

**SAW Duplexer 897.50 / 942.50MHz**  
**Part No: MP06405**

**Model: TF0093A**  
**Rev. No: 1**

**A. MAXIMUM RATING:**

Parameters Description	Unit	Min.	Typ.	Max.
Operation Temperature Range	°C	-20	-	+85
Storage Temperature Range	°C	-40	-	+85
Maximum DC Voltage	V	0		
Input Power at Tx Port	dBm	29dBm, Ta = +50°C, 10000h, WCDMA modulation		
Antenna Impedance (single ended) <sup>(1)</sup>	Ω	50 // 7.5nH		
Tx Impedance (single ended)	Ω	50		
Rx Impedance (single ended)	Ω	50		
Package type		C45		
Length x Width	mm <sup>2</sup>	2.0 x 1.6		
Height	mm	0.5		

**B. ELECTRICAL CHARACTERISTICS:**

Tx to Ant		Specifications			
Parameters Description	Condition (MHz)	Unit	Min.	Typ.	Max.
Insertion Loss	880.24 ~ 914.76	dB	-	2.1	3.2
Ripple	882.4 ~ 912.6	dB	-	1.9	2.4
VSWR of Ant Port	880.0 ~ 915.0	dB <sub>p-p</sub>	-	1.1	2.8
VSWR of Tx Port	880.0 ~ 915.0	-	-	1.7	2.1
Attenuation	880.0 ~ 915.0	-	-	2.0	2.3
	10.0 ~ 728.0	dB	35	38	-
	728.0 ~ 798.0	dB	30	38	-
	927.4 ~ 957.6	dB	44	54	-
	1565.0 ~ 1607.0	dB	45	47	-
	1710.0 ~ 2170.0	dB	45	50	-
	2400.0 ~ 2745.0	dB	40	46	-
	5130.0 ~ 5825.0	dB	12	20	-
	880.24 ~ 914.76	dB	-	2.1	3.2

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Ant to Rx		Specifications			
Parameters Description	Condition (MHz)	Unit	Min.	Typ.	Max.
Insertion Loss	925.0 ~ 960.0	dB	-	2.1	2.9
	927.4 ~ 957.6	dB	-	2.0	2.4
Ripple	925.0 ~ 960.0	dB <sub>p-p</sub>	-	1.0	2.2
VSWR of Ant Port	925.0 ~ 960.0	-	-	1.6	2.3
VSWR of Rx Port	925.0 ~ 960.0	-	-	1.9	2.3
Attenuation	699.0 ~ 798.0	dB	45	60	-
	882.4 ~ 912.6	dB	50	55	-
	1045.0 ~ 2880.0	dB	40	49	-

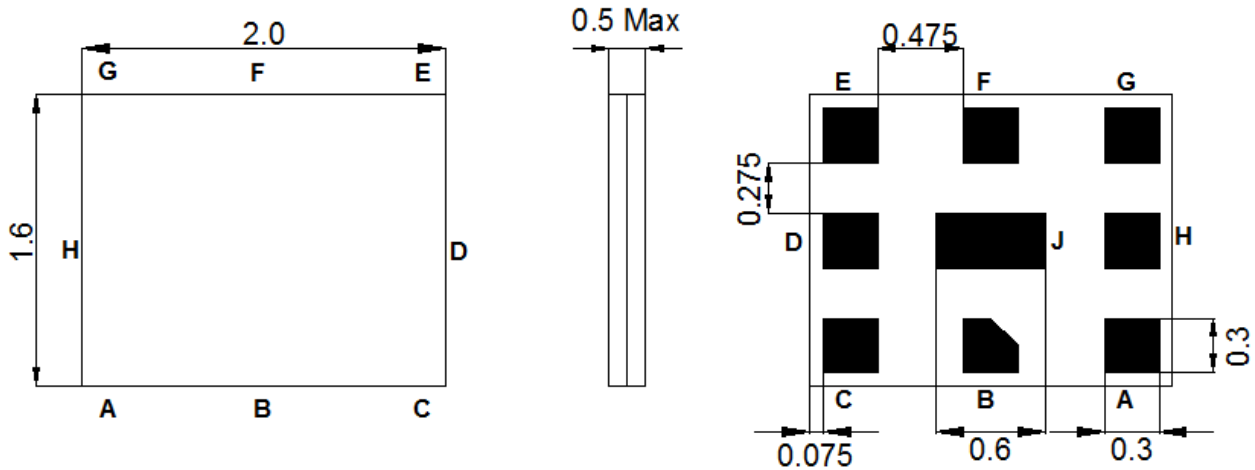
Tx to Rx		Specifications			
Parameters Description	Condition (MHz)	Unit	Min.	Typ.	Max.
Isolation	882.4 ~ 912.6	dB	55	57	-
	915.0 ~ 925.0	dB	16	20	-
	927.4 ~ 957.6	dB	51	55	-

Notes: (1) With Matching Network.

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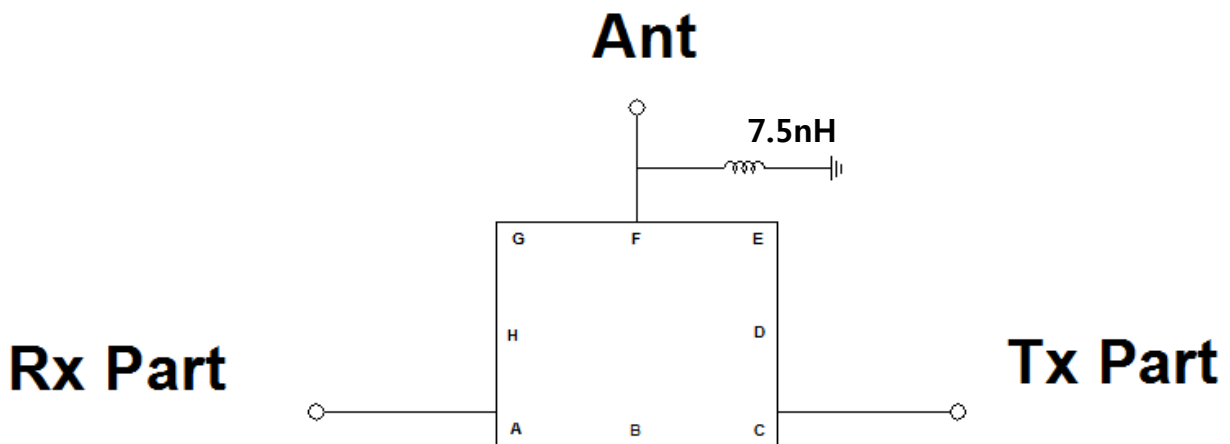
**Model: TF0093A**  
**Rev. No: 1**

