

SAW Duplexer 313.150 / 314.0MHz

Model: TF0096A

Part No: MP07001

Rev. No: 1

A. MAXIMUM RATING:

Electrostatic Sensitive Device (ESD)

1. Input Power Level: 10 dBm
2. DC Voltage: 0V
3. Operating Temperature: -40°C to +85°C
4. Storage Temperature: -40°C to +85°C

B. ELECTRICAL CHARACTERISTICS: SF2281D

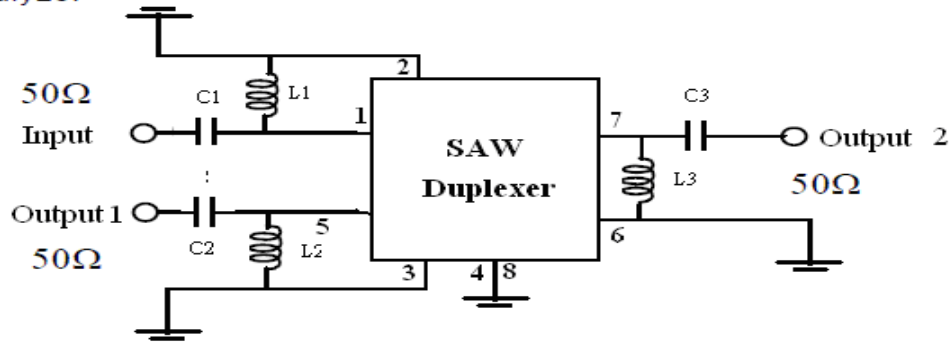
Pass Band I	Unit	Min.	Typ.	Max.
Center frequency Fc	-		313.15	-
Insertion loss (313.05 ~ 313.25MHz) IL	-		3.5	4.2
Amplitude Ripple (313.05 ~ 313.25MHz)	-		07	1.2
VSWR (313.05 ~ 313.25MHz)			1.6	2.3
Attenuation (Reference level from 0dB)				
313.9 ~ 314.1MHz	dB	26	30	
Fc +2.0MHz	dB	25	30	
Fc -2.0MHz	dB	30	35	
Pass Band II				
Center frequency Fc	MHz	-	314	-
Insertion loss (313.9 ~ 314.1MHz) IL	dB	-	3.5	4.0
Amplitude Ripple (313.9 ~ 314.1MHz)	dB	-	0.5	1.2
VSWR (313.9 ~ 314.1MHz)			1.6	2.3
Attenuation (Reference level from 0dB)				
313.05 ~ 313.25MHz	dB	26	30	
Fc +2.0MHz	dB	25	30	
Fc -2.0MHz	dB	30	35	

