- **SAW Duplexer For 822.5MHz / 867.5MHz**
- **Revision 0: February 2014**

Electrical Characteristics

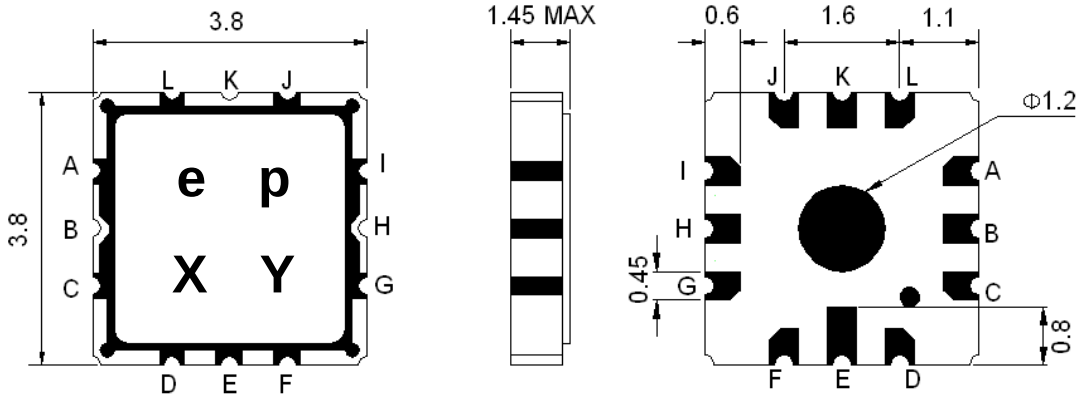
MAXIMUM RATING				
PARAMETERS DESCRIPTION	**UNIT**	**MINIMUM**	**TYPICAL**	**MAXIMUM**
Operating Temperature Range	°C	-5	-	+85
Storage Temperature Range	°C	-40	-	+85
Maximum DC Voltage	V	-	0	-
Maximum Input Power	dBm	0.5 W > 50,000 Hours, CW tone(Ta= +50□C)		
Input Impedance	Ω	-	50	-
Output Tx Impedance	Ω	-	50	-
Output Rx Impedance	Ω	-	50	-
Package type & size	S33			
Length x Width	mm^2	-	3.8 x 3.8	-
Height	mm	-	-	1.45

ELECTRICAL SPECIFICATION					
PARAMETERS	**CONDITION [MHZ]**	**UNIT**	**MINIMUM**	**TYPICAL**	**MAXIMUM**
Ant → Rx (822.5MHz)		**Specifications**			
Insertion Loss	815.0 ~ 830.0	dB	-	1.6	3.0
Amplitude Ripple	815.0 ~ 830.0	dB_{p-p}	-	0.5	1.2
VSWR	815.0 ~ 830.0	-	-	1.55	2.0
Absolute Attenuation	D.C ~ 740.0	dB	30	33	-
	742.0	dB	30	37	-
	800.0	dB	25	40	-
	845.0	dB	25	40	-
	860.0 ~ 875.0	dB	40	46	-
	943.0	dB	30	38	-
	1000.0 ~ 2000.0	dB	30	37	-
	2000.0 ~ 3000.0	dB	15	21	-
	3000.0 ~ 6000.0	dB	3	7	-
	2nd Harmonic	dB	40	50	-
	3rd Harmonic	dB	25	40	-

PARAMETERS	CONDITION [MHZ]	UNIT	MINIMUM	TYPICAL	MAXIMUM
Tx (867.5MHz) → Ant		**Specifications**			
Insertion Loss	860.0 ~ 875.0	dB	-	1.6	3.0
Amplitude Imbalance	860.0 ~ 875.0	dB_{p-p}	-	0.5	1.2
VSWR	860.0 ~ 875.0	-	-	1.55	2.0
Absolute Attenuation	D.C ~ 740.0	dB	30	36	-
	742.0	dB	30	38	-
	845.0	dB	25	40	-
	890.0	dB	25	45	-
	815.0 ~ 830.0	dB	40	43	-
	943.0	dB	35	44	-
	1000.0 ~ 2000.0	dB	30	36	-
	2000.0 ~ 3000.0	dB	25	29	-
	3000.0 ~ 6000.0	dB	3	7	-
	2nd Harmonic	dB	40	50	-
	3rd Harmonic	dB	30	38	-
Tx → Rx		**Specifications**			
Isolation	815.0 ~ 830.0	dB	40	43	-
	860.0 ~ 875.0	dB	40	48	-

Notes : (1) No Matching Network .