**C. OUTLINE DRAWING:**



B, D, E, G, H: Ground  
 F: Ant  
 C: Tx (897.5MHz)  
 A: Rx (942.5MHz)

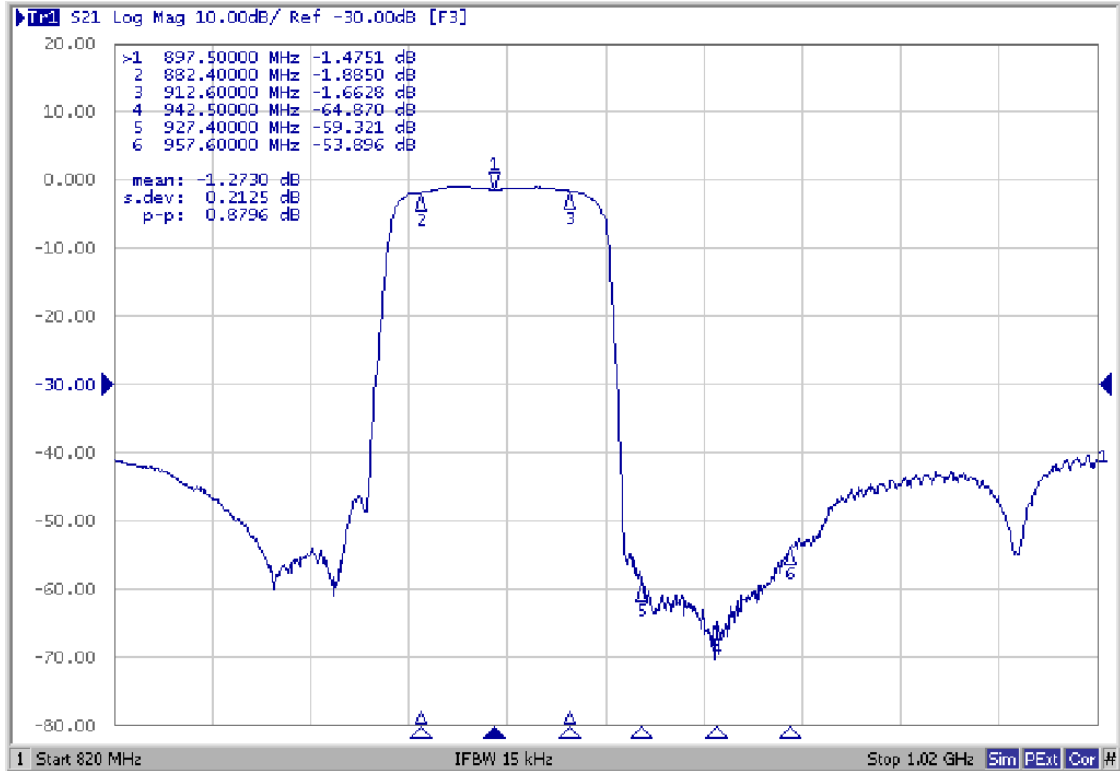
**D. TESTING ENVIRONMENT:**



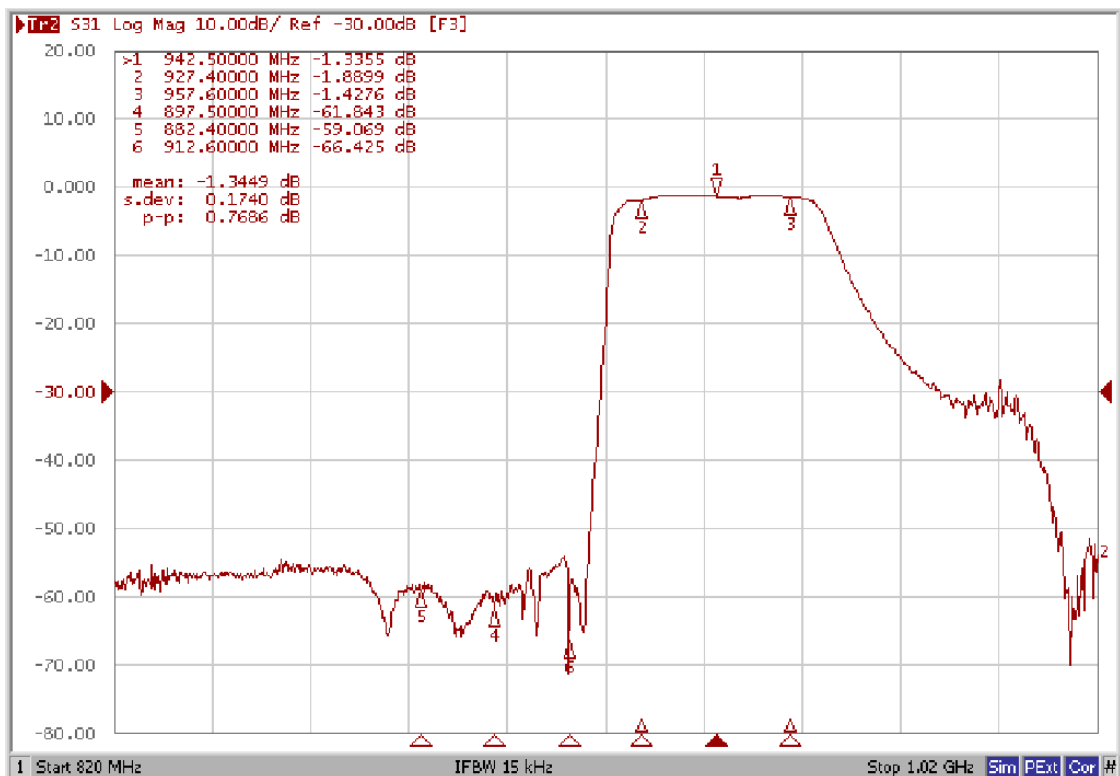
**SAW Duplexer 897.50 / 942.50MHz**  
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**Rev. No: 1**

