



---

# SK3080D

Band 8, SAW Duplexer(Rx Unbalanced Port)  
Revision: Jan 2021

MSL 3 Device



- Electrical Characteristics
  - Package Dimensions
  - Testing Environment
  - Frequency Characteristics
  - Packing material
-

## □ Electrical Characteristics

### Maximum Ratings

Parameters Description	Unit	Minimum	Typical	Maximum
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, 50000h, CW		
Antenna Impedance(unbalanced) <sup>(1)</sup>	Ω	50		
Tx Impedance(unbalanced) <sup>(1)</sup>	Ω	50		
Rx Impedance(unbalanced) <sup>(1)</sup>	Ω	50		
Package type		C63		
Length x Width	mm <sup>2</sup>	1.8 x 1.4		
Height	mm	0.65		

### Electrical Specification

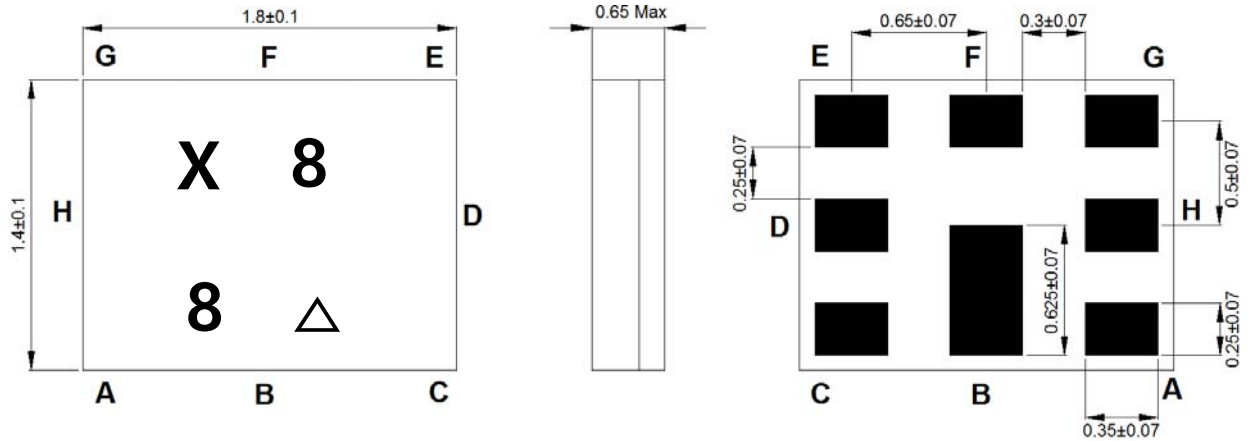
Tx to Ant		Specifications			
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum
Insertion Loss	880.48 ~ 914.52	dB	-	2.7	3.6
	882.4 ~ 912.6	dB	-	2.0	2.7
Ripple	880.0 ~ 915.0	dB <sub>p-p</sub>	-	2.0	2.9
VSWR of Ant Port	880.0 ~ 915.0	-	-	1.5	2.0
VSWR of Tx Port	880.0 ~ 915.0	-	-	1.5	2.0
Attenuation	10.0 ~ 716.0	dB	30	37	-
	716.0 ~ 728.0	dB	33	38	-
	728.0 ~ 793.0	dB	33	38	-
	832.0 ~ 862.0	dB	28	33	-
	927.4 ~ 957.6	dB	40	44	-
	1559.0 ~ 1563.0	dB	35	45	-
	1565.42 ~ 1573.37	dB	35	45	-
	1573.37 ~ 1577.47	dB	35	45	-
	1577.47 ~ 1585.42	dB	35	44	-
	1597.55 ~ 1605.89	dB	35	44	-
	1710.0 ~ 1785.0	dB	30	40	-
	1760.0 ~ 1840.0	dB	30	40	-
	1840.0 ~ 1880.0	dB	30	39	-
	1920.0 ~ 1980.0	dB	30	38	-
	2110.0 ~ 2170.0	dB	28	36	-
	2400.0 ~ 2500.0	dB	25	34	-
	2434.0 ~ 2494.0	dB	25	34	-
	2620.0 ~ 2745.0	dB	25	33	-
	3520.0 ~ 3660.0	dB	15	29	-
	4400.0 ~ 4575.0	dB	10	23	-
4900.0 ~ 5950.0	dB	10	21	-	
6160.0 ~ 6405.0	dB	15	38	-	
7040.0 ~ 7320.0	dB	15	29	-	

Ant to Rx		Specifications			
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum
Insertion Loss	925.48 ~ 959.52	dB	-	2.6	3.6
	927.4 ~ 957.6	dB		2.0	2.7
Ripple	925.0 ~ 960.0	dB <sub>p-p</sub>	-	1.8	2.9
VSWR of Ant Port	925.0 ~ 960.0	-	-	1.5	2.3
VSWR of Rx Port	925.0 ~ 960.0	-	-	1.5	2.3
Attenuation	0.3 ~ 880.0	dB	32	36	-
	45.0	dB	50	84	-
	835.0 ~ 870.0	dB	31	37	-
	882.4 ~ 912.6	dB	45	52	-
	902.5 ~ 910.0	dB	45	67	-
	980.0 ~ 1045.0	dB	32	38	-
	1045.0 ~ 6000.0	dB	17	29	-
	1427.0 ~ 1448.0	dB	30	37	-
	1710.0 ~ 1785.0	dB	30	38	-
	1805.0 ~ 1980.0	dB	30	39	-
	2400.0 ~ 2500.0	dB	30	41	-
	2500.0 ~ 2570.0	dB	30	41	-
	2685.0 ~ 2790.0	dB	30	41	-
	2775.0 ~ 2880.0	dB	30	41	-
	2880.0 ~ 3700.0	dB	30	39	-
	3700.0 ~ 3840.0	dB	30	39	-
	4625.0 ~ 4800.0	dB	15	30	-
	4900.0 ~ 5950.0	dB	15	29	-
6475.0 ~ 6720.0	dB	10	30	-	
7400.0 ~ 7680.0	dB	5	23	-	

