

SAW Duplexer 782.0 / 751.0MHz
Part No: MP05781

Model: TF0091A
Rev. No: 1

A. MAXIMUM RATING:

1. Maximum Input Power: 29dBm
2. DC voltage: 0V
3. Operating Temperature: -30°C to +85°C
4. Storage Temperature: -40°C to +85°C

B. ELECTRICAL CHARACTERISTICS:

Tx to Ant		Specifications			
Parameters Description	Condition [MHz]	Unit	Min.	Typ.	Max.
Insertion Loss	777.0 ~ 787.0	dB	-	1.6	2.5
Ripple	777.0 ~ 787.0	dB _{p-p}	-	0.6	1.5
VSWR of Ant Port	777.0 ~ 787.0	-	-	1.5	2.0
VSWR of Tx Port	777.0 ~ 787.0	-	-	1.7	2.0
Attenuation	10.0 ~ 716.0	dB	30	40	-
	716.0 ~ 728.0	dB	40	44	-
	728.0 ~ 746.0	dB	30	46	-
	746.0 ~ 756.0	dB	45	53	-
	758.0 ~ 767.5	dB	28	31	-
	767.5 ~ 768.0	dB	15	27	-
	869.0 ~ 894.0	dB	30	44	-
	1554.0 ~ 1565.0	dB	45	54	-
	1565.0 ~ 1585.0	dB	45	55	-
	1597.0 ~ 1607.0	dB	45	56	-
	1805.0 ~ 1880.0	dB	30	62	-
	1930.0 ~ 1990.0	dB	30	60	-
	2110.0 ~ 2170.0	dB	30	56	-
	2331.0 ~ 2361.0	dB	20	54	-
	2400.0 ~ 2484.0	dB	35	53	-
3108.0 ~ 3148.0	dB	15	50	-	
4990.0 ~ 5850.0	dB	20	35	-	

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Ant to Rx		Specifications			
Parameters Description	Condition [MHz]	Unit	Min.	Typ.	Max.
Insertion Loss	746.0 ~ 756.0	dB	-	2.0	2.5
Ripple	746.0 ~ 756.0	dB _{p-p}	-	0.7	1.0
VSWR of Ant Port	746.0 ~ 756.0	-	-	1.6	2.0
VSWR of Rx Port	746.0 ~ 756.0	-	-	1.9	2.1
Attenuation	1.0 ~ 686.0	dB	40	62	-
	31.0	dB	50	70	-
	686.0 ~ 728.0	dB	30	40	-
	771.0 ~ 772.0	dB	15	20	-
	777.0 ~ 787.0	dB	50	65	-
	787.0 ~ 6048.0	dB	40	49	-
	1710.0 ~ 1755.0	dB	40	56	-
	1850.0 ~ 1910.0	dB	40	56	-
	2238.0 ~ 2268.0	dB	40	56	-
	2400.0 ~ 2500.0	dB	40	56	-
4900.0 ~ 5950.0	dB	40	54	-	

Tx to Rx		Specifications			
Parameters Description	Condition [MHz]	Unit	Min.	Typ.	Max.
Isolation	777.0 ~ 787.0	dB	56	64	-
	746.5 ~ 749.0	dB	50	60	-
	749.0 ~ 752.0	dB	52	55	-
	752.0 ~ 755.5	dB	49	51	-
	1552.0 ~ 1574.0	dB	30	59	-
	2328.0 ~ 2361.0	dB	30	54	-
	3104.0 ~ 3148.0	dB	30	53	-