**E. FREQUENCY CHARACTERISTICS:**



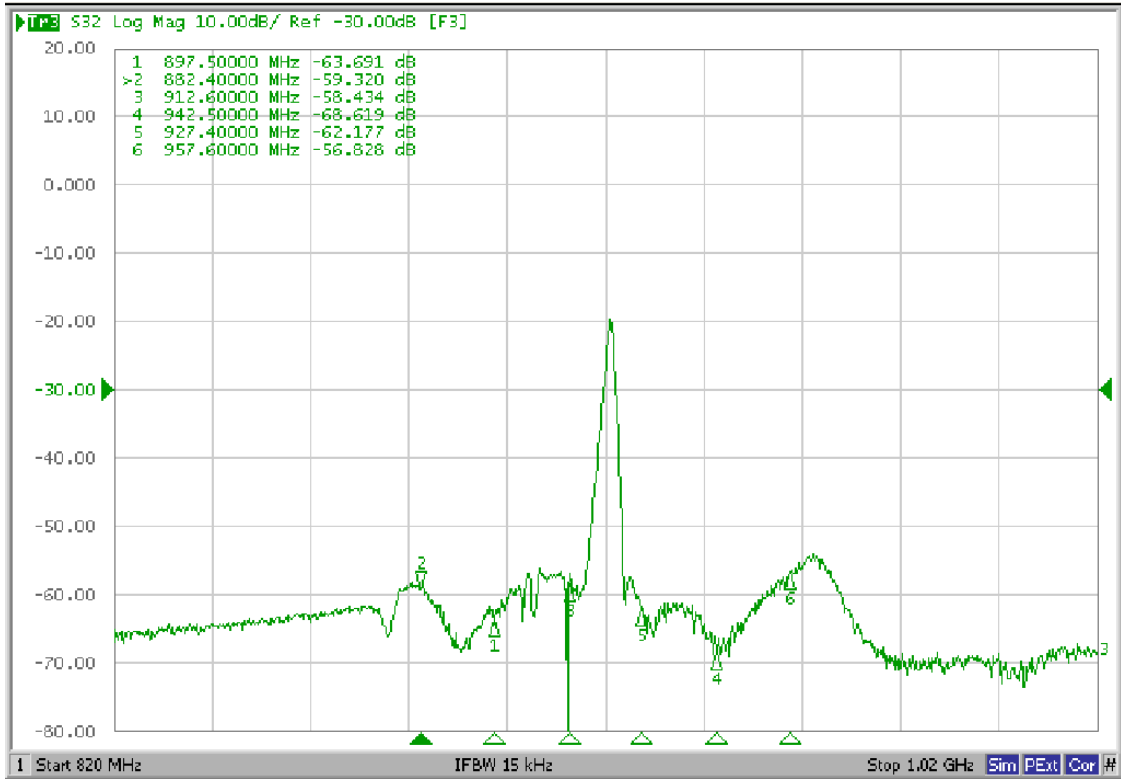
**Ant to Rx**



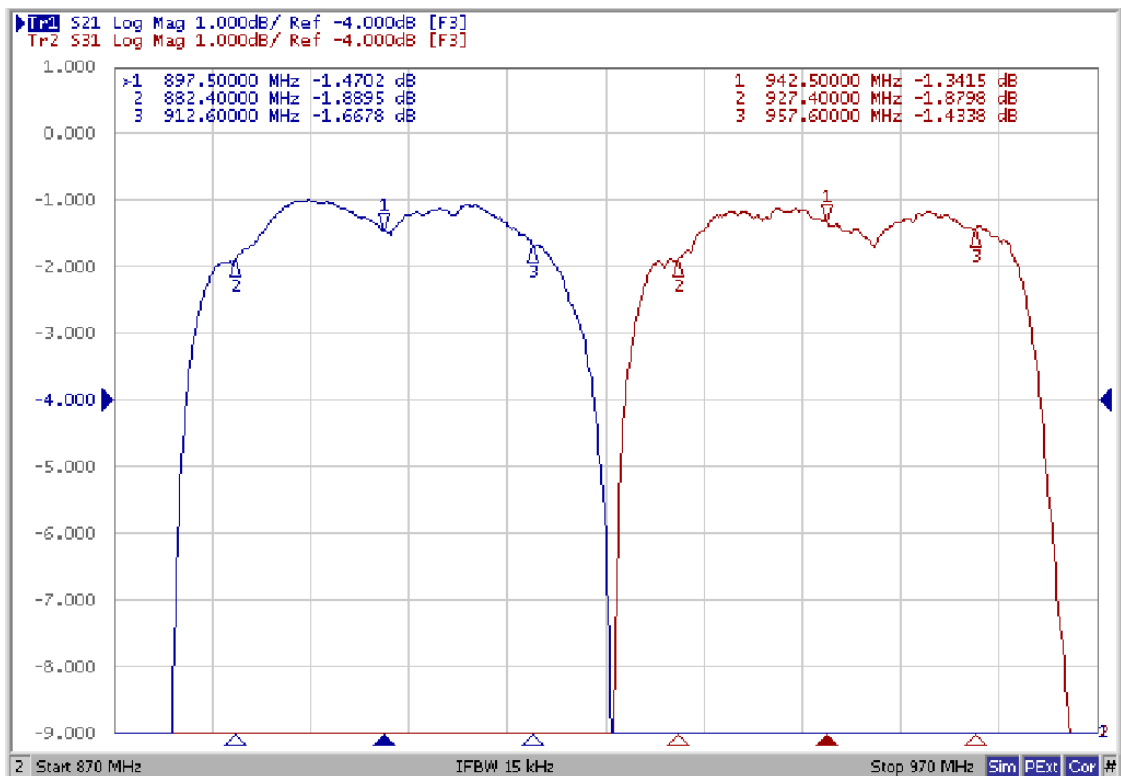
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**Model: TF0093A**  
**Rev. No: 1**