SAW Duplexer 313.150 / 314.0MHz
Part No: MP07001

Model: TF0096A
Rev. No: 1

C. MEASUREMENT CIRCUIT:

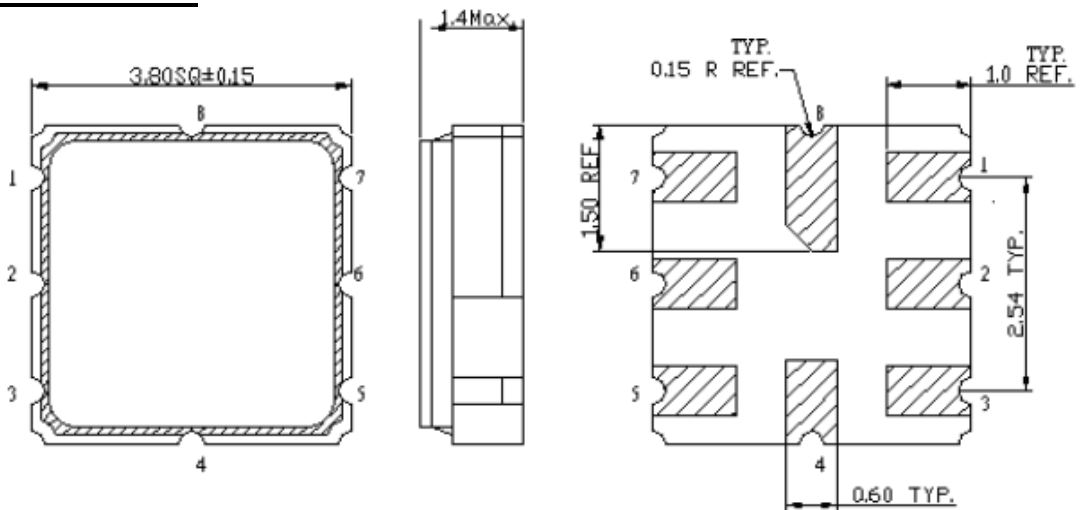
HP Network analyzer



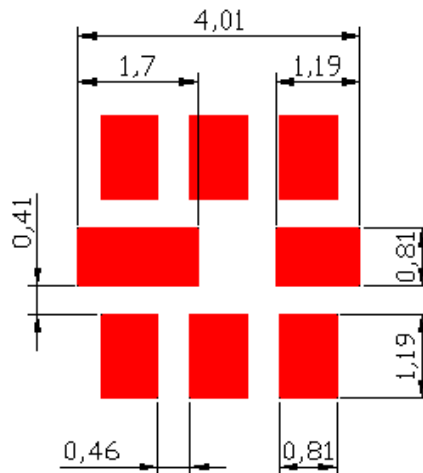
L1: 70nH; L2: 80nH; L3: 80nH; C1: 2pF; C2: 2pF; C3: 2pF

D. OUTLINE DRAWING:

- 1: Input
- 2, 3, 6: RF Ground
- 4, 8: Case Ground
- 5: Band 1 Output
- 7: Band 2 Output