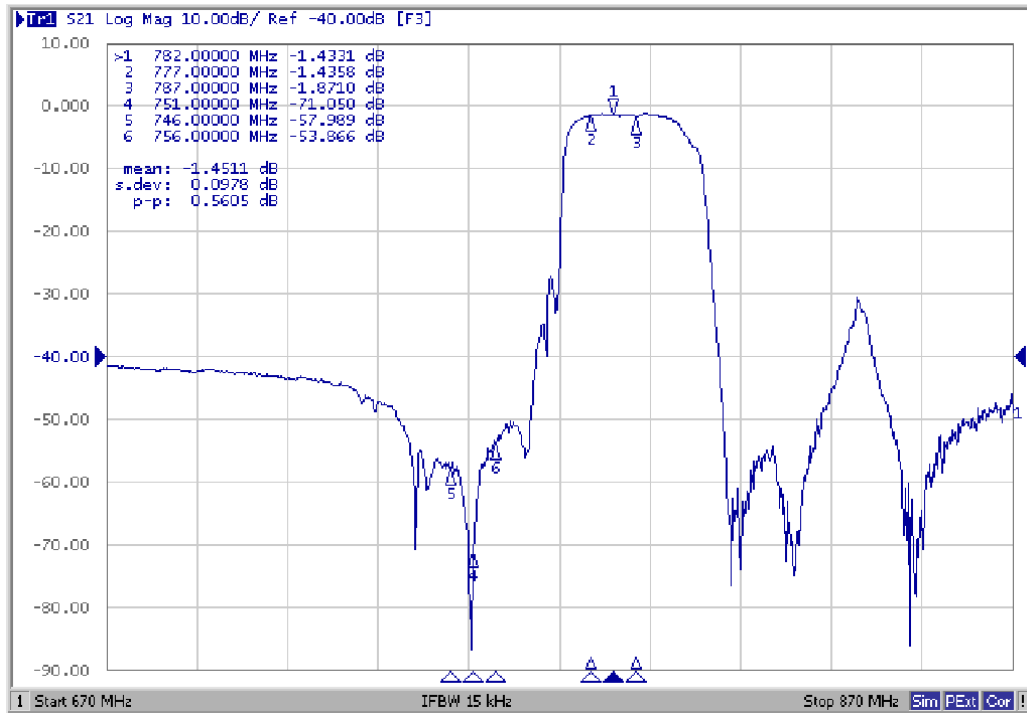
Note: With Matching Network.

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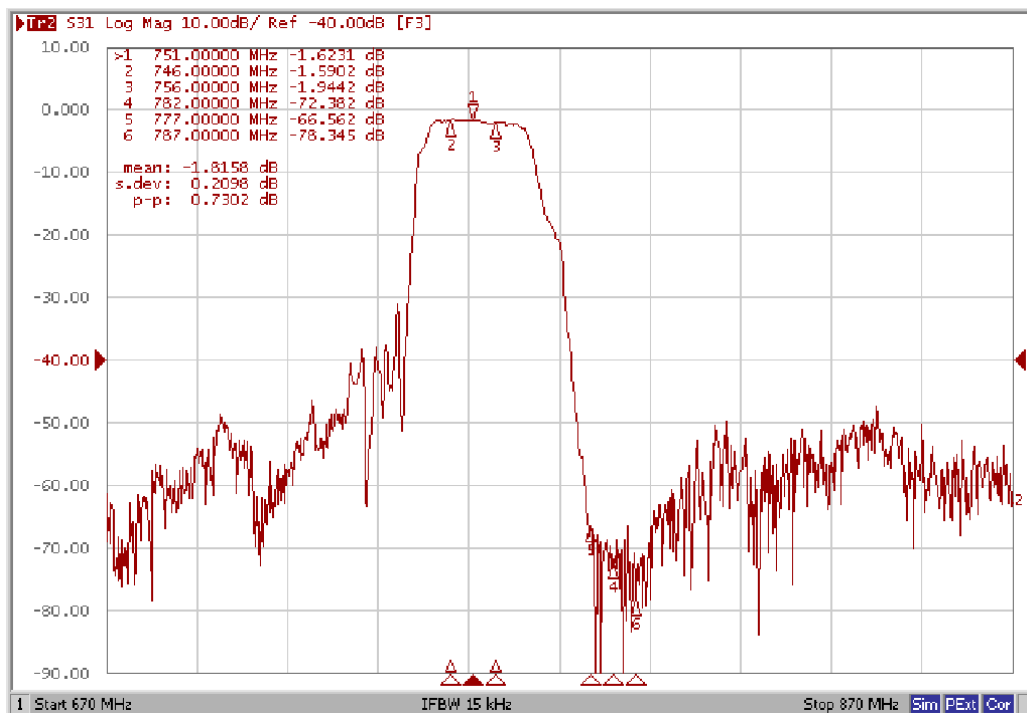
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C. FREQUENCY CHARACTERISTICS:

Tx to Ant



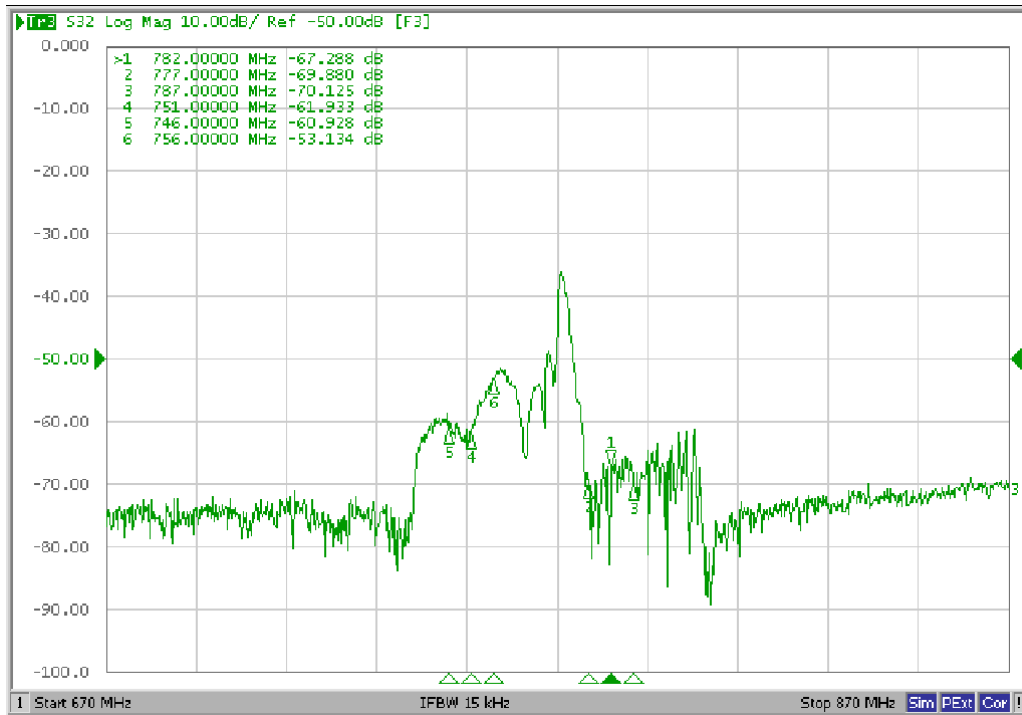
Ant to Rx



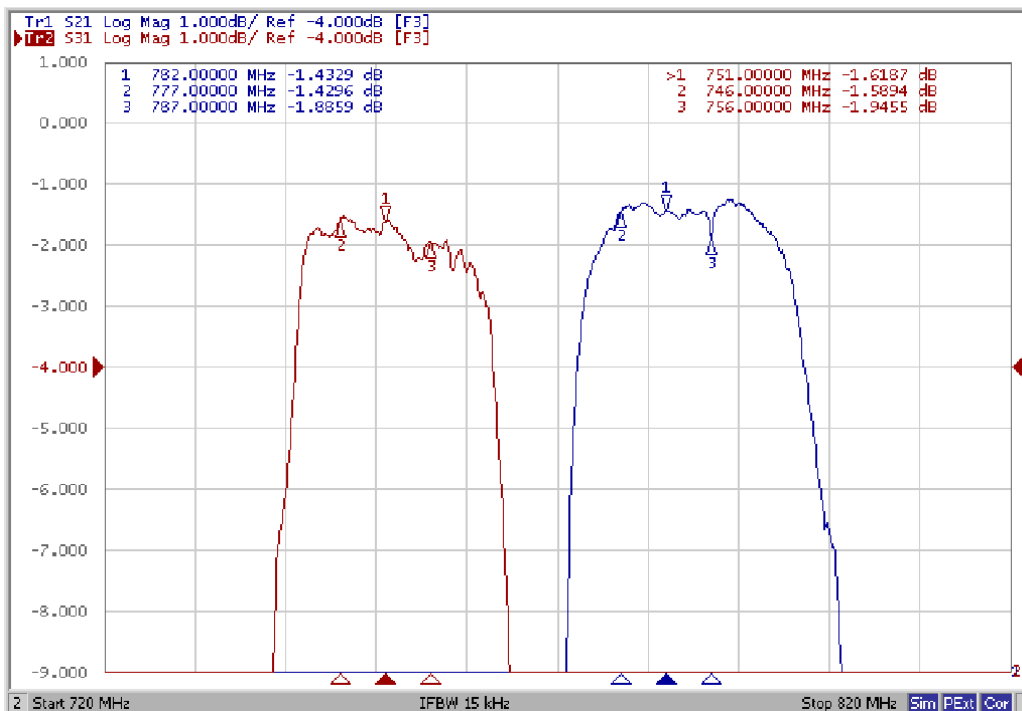
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Isolation