**Isolation**



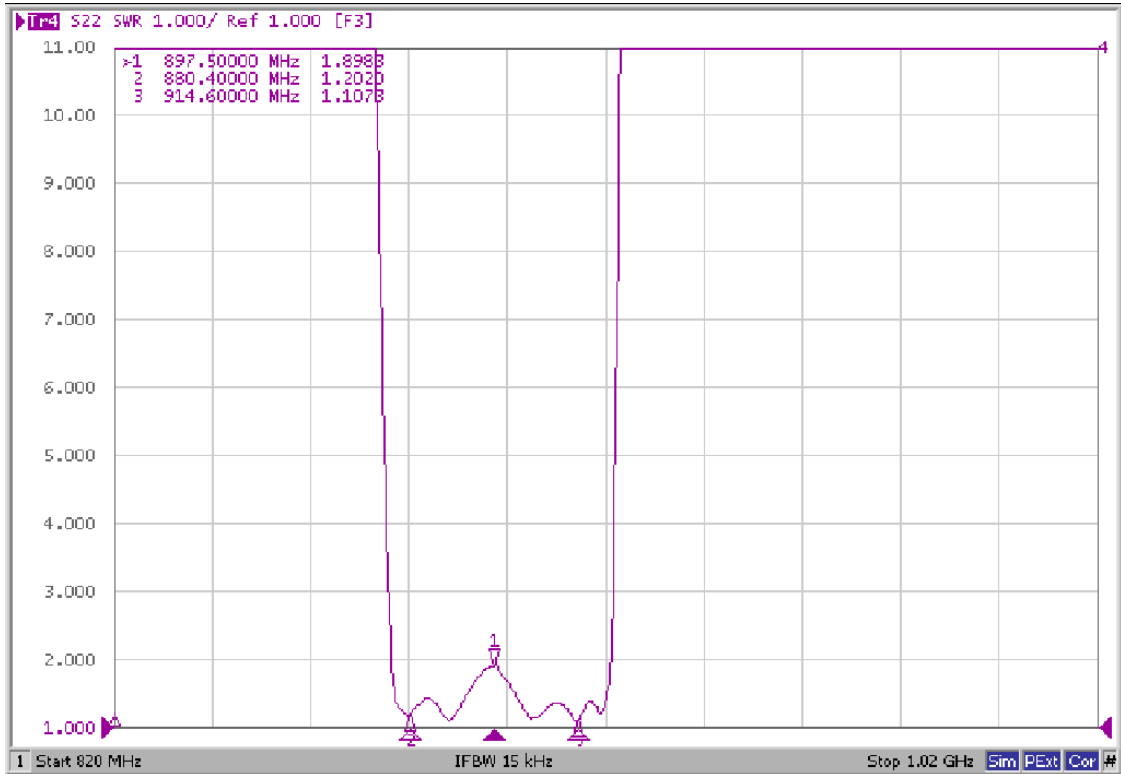
**Ripple**



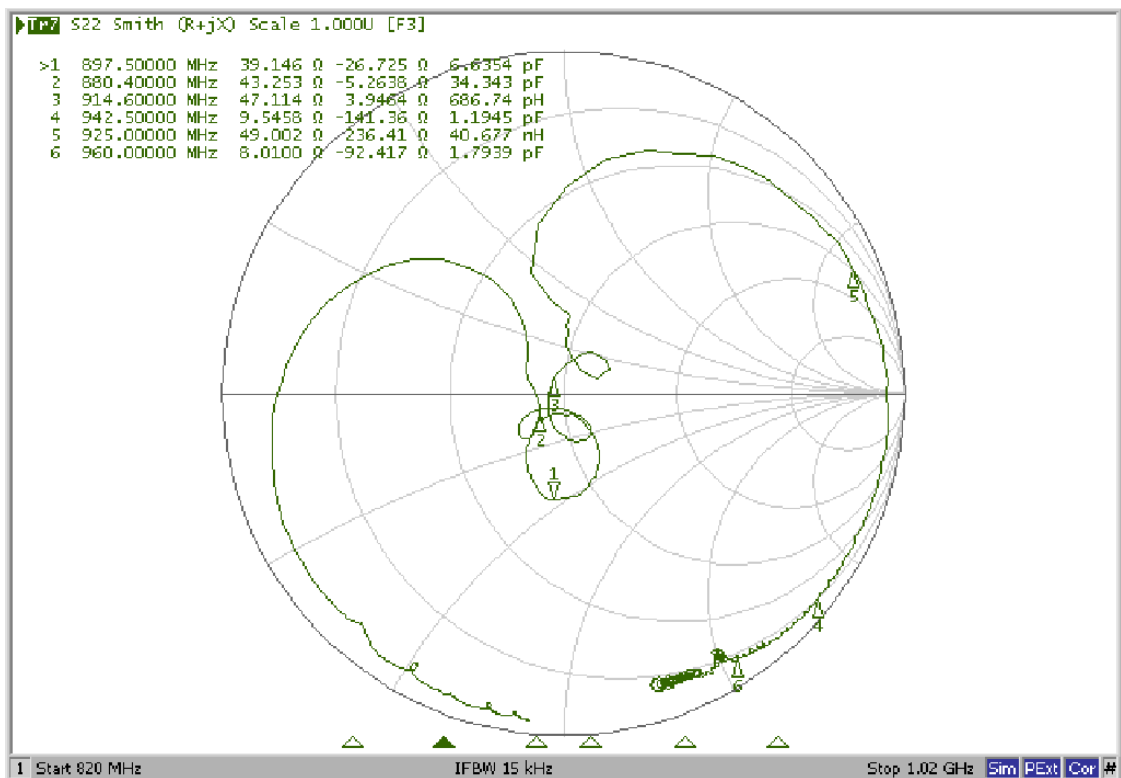
**SAW Duplexer 897.50 / 942.50MHz**  
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**VSWR (Tx Port)**



