



TMX W619

SAW BandPASS Filter – BASE STATION CDMA – Rx IF
Preliminary Specification (Rev-)

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May 30th, 2005

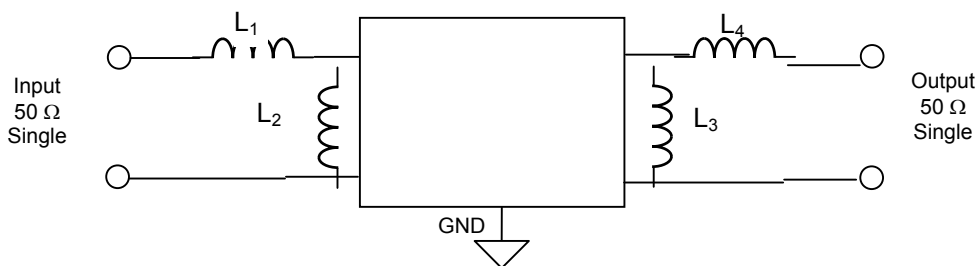
Operating temperature range : [0°C; +85°C]

Electrical Parameters	Unit	Minimum	Typical ⁽¹⁾	Maximum
Source Impedance (single ended)	Ω	-	50 ⁽²⁾	-
Load Impedance (single ended)	Ω	-	50 ⁽²⁾	-
Center Frequency fo	MHz	-	71.1	-
Bandwidth at -1 dB ⁽³⁾	MHz	1.05	1.17	-
Bandwidth at -3.75 dB ⁽³⁾	MHz	1.18	1.33	-
Template on the amplitude, reference is insertion loss at fo				
from fo ± 0.75 MHz to fo ± 0.90 MHz	dB	10	12	-
from fo ± 0.9 MHz to fo ± 4 MHz	dB	26	28	-
Ultimate attenuation (from 30 MHz to 67.1 MHz and from 75.1 MHz to 500 MHz)	dB	45	50	-
Insertion Loss at fo ⁽²⁾	dB	-	11.2	13.5
Amplitude Variation over 1.05 MHz bandwidth ⁽⁴⁾	dB _{p-p}	-	0.5	1.0
Phase Linearity over 1.26 MHz bandwidth	deg RMS	-	0.8	2.0
Group Delay Variation over 1.05 MHz bandwidth	ns _{p-p}	-	250	300
Average Group Delay over 1.26 MHz bandwidth	μs	-	2.6	-
Input / Output Return Loss over 1.05 MHz bandwidth ⁽²⁾	dB	10	13	-
Input Power	dBm	-	-	20
Package type & size		SMT		
Length x Width	mm ²	-	19 x 6.5	-
Height	mm	-	1.9	2.1
Pin Out				
Input	1	Output	6	
Input Return	10	Output Return	5	
Case Ground	2, 3, 4, 7, 8, 9	To Be Grounded	2, 3, 4, 5, 7, 8, 9, 10	

Notes :

- (1) Typical values are nominal performances at room temperature
- (2) With external matching networks
- (3) The amplitude reference is insertion loss at fo.
- (4) The amplitude variation is defined as the maximum level – minimum level over the given bandwidth.

MATCHING NETWORK FOR 50 Ω / 50 Ω CONFIGURATION



Temex Test Fixture	Customer PC Board
L ₁ = 650 nH, Q > 35	L ₁ = TBD, Q > 35
L ₂ = 470 nH, Q > 35	L ₂ = TBD, Q > 35
L ₃ = 390 nH, Q > 35	L ₃ = TBD, Q > 35
L ₄ = 650 nH, Q > 35	L ₄ = TBD, Q > 35