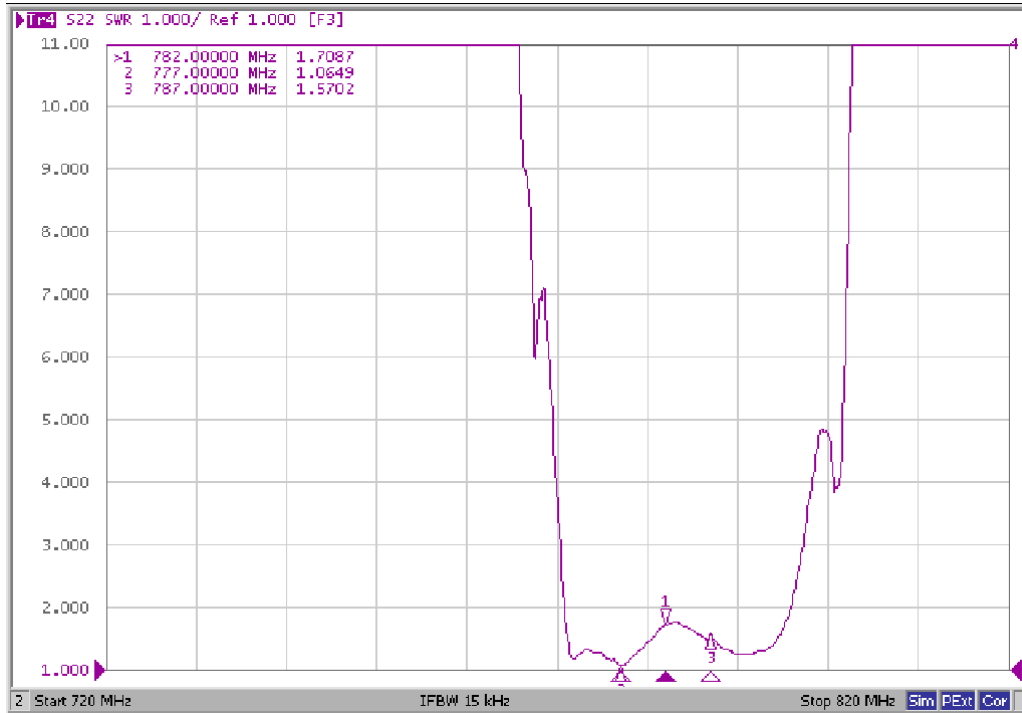
Ripple



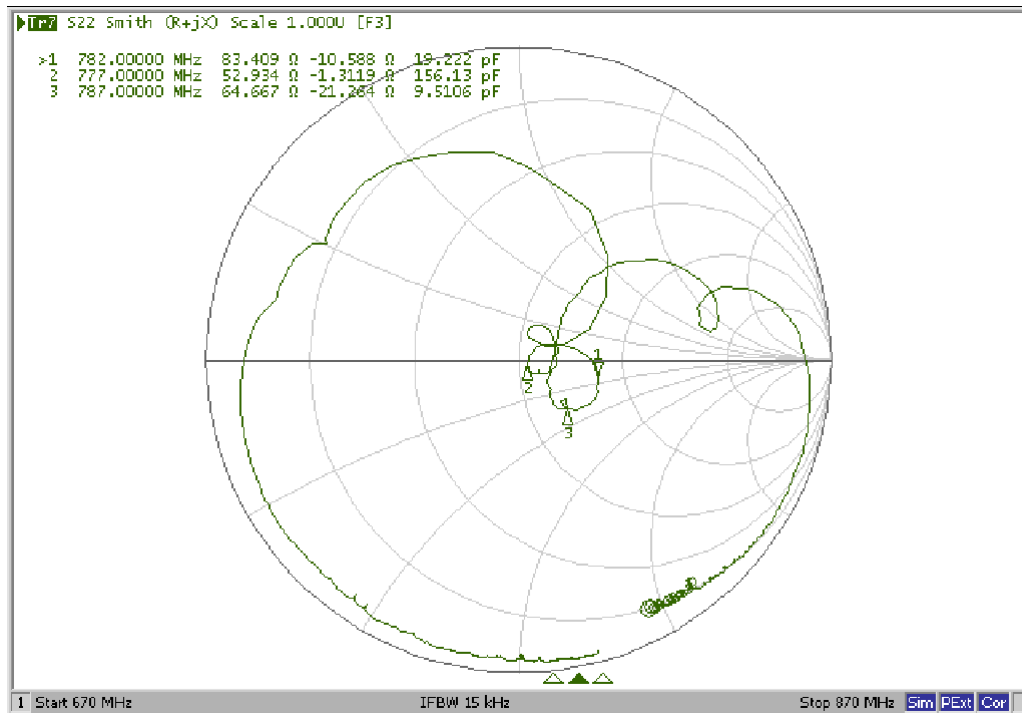
SAW Duplexer 782.0 / 751.0MHz
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VSWR (Tx Port)



