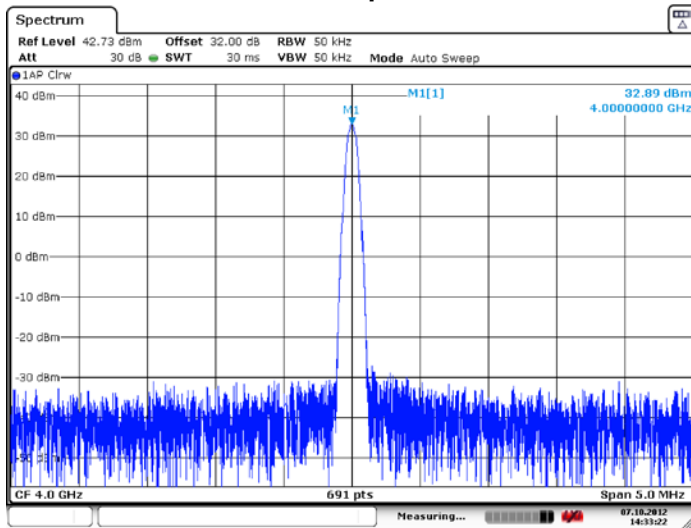


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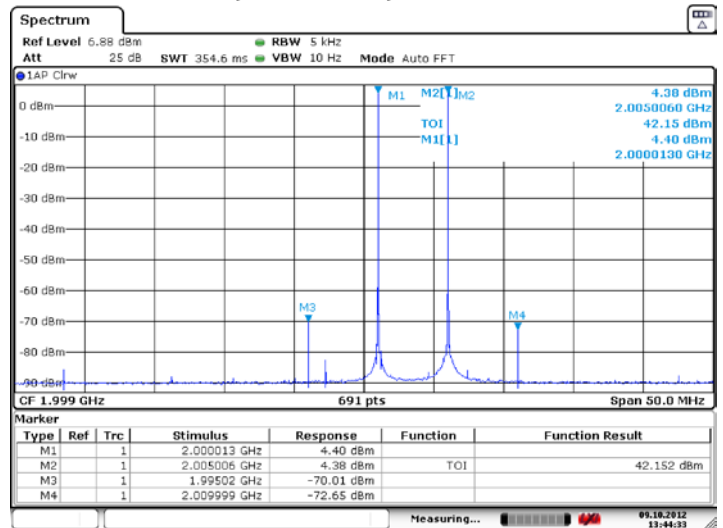
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1dB Compression Point

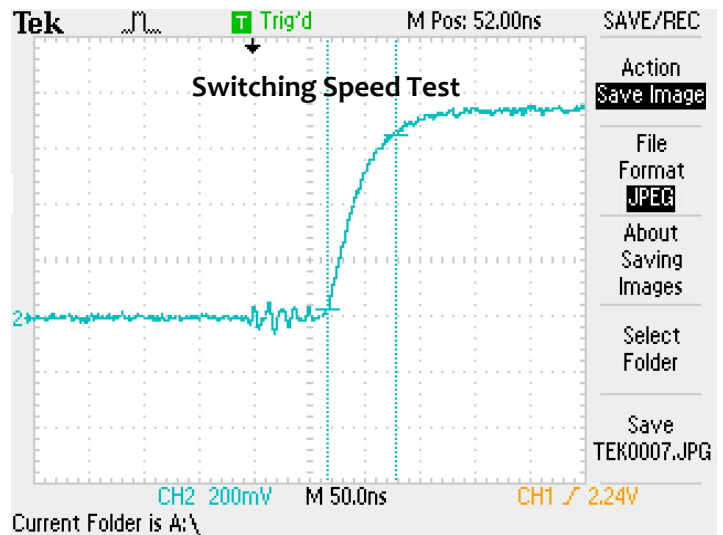
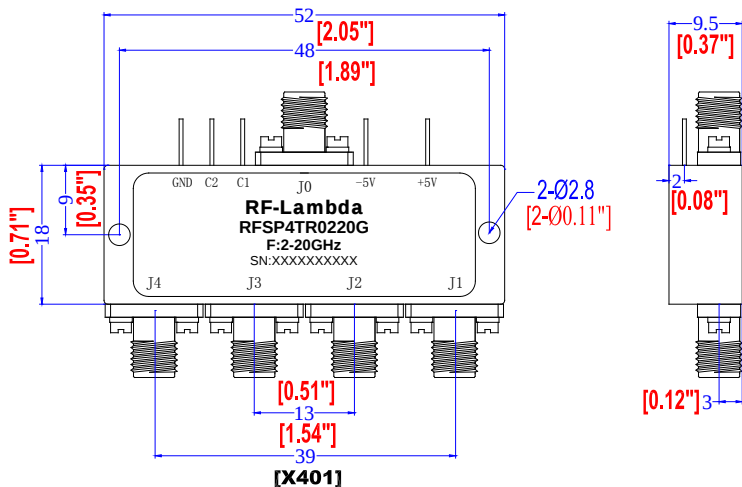


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IP3 – INPUT IP3 Point



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