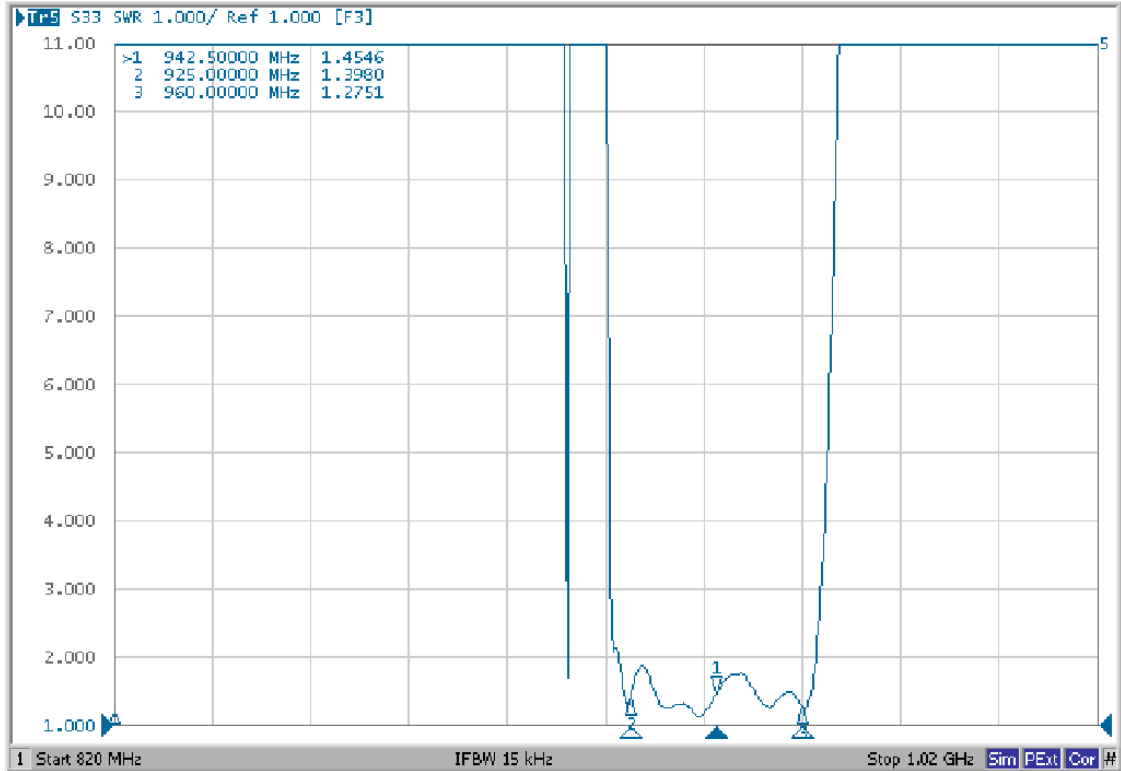
**Smith Chart (Tx Port)**



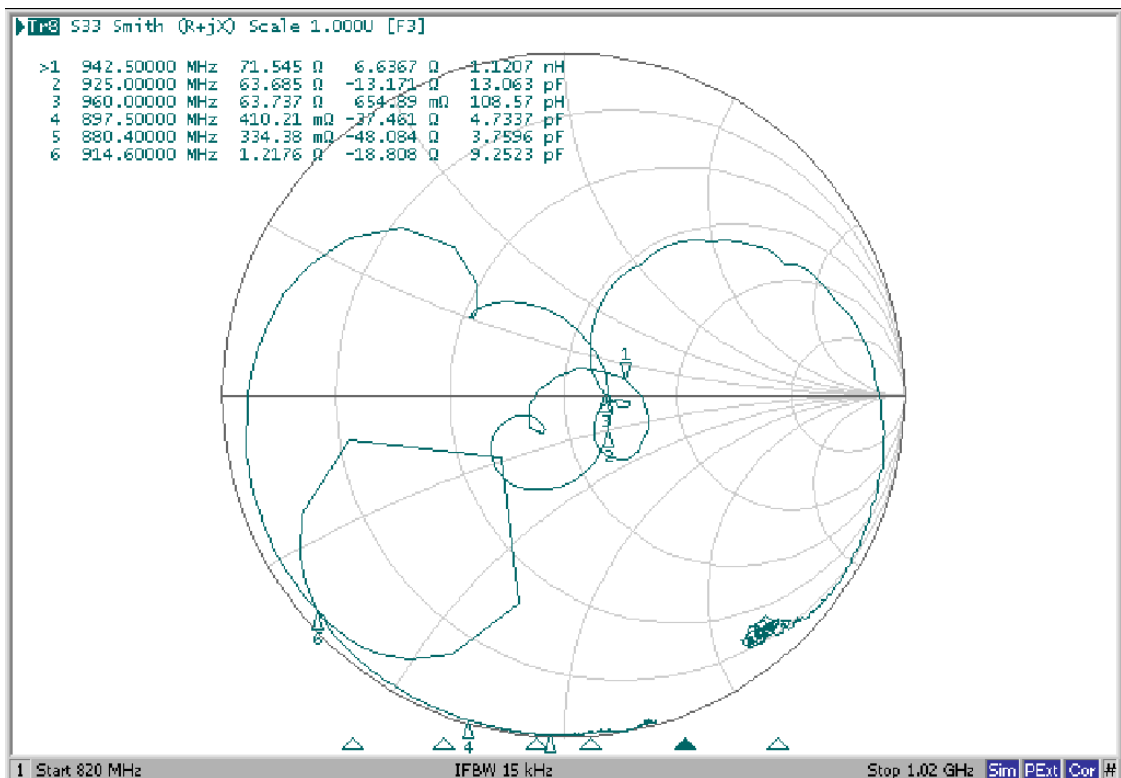
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**VSWR (Rx Port)**