Tx to Rx		Specifications			
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum
Isolation	882.4 ~ 912.6	dB	50	54	-
	927.4 ~ 957.6	dB	45	47	-

**Notes :** (1) With Matching Network

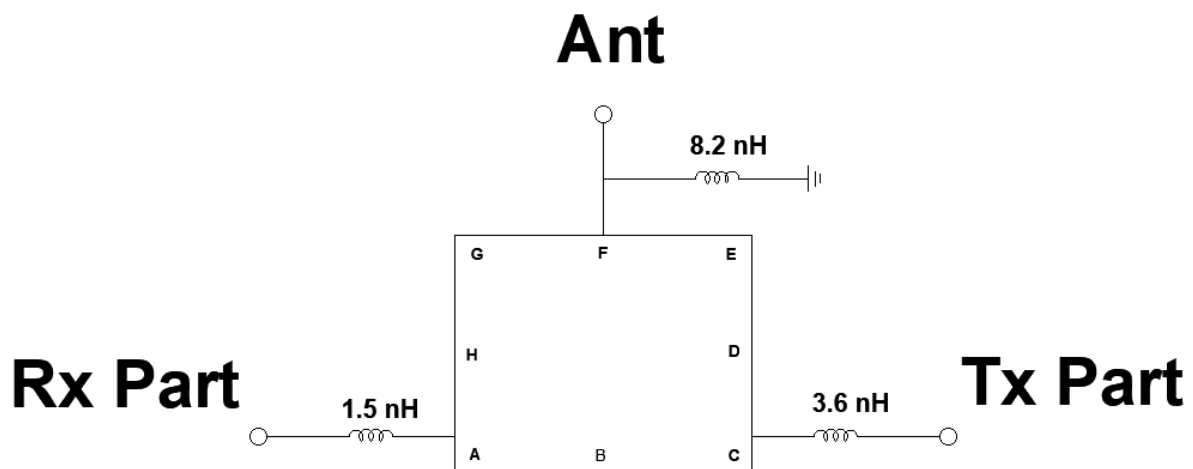
## Package Dimensions



Marking Descriptions	
X	S or W
8	Band Class
8	Series Number
△	Date Code (Year+Month)

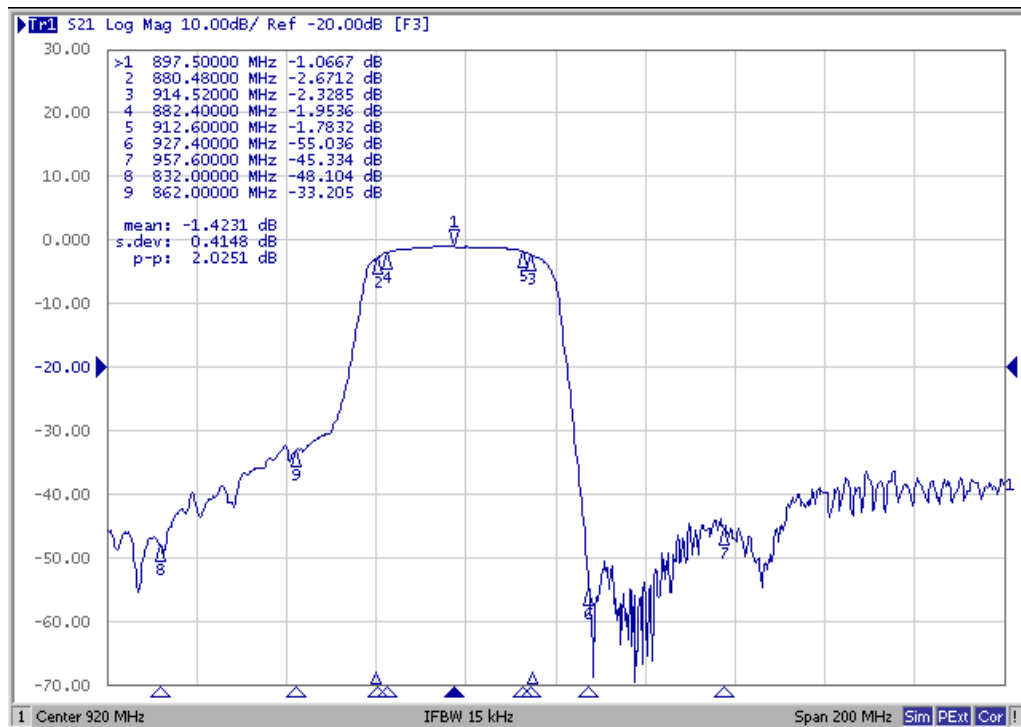
Pin Description	
B, D, E, G, H	Ground
F	Ant
C	Tx (897.5MHz)
A	Rx (942.5MHz)