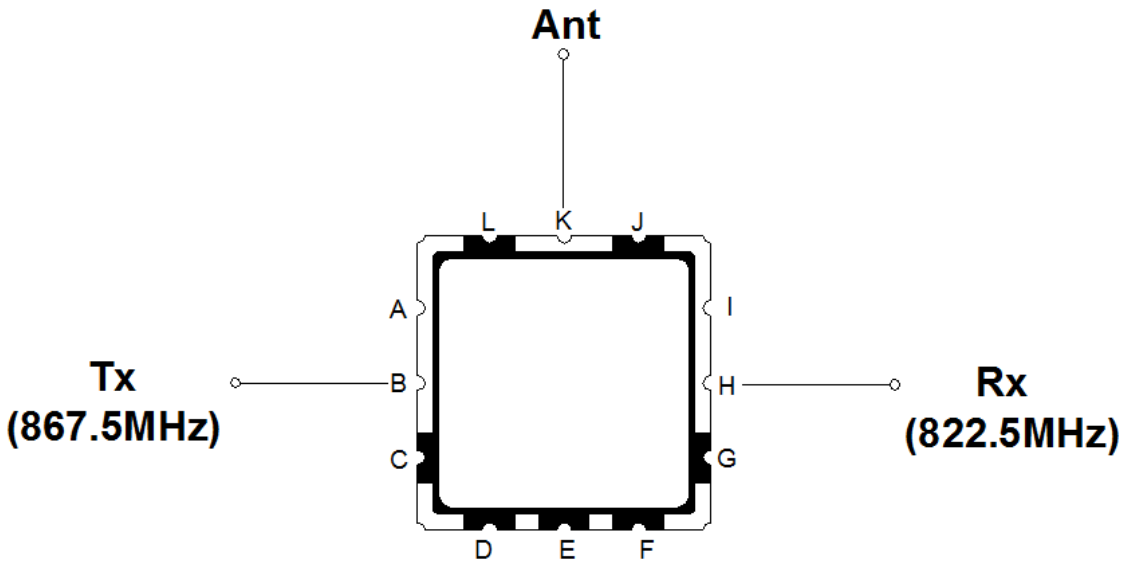
Package Dimensions



Marking Descriptions	
e	Wireless Application
p	Series Number
X	Date Code (Year)
Y	Date Code (Month)

Pin Description	
A, C, D, E, F, G, I, J, L	Ground
K	Ant
B	Tx (867.5MHz)
H	Rx (822.5MHz)