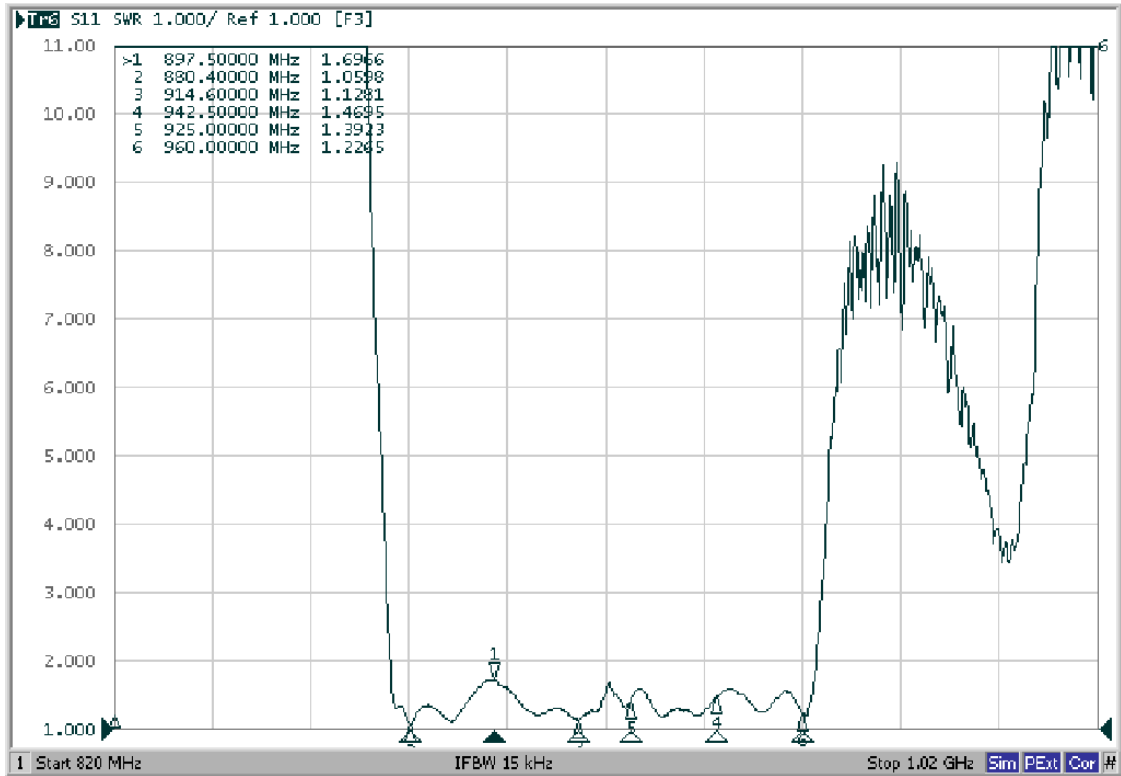
**Smith Chart (Rx Port)**



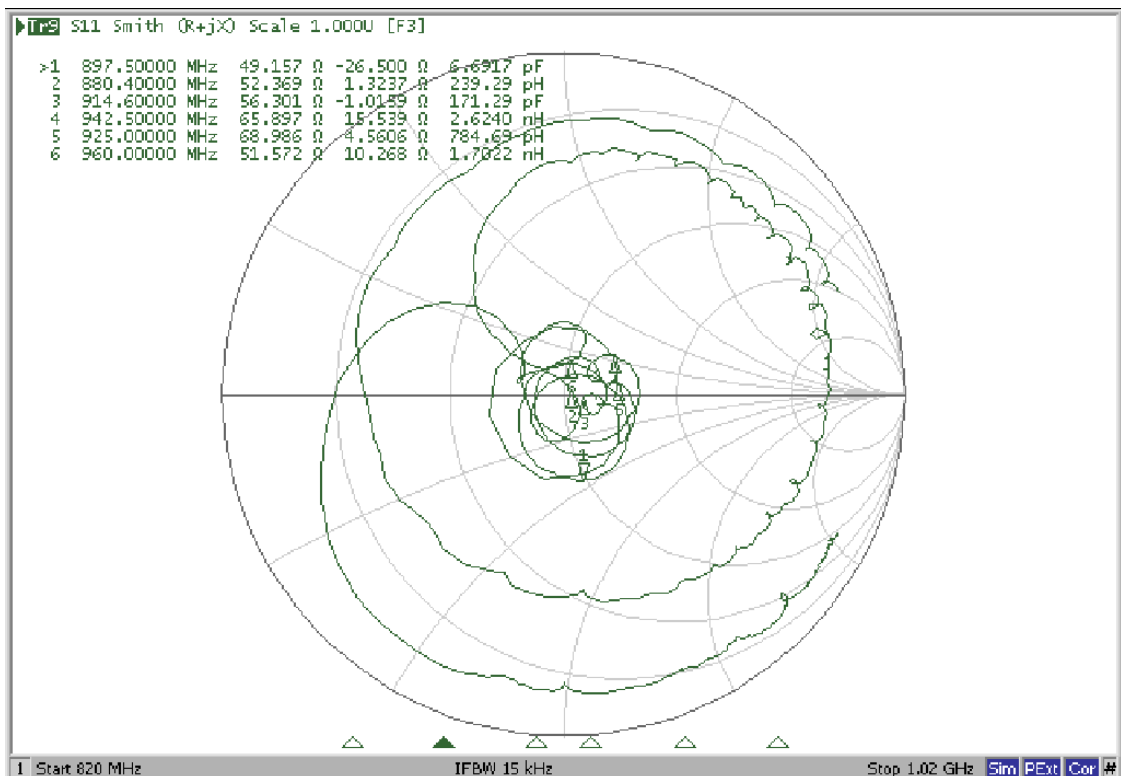
**SAW Duplexer 897.50 / 942.50MHz**  
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**Model: TF0093A**  
**Rev. No: 1**

### VSWR (ANT Port)



### Smith Chart (ANT Port)



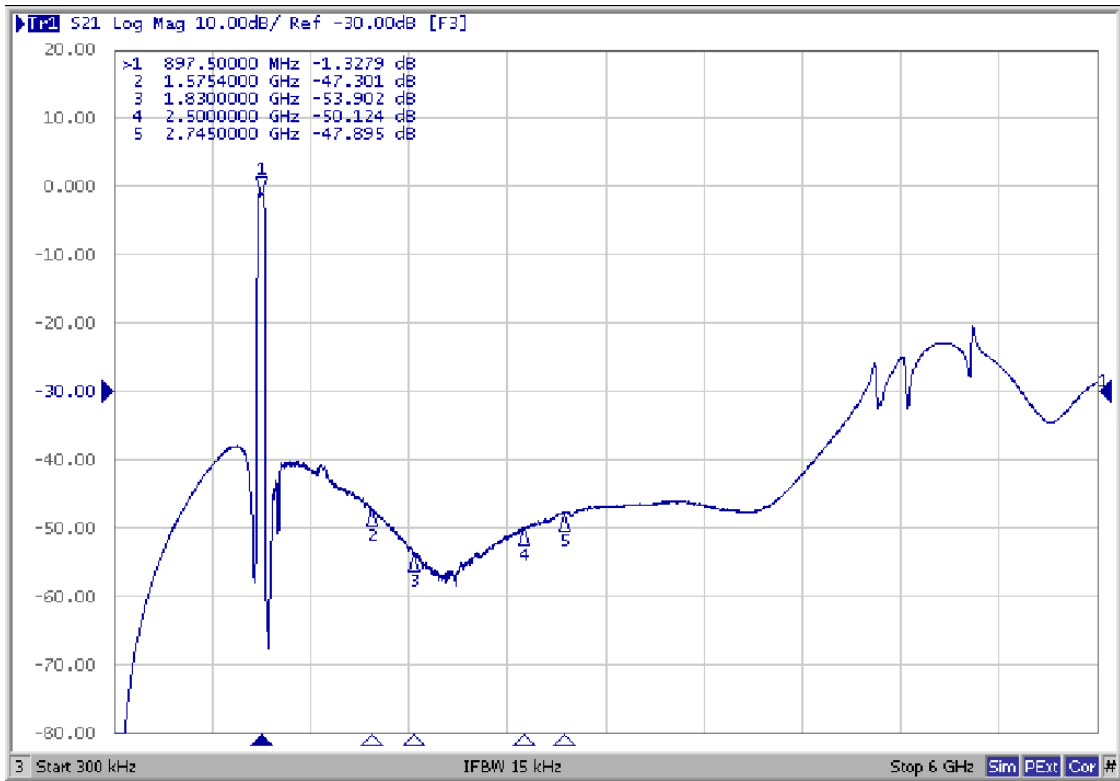


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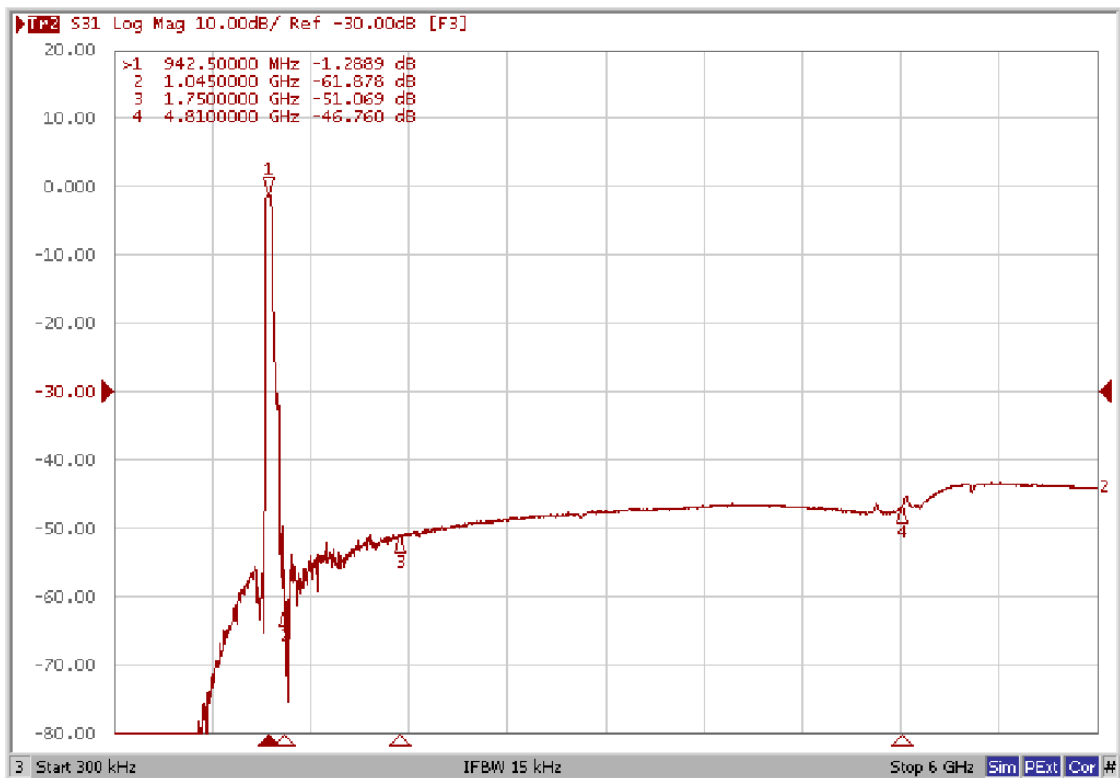
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**Rev. No: 1**

**Wide Span**

**Tx**



**Rx**

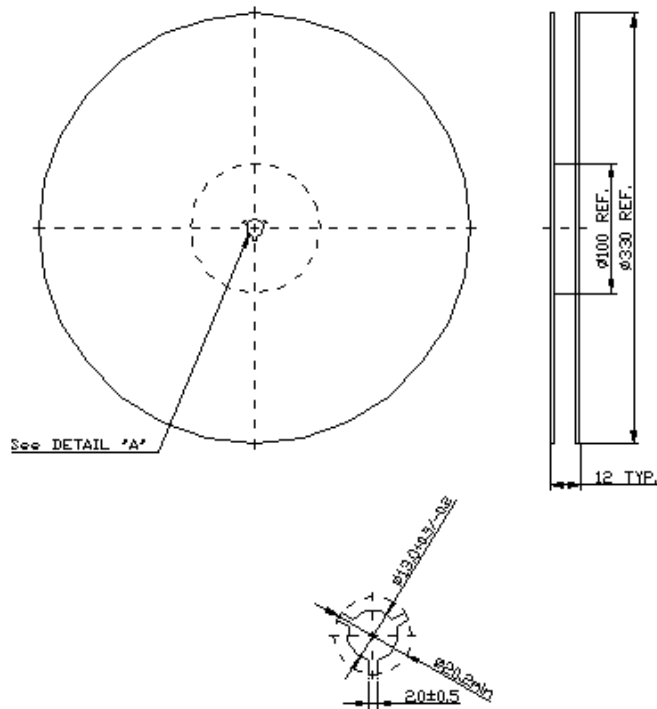


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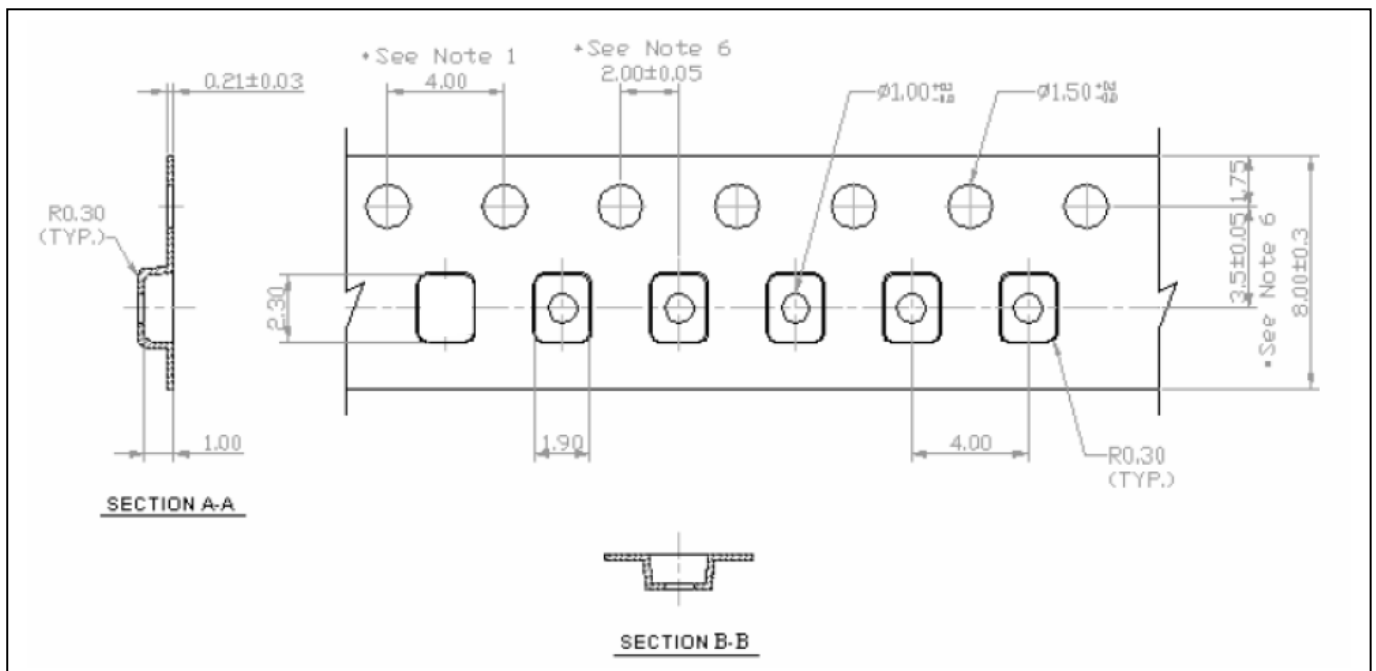
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**F. PACKING:**

1. Reel Dimension (Please refer to FR-75D10 for packing quantity)



2. Tape Dimension



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**G. RECOMMENDED REFLOW PROFILE:**