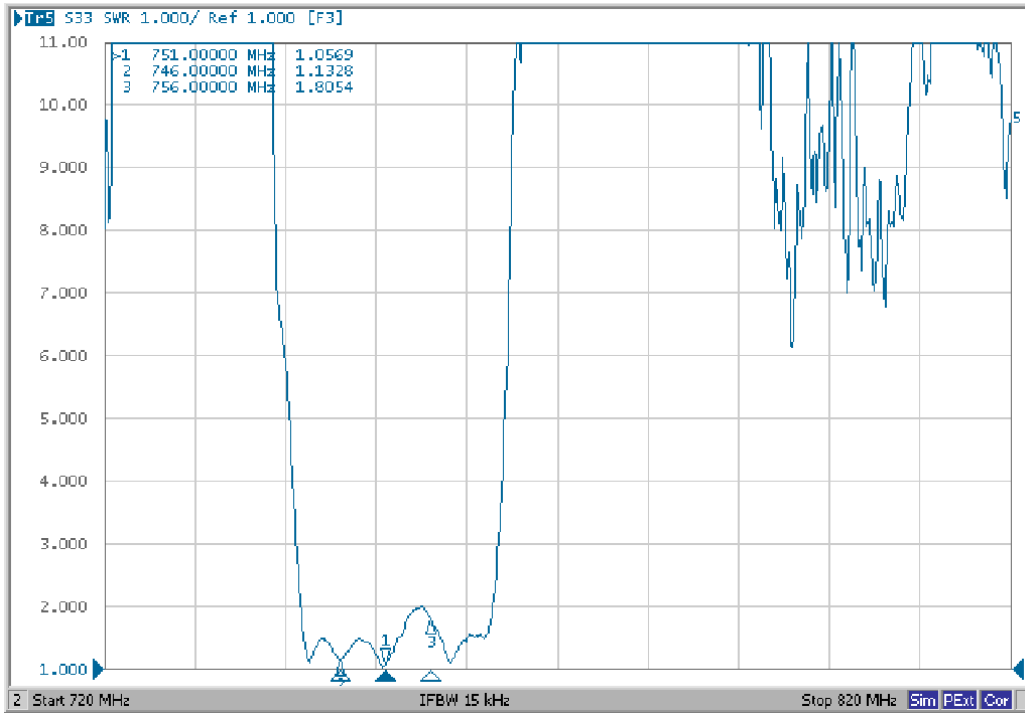
Smith Chart (Tx Port)



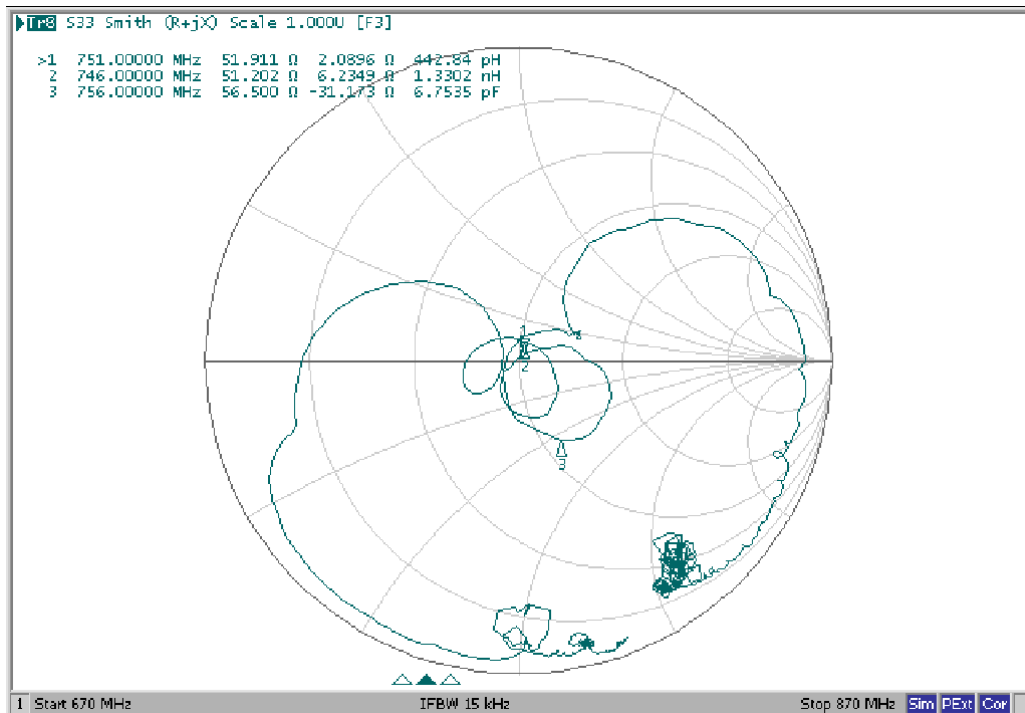
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VSWR (Rx Port)