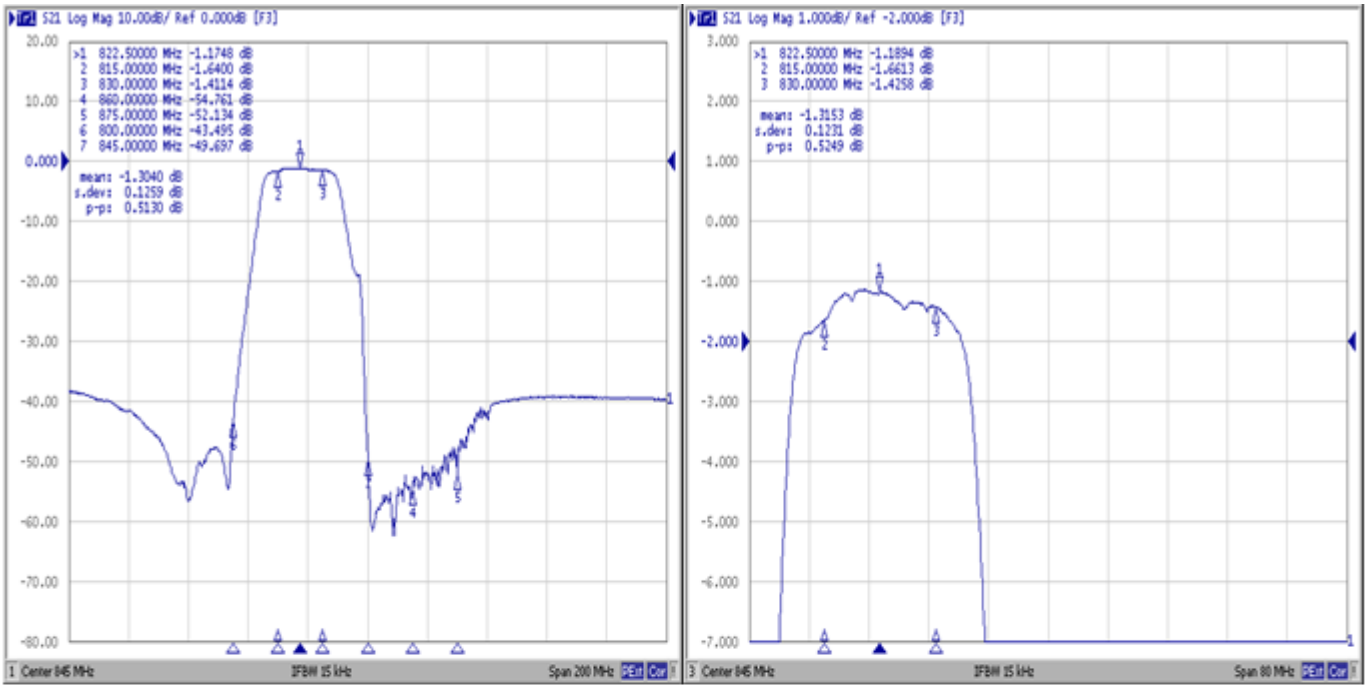
Testing Environment



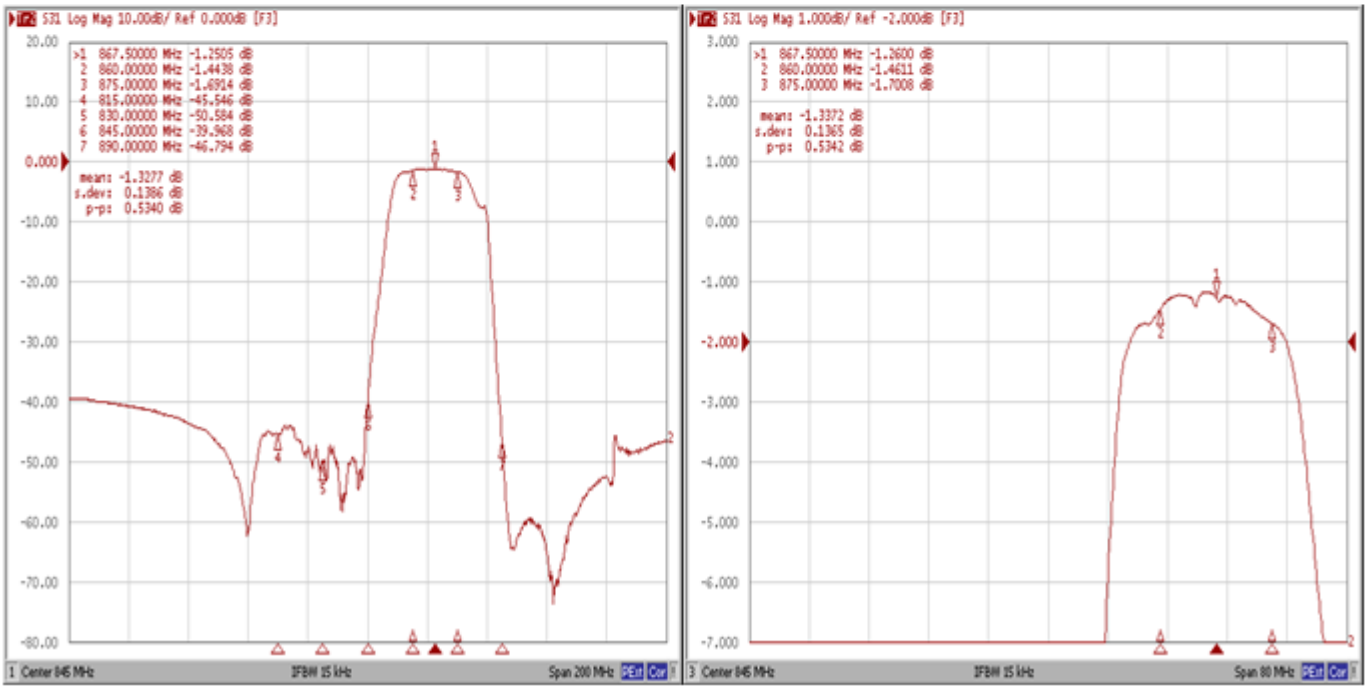
Transko Electronics, Inc. 3981 E. Miraloma Ave., Anaheim CA 92806 USA
Tel: 714-528-8000 Fax: 714-528-8017 Website: www.transko.com E-mail: sales@transko.com