## Testing Environment

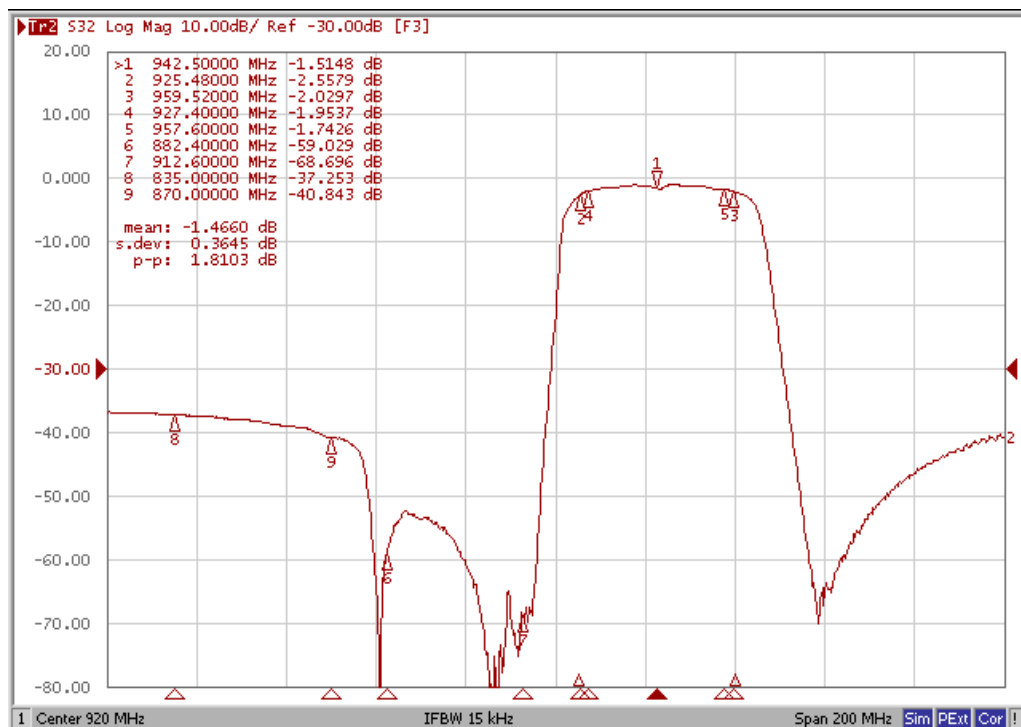


## □ Frequency Characteristics

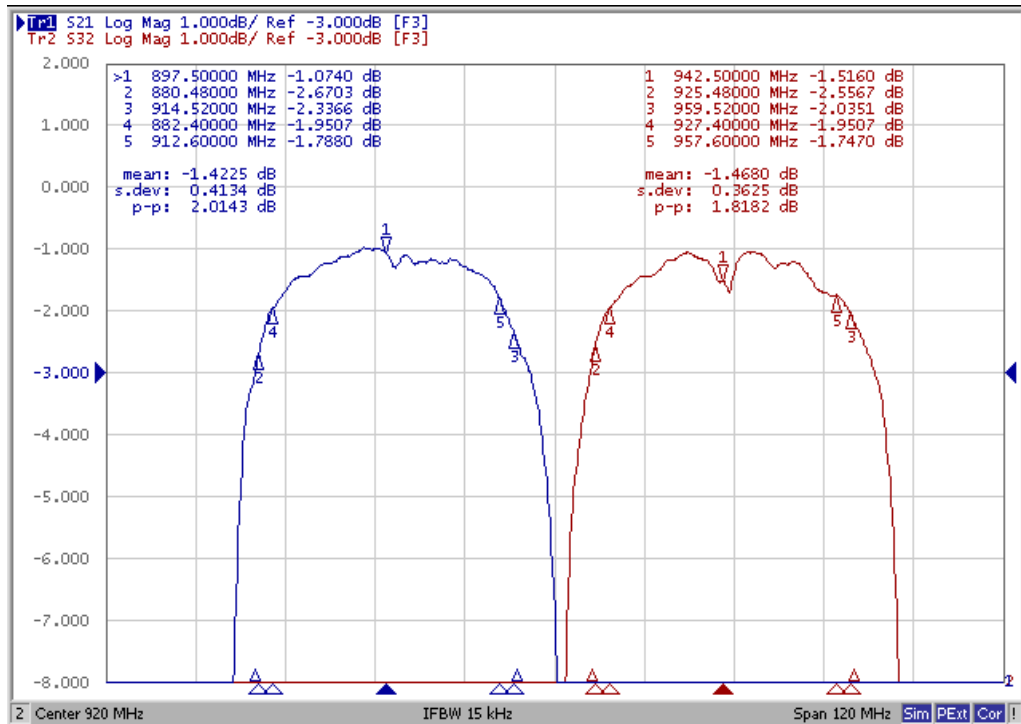
Tx to Ant