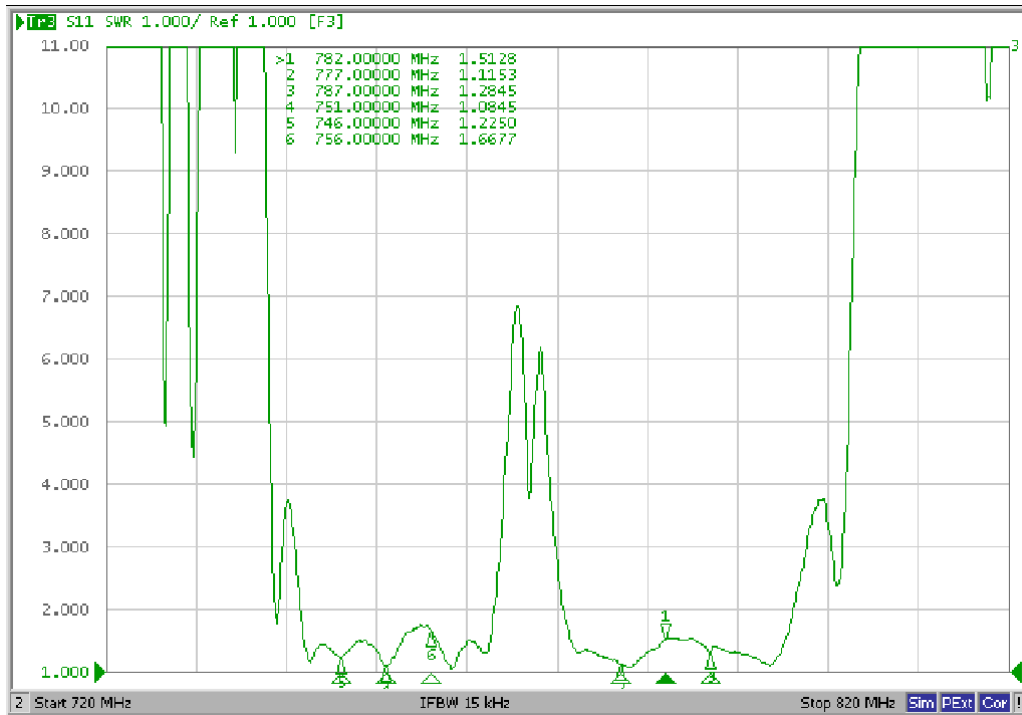
Smith Chart (Rx Port)



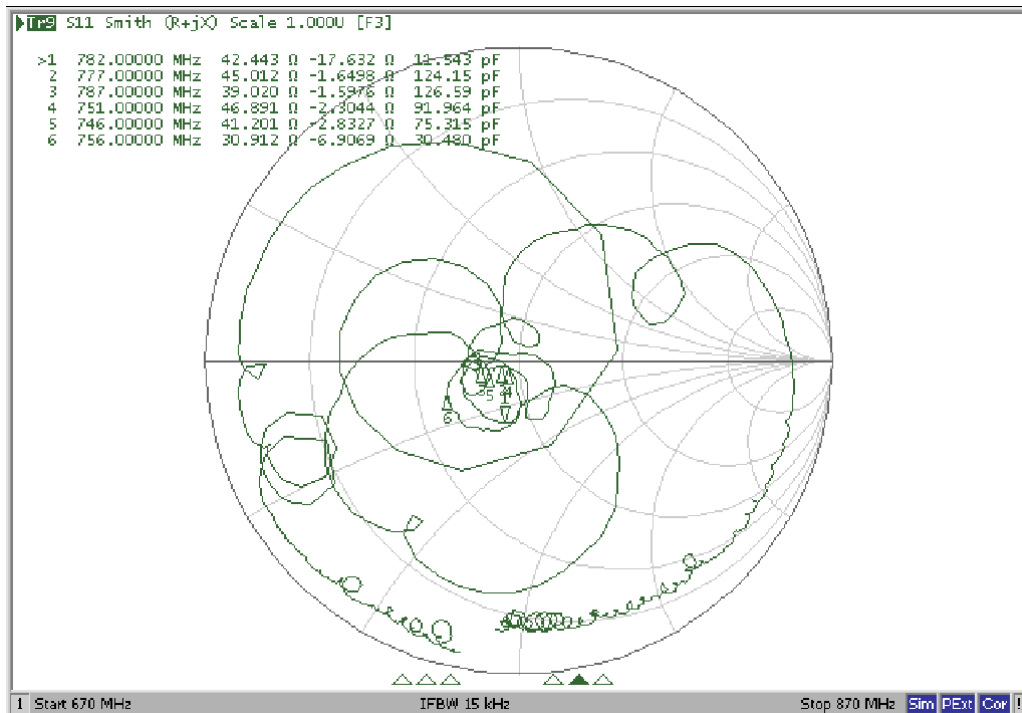
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VSWR (ANT Port)