Frequency Characteristics

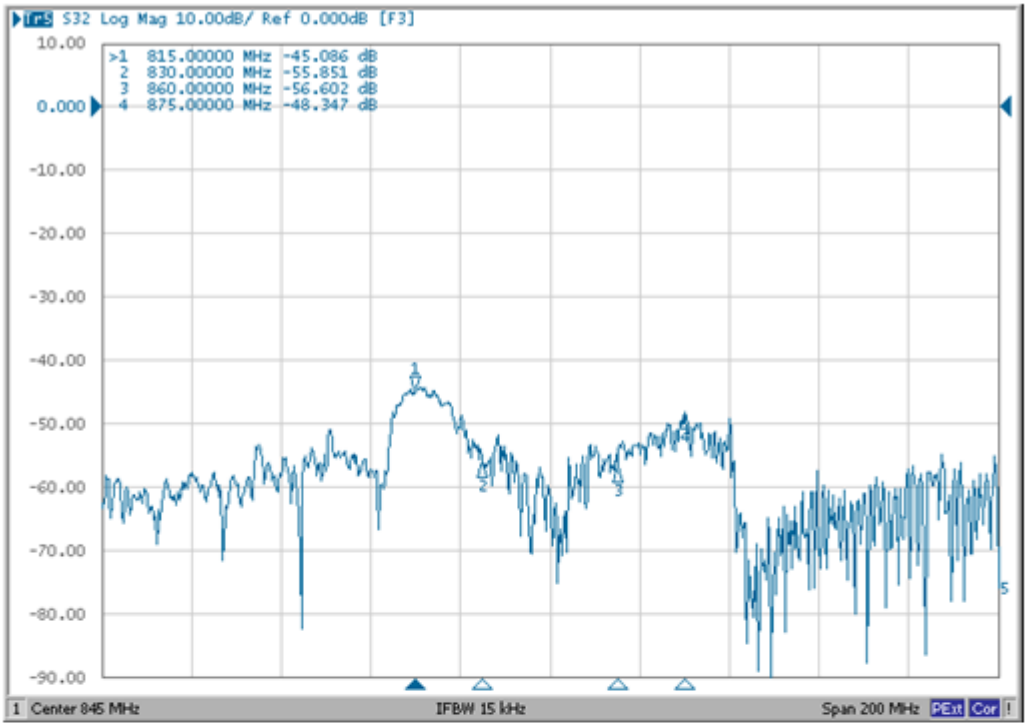
Ant to Rx



Tx to Ant

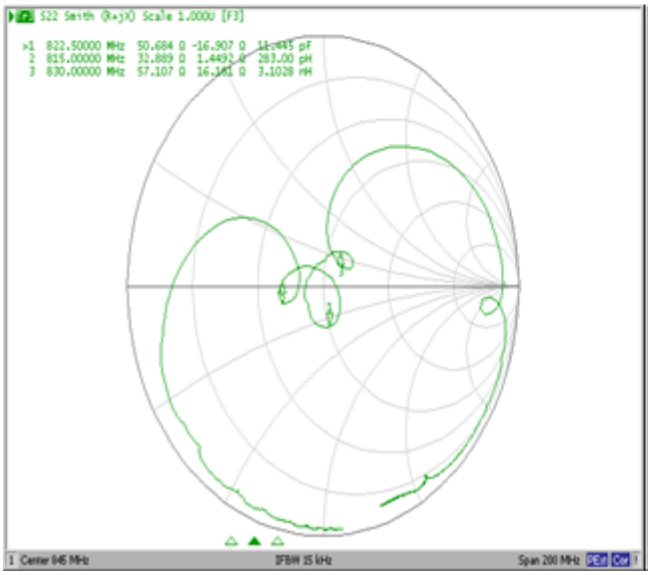


Isolation

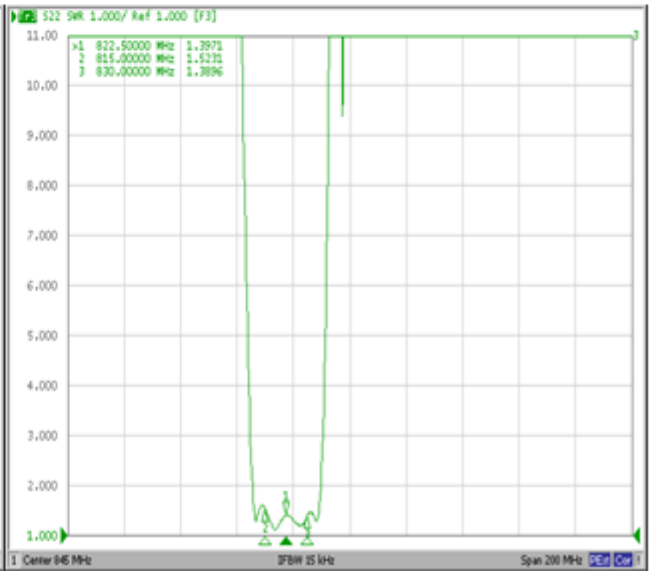


Rx Part

Smith Chart