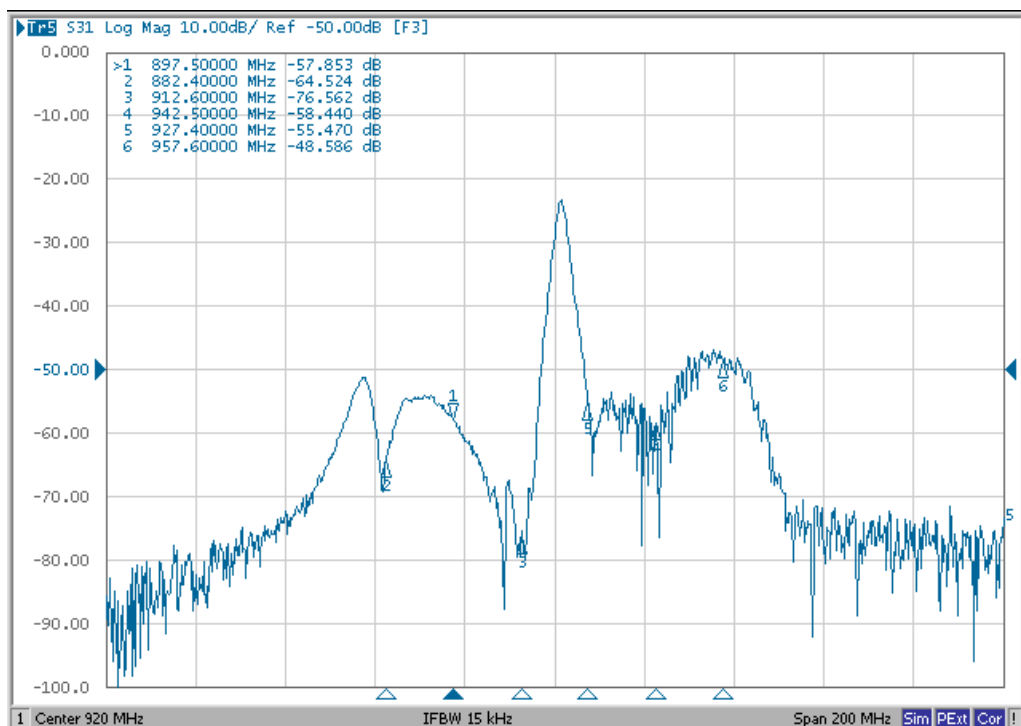
Ant to Rx



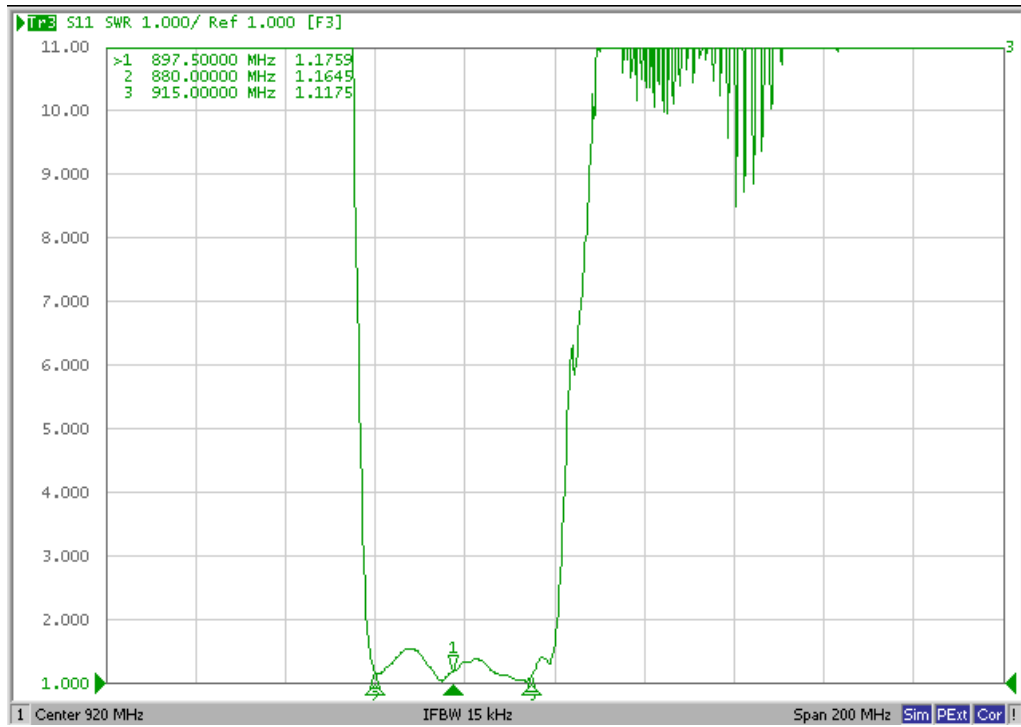
### Ripple Deviation



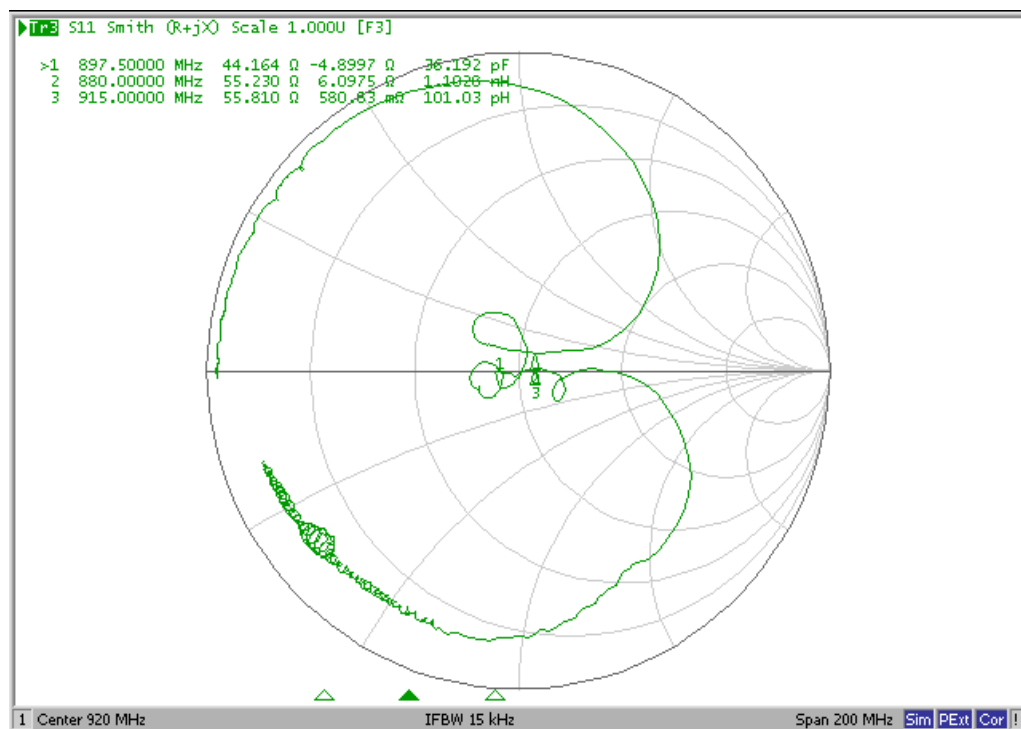