E. PCB FOOTPRINT:

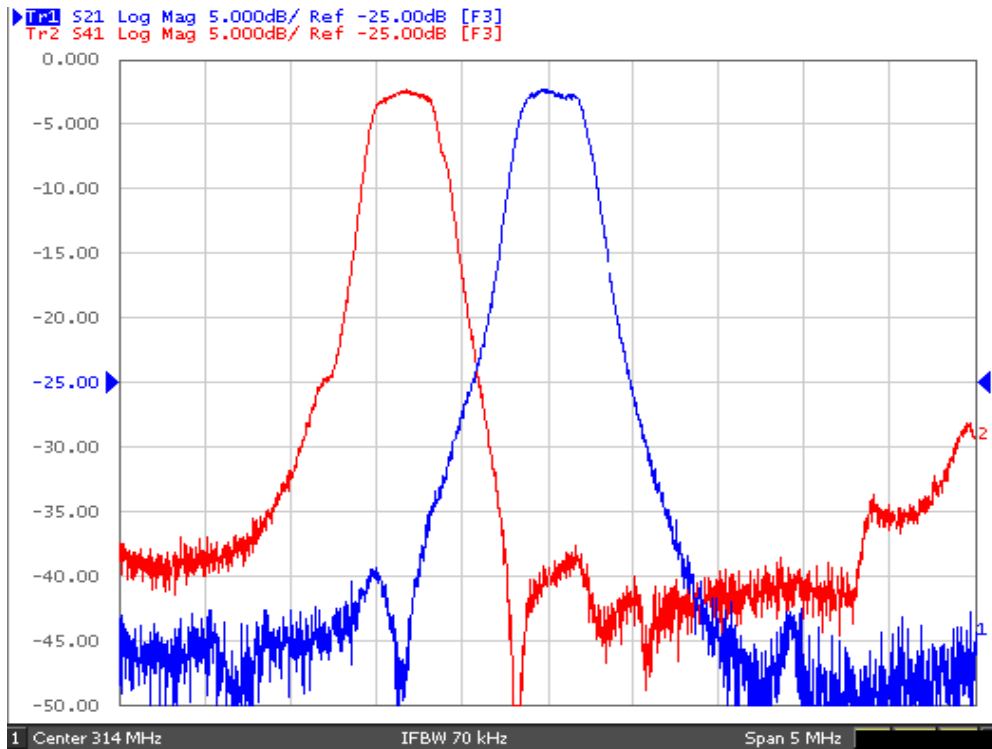


SAW Duplexer 313.150 / 314.0MHz
Part No: MP07001

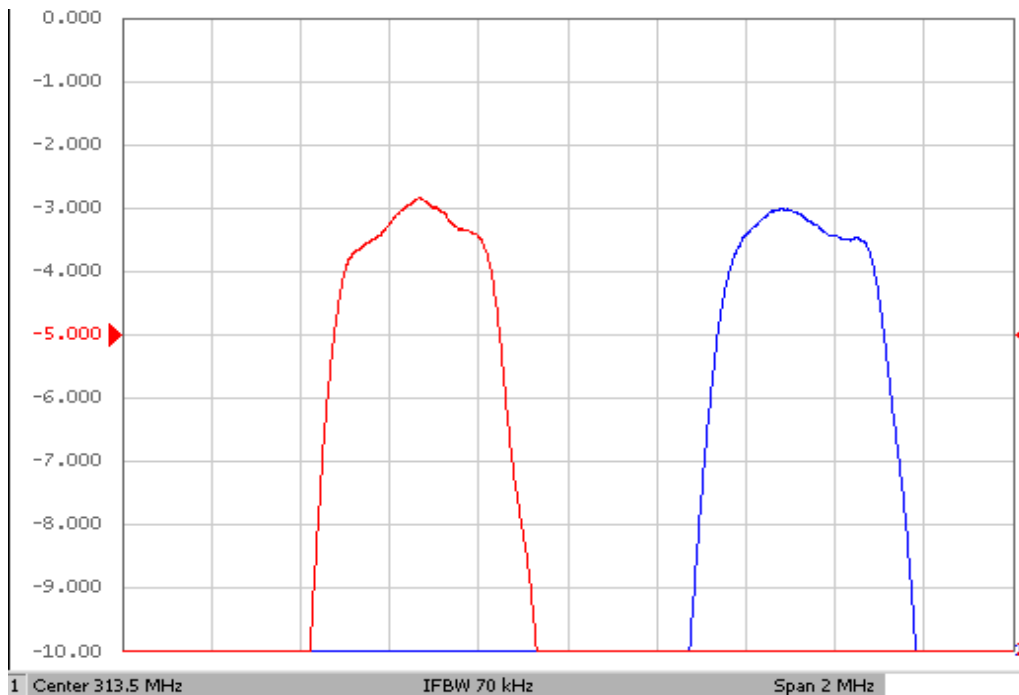
Model: TF0096A
Rev. No: 1

F. FREQUENCY CHARACTERISTICS:

S21: Span 5MHz



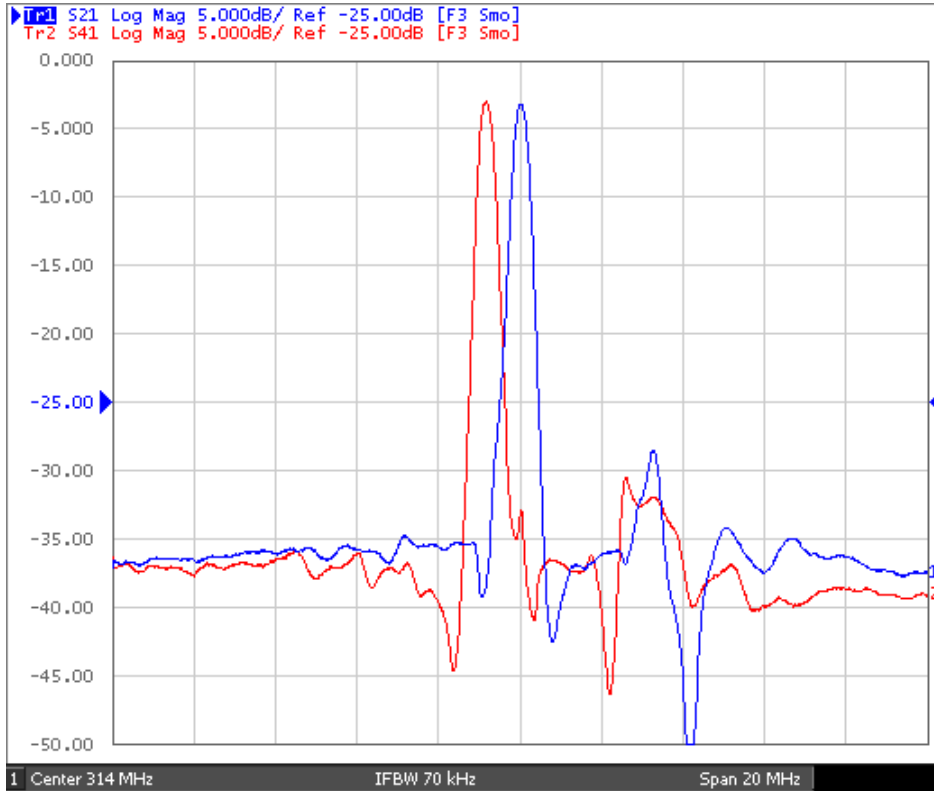
S21: Span 2MHz



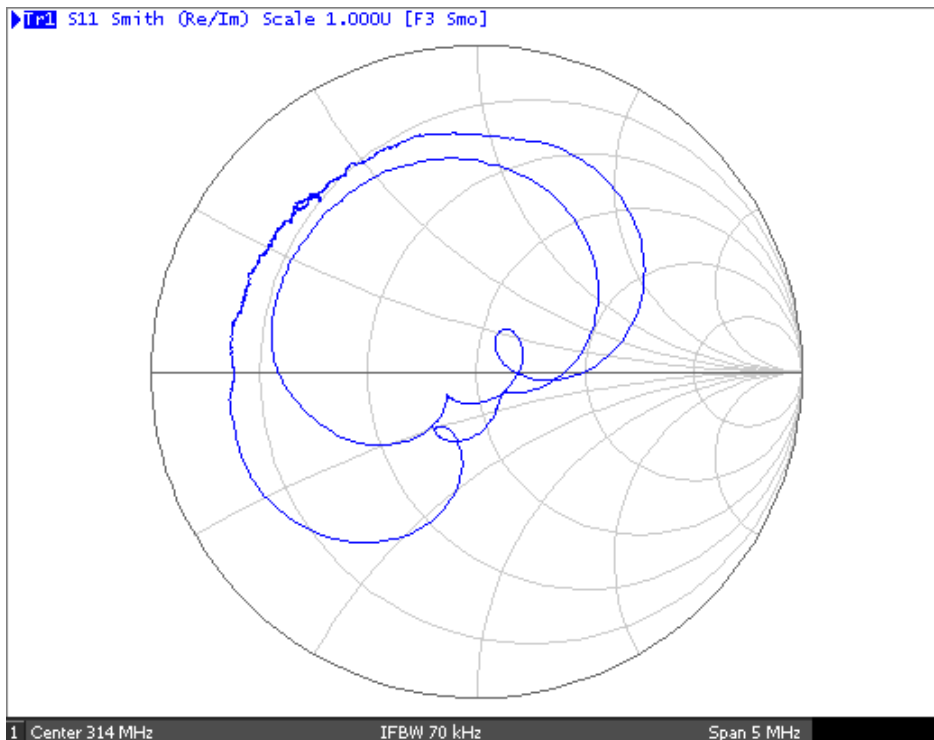
SAW Duplexer 313.150 / 314.0MHz
Part No: MP07001

Model: TF0096A
Rev. No: 1

S21: Span 20MHz



S11 (I/P)