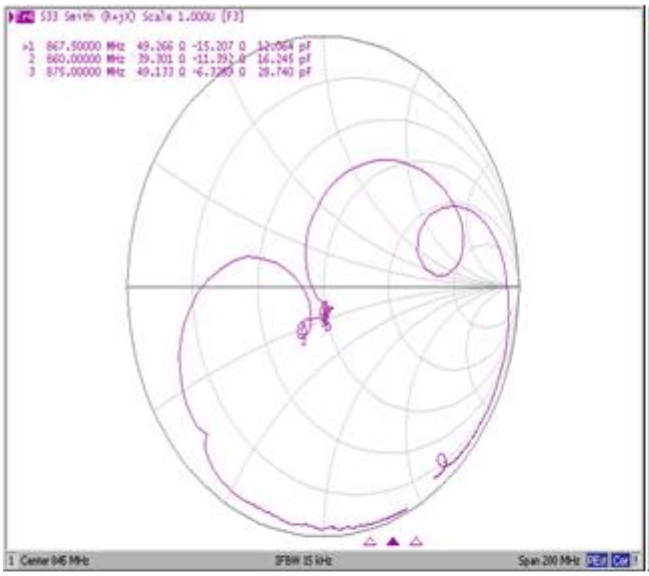


VSWR

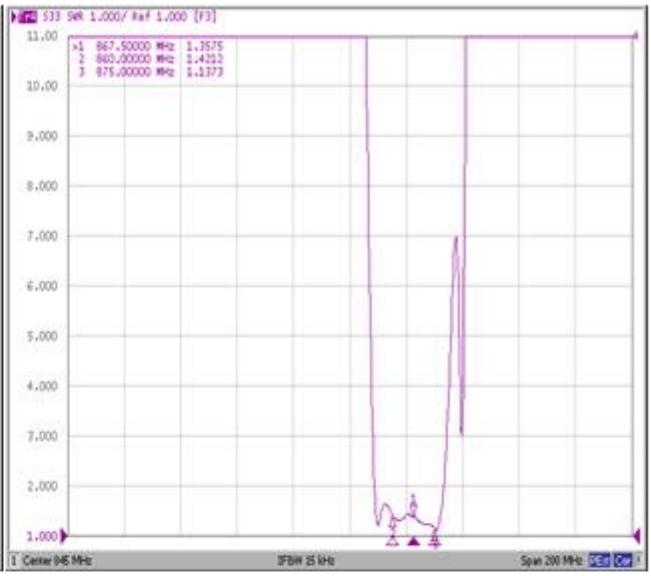


Tx Part

Smith Chart

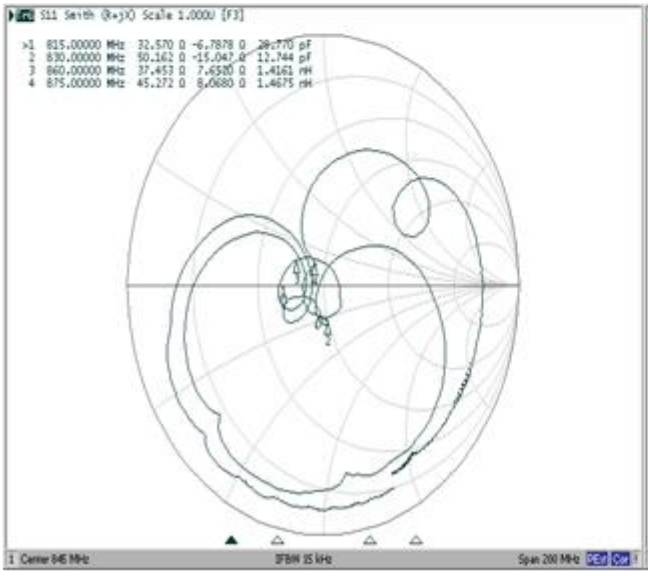


VSWR

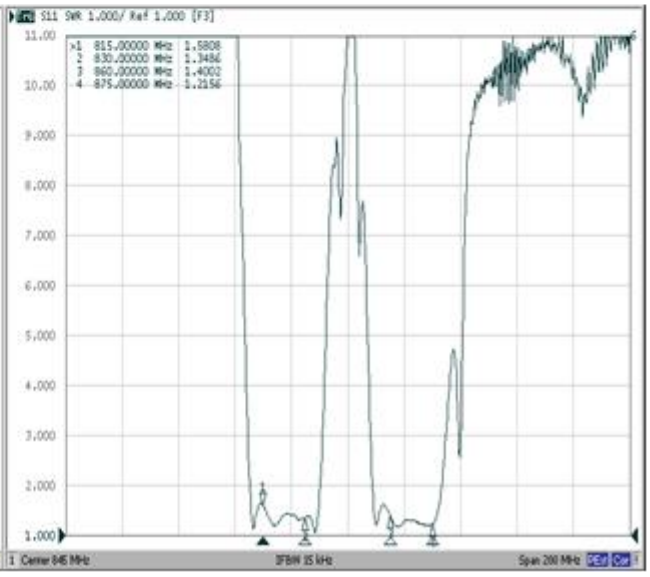


Antenna