### Isolation



### VSWR (Tx Port)

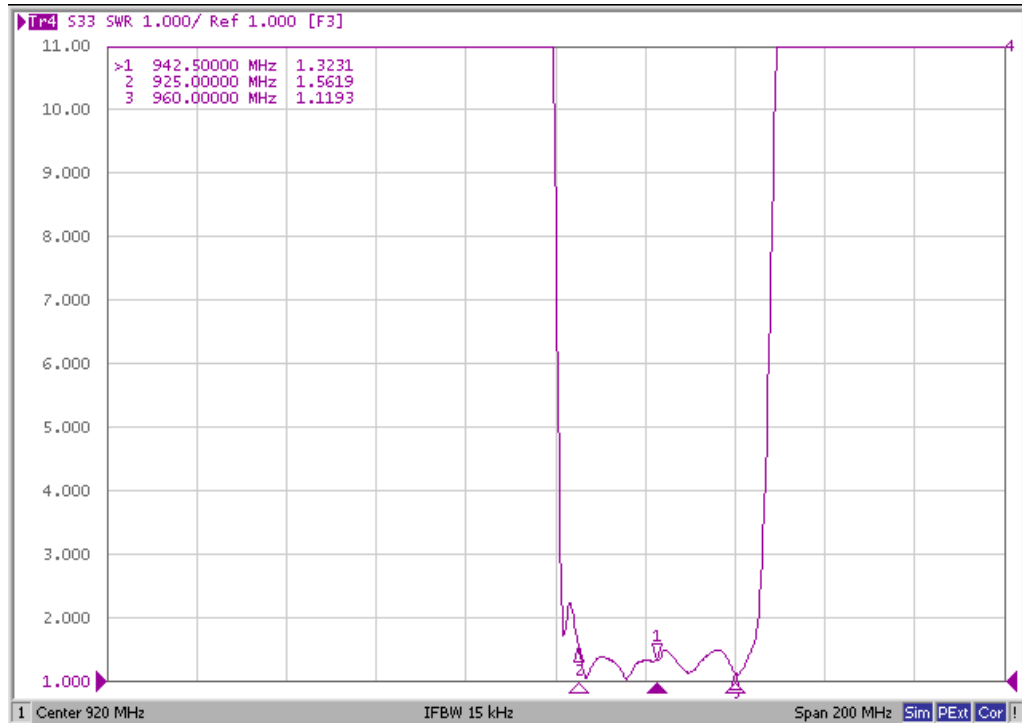


### Smith Chart (Tx Port)

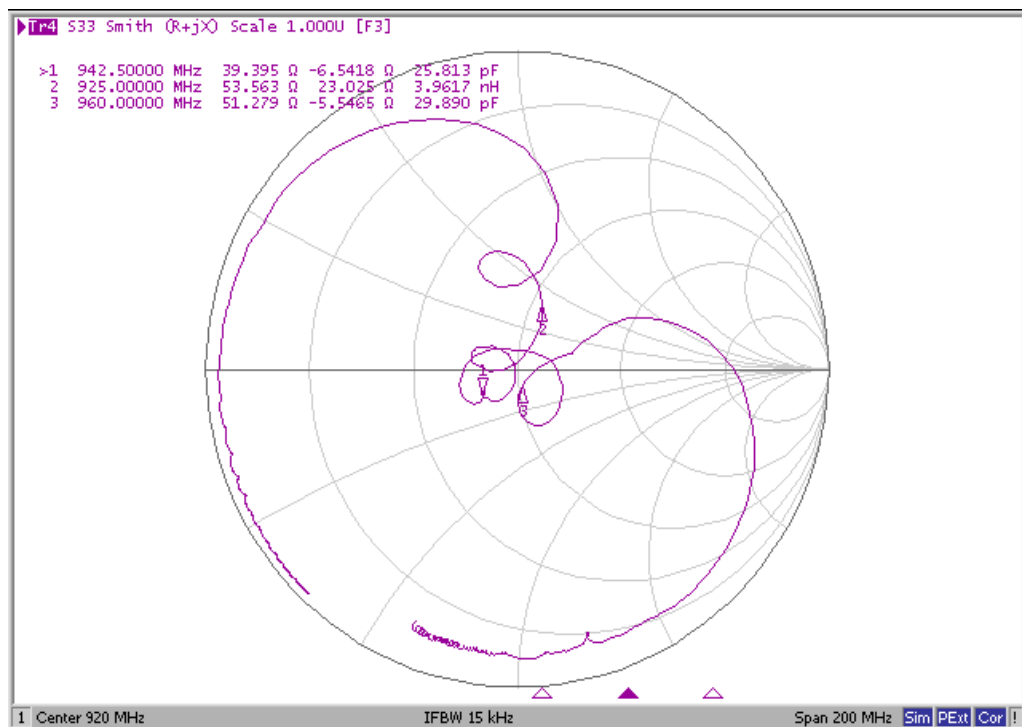




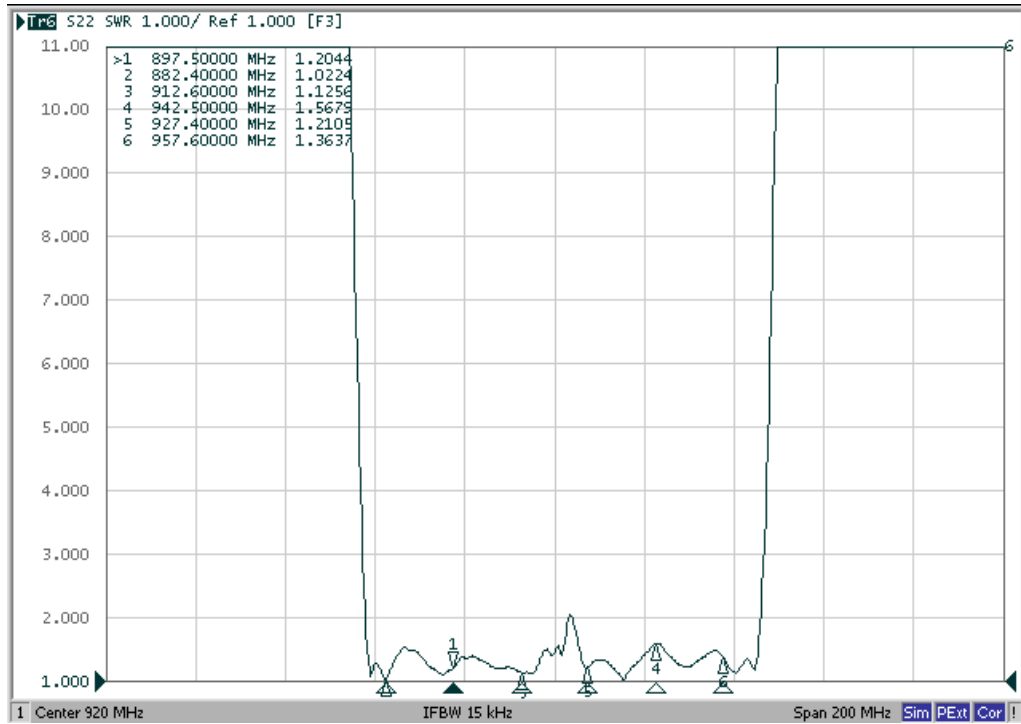
### VSWR (Rx Port)



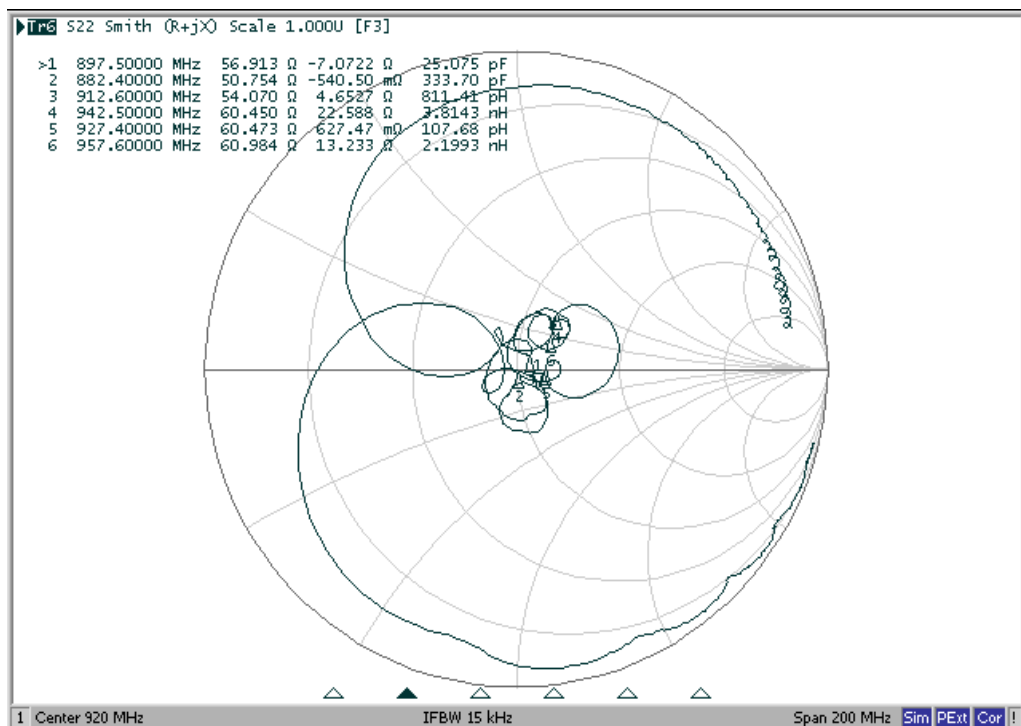
### Smith Chart (Rx Port)



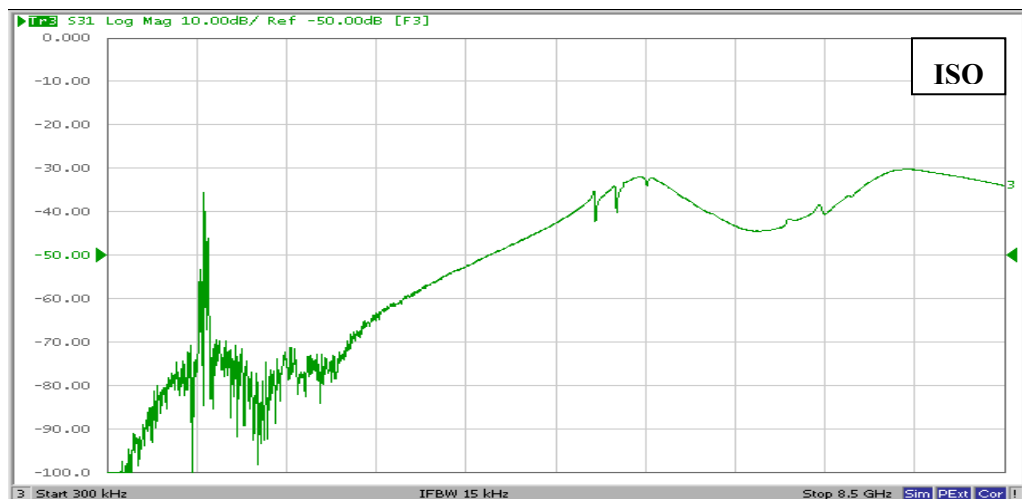
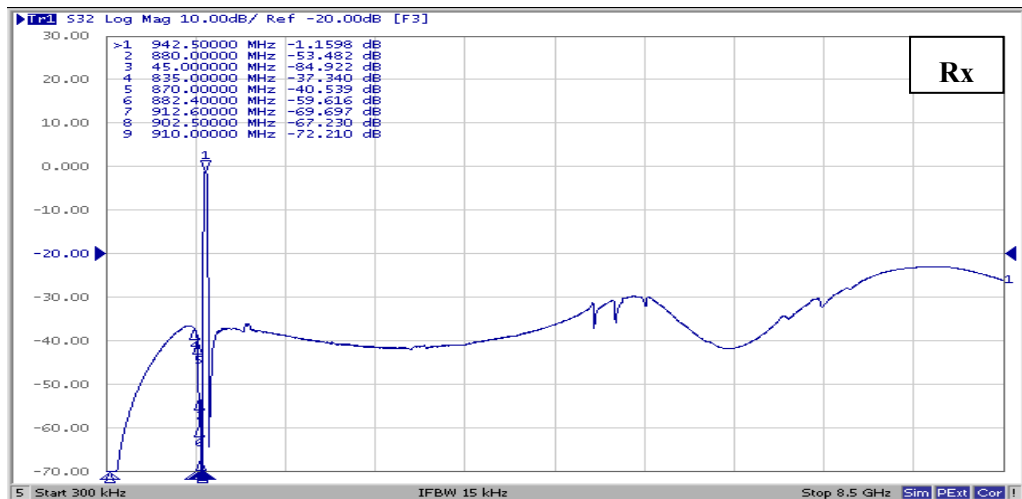
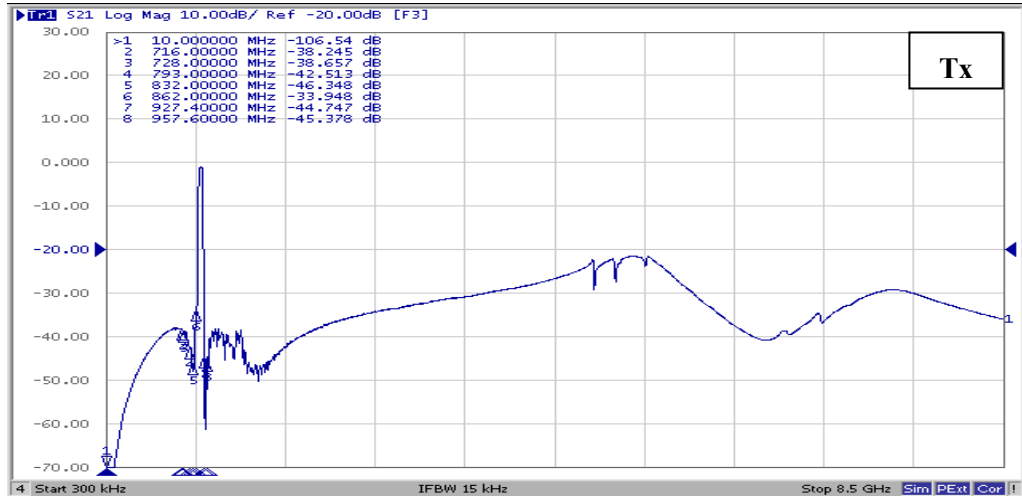
### VSWR (ANT Port)



### Smith Chart (ANT Port)

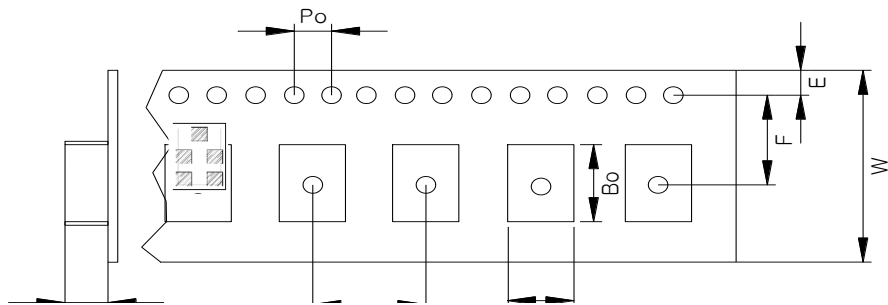


### Wide Span



## □ Packing material

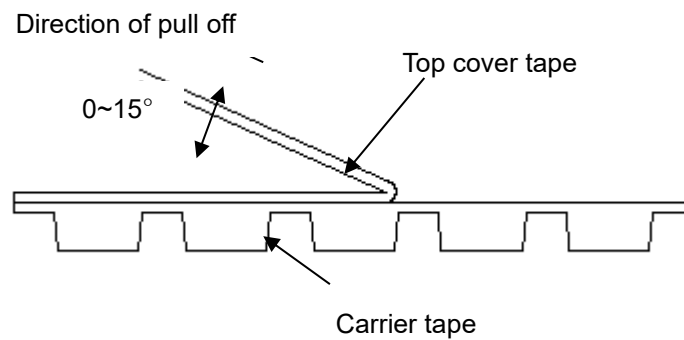
### Carrier Tape Dimension



(U  
nit : mm)

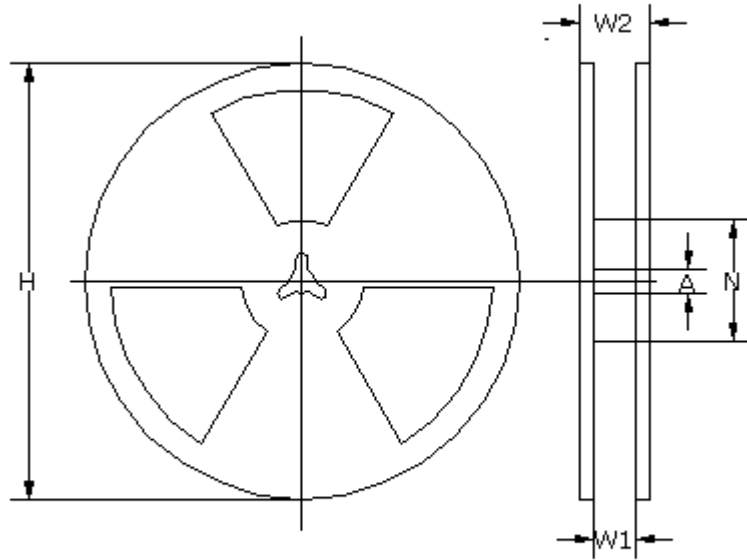
A	B	K0	W	E	F	P0	P1
1.3±0.05	1.65±0.05	0.75±0.05	8.0±0.3	1.75±0.1	3.5±0.1	4.0±0.1	4.0±0.1

### Top Cover Tape Adhesion



Pull of angle : 0 ~ 15 degree  
 Speed : 300 mm/min  
 Force : 0.2 ~ 0.7N

**Reel Dimension**



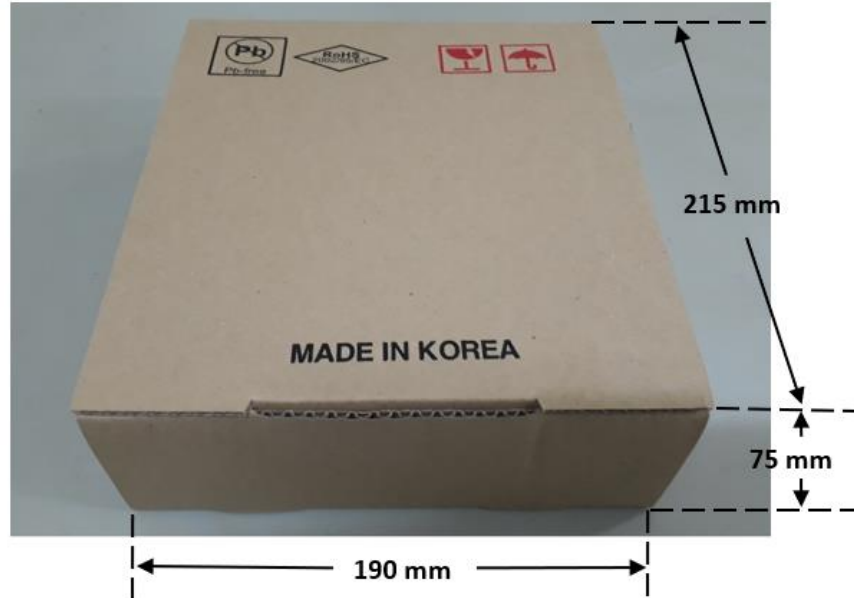
(Unit : mm)

A	N	H	W1	W2
$\Phi 13 \pm 0.2$	$\Phi 66 \pm 0.5$	$\Phi 180.0 +0/-1.5$	$9.0 +1.0/-0$	$11.4 \pm 1.0$

Quantity per Reel : 3,000pcs  
 Tray and Tape Type : **N.A**

#### 4.4.2 Packaging Box

- 1) Inner Box ; in which **EECO** puts 5 reel which contains  
**15,000 filters.**



- 2) Outer Box ; in which **EECO** puts 16 inner boxers, that is 80 reel .  
**Total 240,000 filters/outer box**



## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Signal Conditioning](#) category:*

*Click to view products by [Suntek](#) manufacturer:*

Other Similar products are found below :

[MAPDCC0001](#) [MAPDCC0004](#) [PD0409J5050S2HF](#) [HHS-109-PIN](#) [AFS14A35-1591.50-T3](#) [DS-323-PIN](#) [DSS-313-PIN](#) [B39321R801H210](#)  
[1A0220-3](#) [JP510S](#) [LFB212G45SG8C341](#) [LFB322G45SN1A504](#) [LFL182G45TC3B746](#) [SF2159E](#) [30057](#) [AFS1575.42S4-T](#) [FM-104-PIN](#)  
[CER0813B](#) [MAPDCC0005](#) [3A325](#) [40287](#) [41180](#) [ATB3225-75032NCT](#) [BD0810N50100AHF](#) [JHS-115-PIN](#) [DC0710J5005AHF](#)  
[DC2327J5005AHF](#) [43020](#) [LFB2H2G60BB1C106](#) [LFL15869MTC1B787](#) [X3C19F1-20S](#) [XC3500P-20S](#) [10013-20](#) [SF2194E](#)  
[CDBLB455KCAX39-B0](#) [TGL2208-SM, EVAL](#) [RF1353C](#) [051157-0000](#) [PD0922J5050D2HF](#) [1E1305-3](#) [1F1304-3S](#) [1G1304-30](#)  
[B0922J7575AHF](#) [10017-3](#) [TP-103-PIN](#) [BD1222J50200AHF](#) [BD1722J50100AHF](#) [2450DP39K5400E](#) [BD0810J50150AHF](#)  
[BD1722J50200AHF](#)