TBD = To Be Defined

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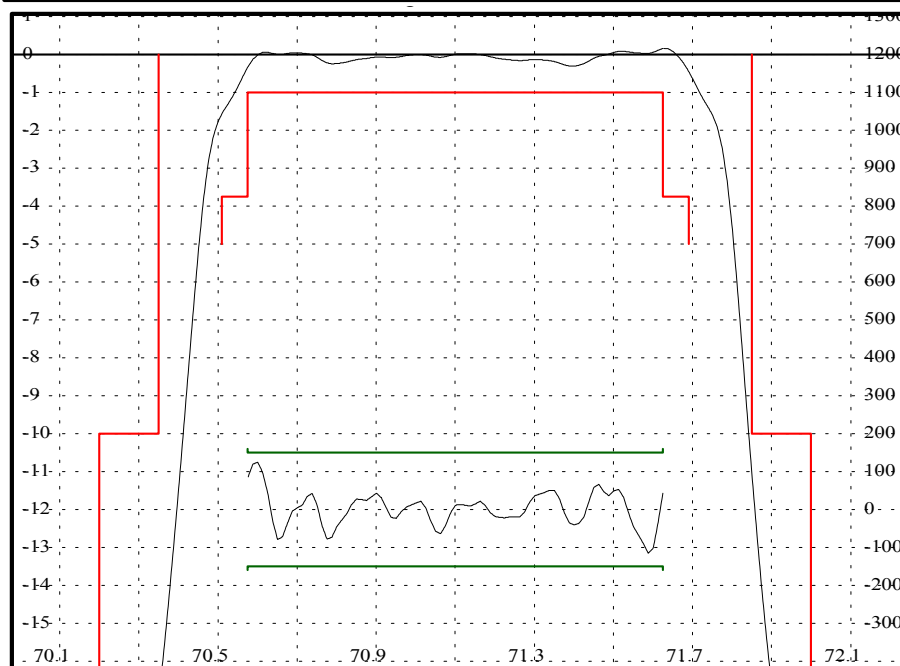
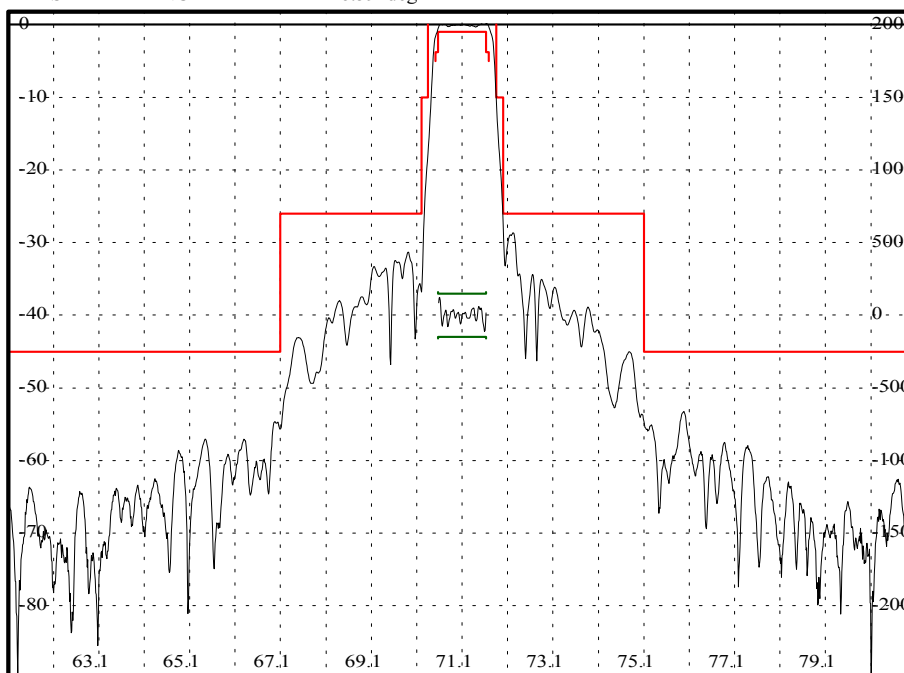
NOMINAL S21 RESPONSE (MEASUREMENT)

References

CENTER FREQUENCY = 71.1 MHz
LOSS REFERENCE = 11.18 dB
DELAY REFERENCE = 2.64 μ s
PHASE REFERENCE = 116.59 deg

Scales

SCALE_FREQUENCY = 1 MHz/div
SCALE_AMPLITUDE = 10 dB/div
SCALE_TPG = 500 ns/div



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PACKAGE DRAWING