Smith Chart

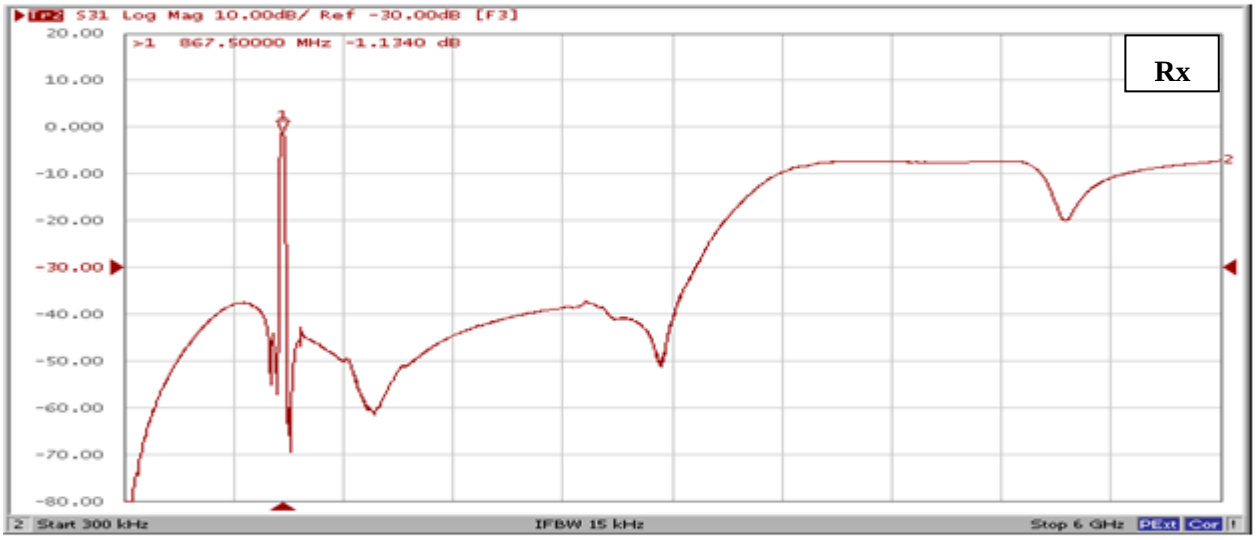


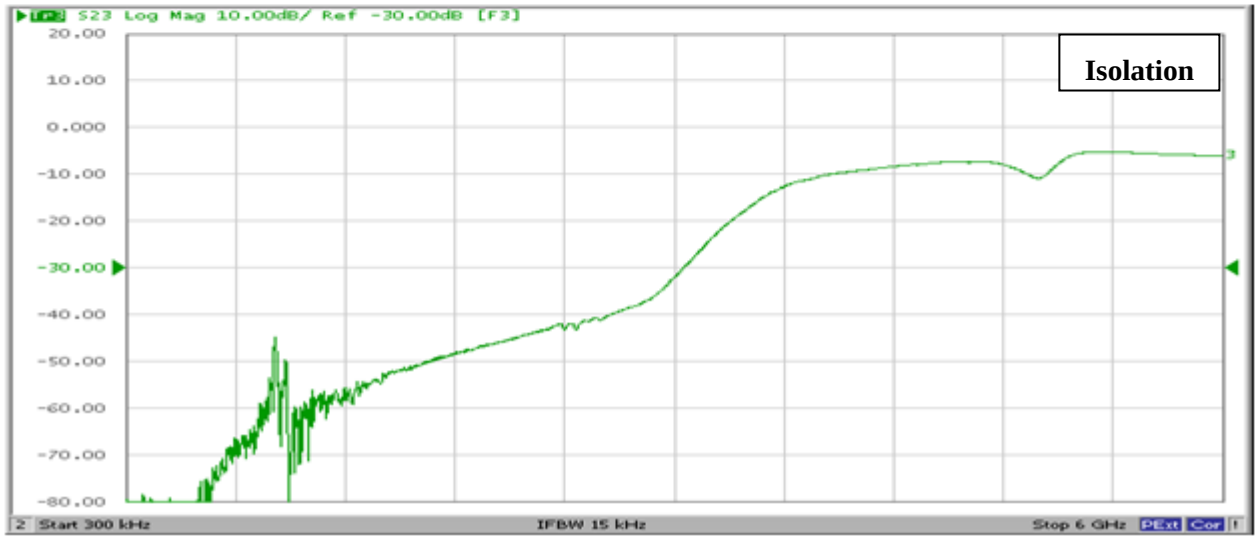
VSWR



Transko Electronics, Inc. 3981 E. Miraloma Ave., Anaheim CA 92806 USA
Tel: 714-528-8000 Fax: 714-528-8017 Website: www.transko.com E-mail: sales@transko.com

Wide Span





Transko Electronics, Inc. 3981 E. Miraloma Ave., Anaheim CA 92806 USA
Tel: 714-528-8000 Fax: 714-528-8017 Website: www.transko.com E-mail: sales@transko.com