Smith Chart (ANT Port)

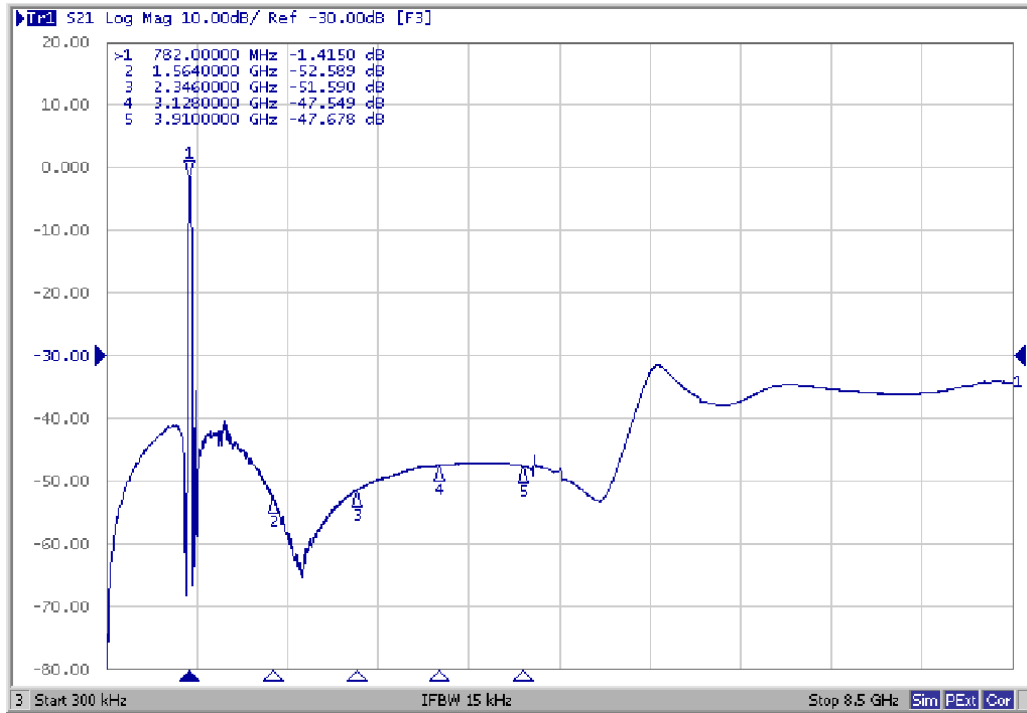


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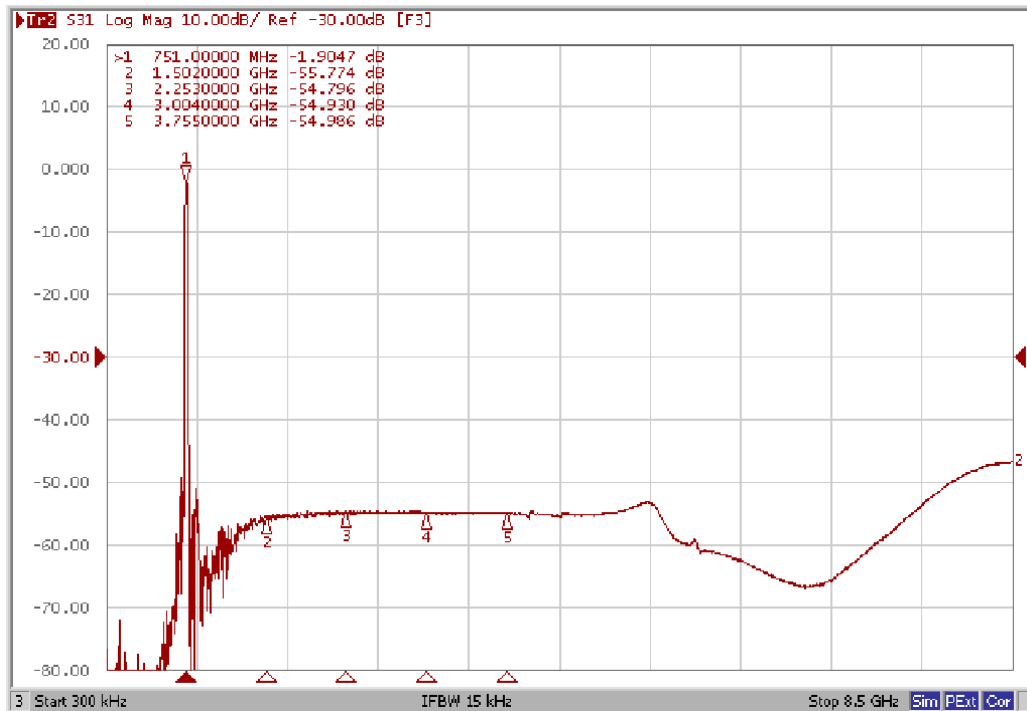
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Wide Span