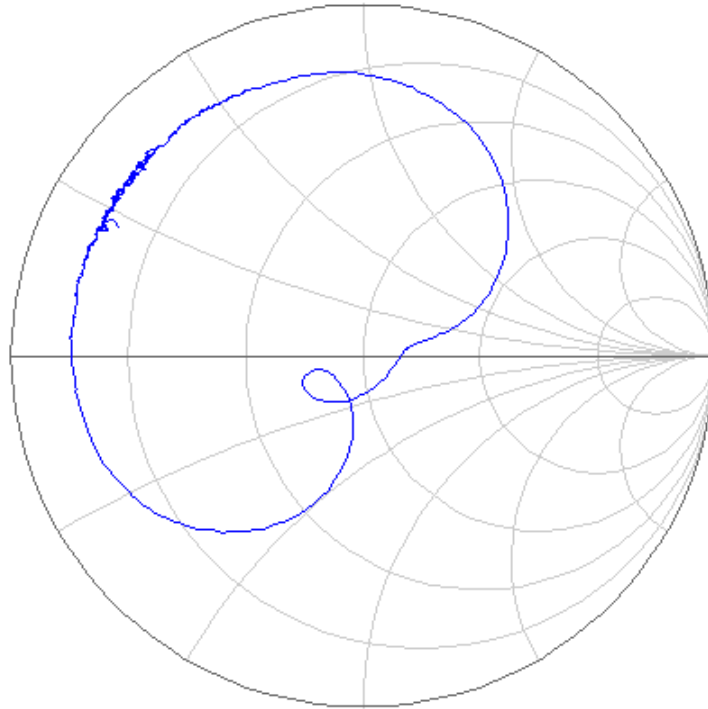


SAW Duplexer 313.150 / 314.0MHz
Part No: MP07001

Model: TF0096A
Rev. No: 1

S22 (O/P_2)

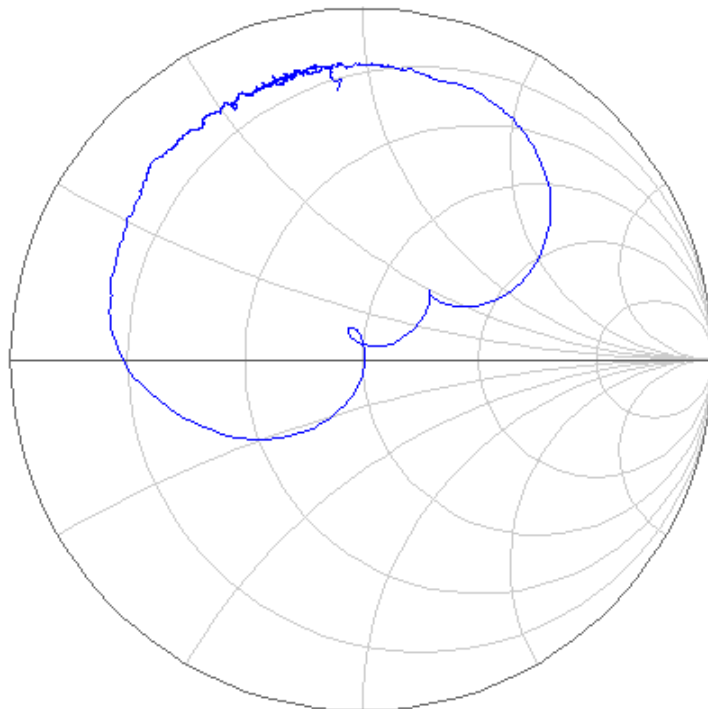
▶ [F3] S22 Smith (Re/Im) Scale 1.000U [F3 Smo]



Center 314 MHz IFBW 70 kHz Span 5 MHz

S44 (O/P_1)

▶ [F3] S44 Smith (Re/Im) Scale 1.000U [F3 Smo]



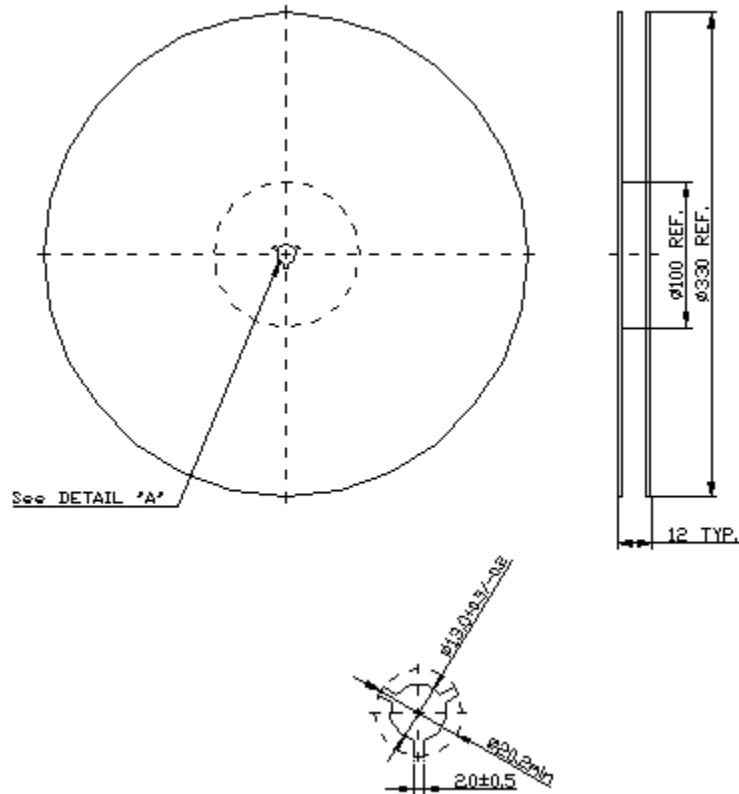
Center 314 MHz IFBW 70 kHz Span 5 MHz

SAW Duplexer 313.150 / 314.0MHz
Part No: MP07001

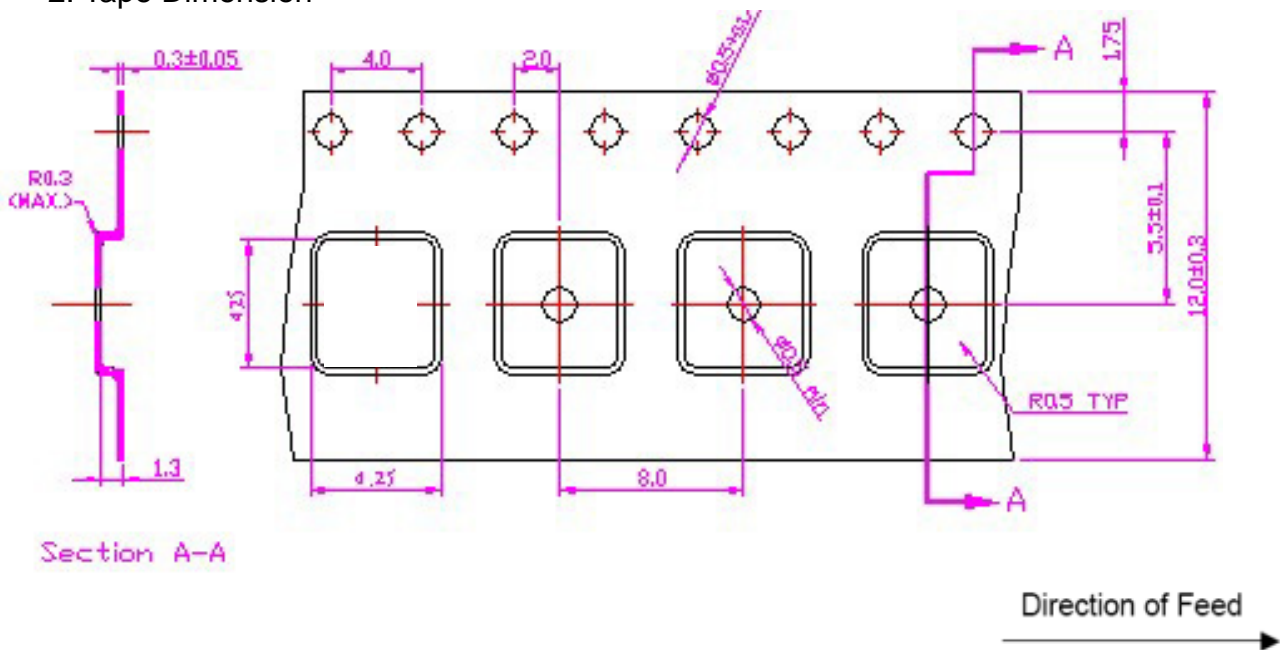
Model: TF0096A
Rev. No: 1

G. PACKING:

1. Reel Dimension



2. Tape Dimension



SAW Duplexer 313.150 / 314.0MHz
Part No: MP07001

Model: TF0096A
Rev. No: 1

H. RECOMMENDED REFLOW PROFILE:

1. Preheating shall be fixed at 150 ~ 180°C for 60 ~ 90 seconds.
2. Ascending time to preheating temperature 150°C shall be 30 seconds min.
3. Heating shall be fixed at 220°C for 50 ~ 80 seconds and at 245 ~ 260°C peak (min. 10 sec).
4. Time: 2 times.