Tx



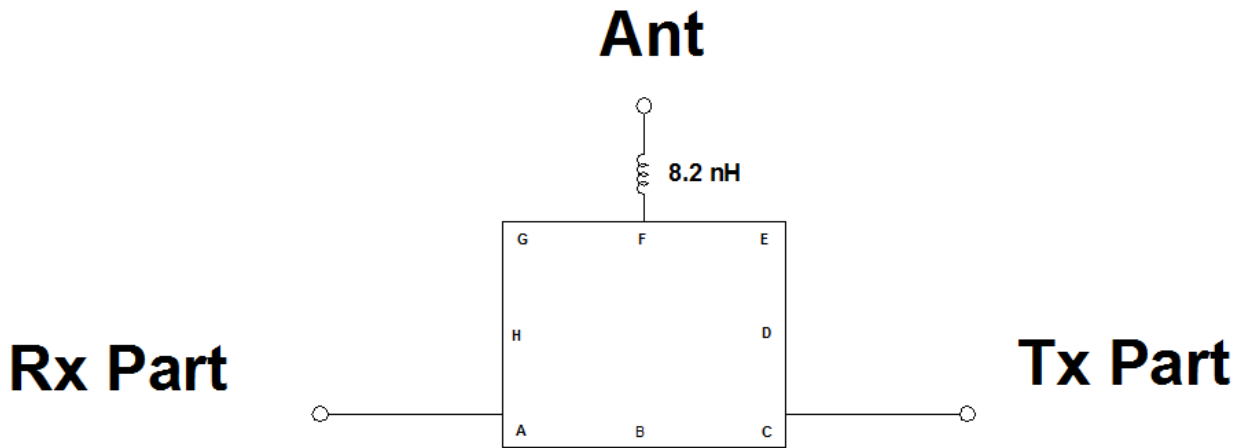
Rx



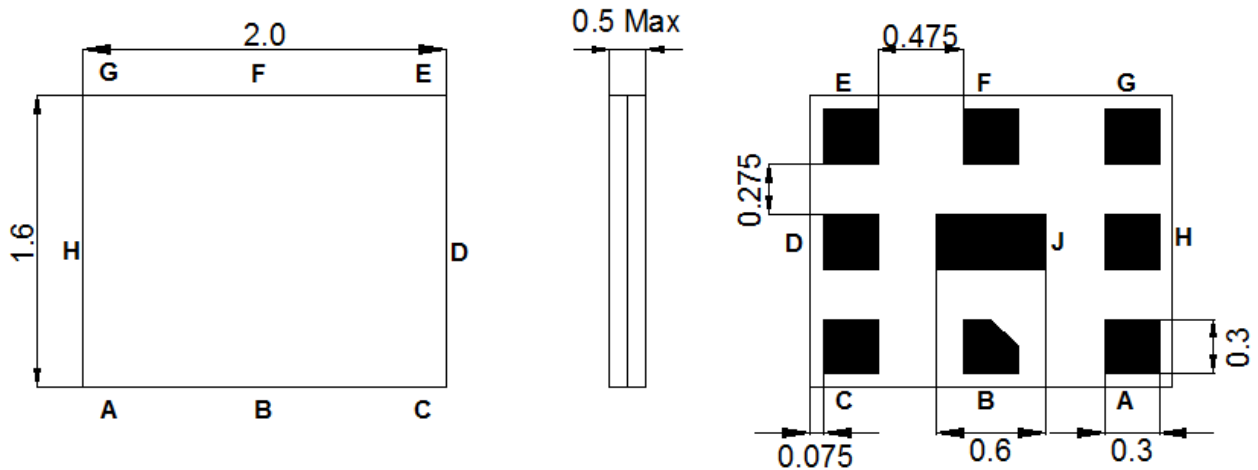
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D. MEASUREMENT CIRCUIT:



E. OUTLINE DRAWING:



B, D, E, G, H: Ground
 F: Ant
 C: Tx (782MHz)
 A: Rx (751MHz)

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G. RECOMMENDED REFLOW PROFILE:

