

TMX R757

SAW BANDPASS FILTER - BASE STATION WCDMA – Tx-IF

Specification

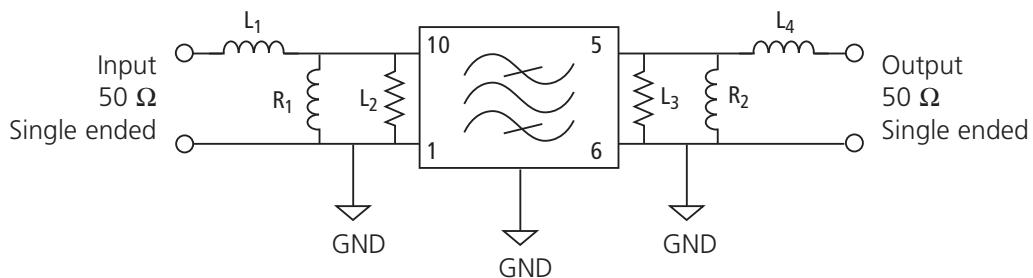
All performances include temperature variations

		Minimum	Typical	Maximum
Source Impedance (single ended) ⁽¹⁾	Ω		50	
Load Impedance (single ended) ⁽¹⁾	Ω		50	
Operating Temperature Range	$^{\circ}\text{C}$	-10		+80
Center Frequency F_c	MHz		160	
Bandwidth at -1 dB	MHz	9		
Template on the amplitude, reference is loss at F_c				
Attenuation at $F_c \pm 4.5$ MHz	dB			1.0
Attenuation at $F_c \pm 5.5$ MHz	dB	30		
Attenuation at $F_c \pm 5.8$ MHz	dB	35		
Attenuation at $F_c \pm 6.5$ MHz	dB	45		
Attenuation at $F_c \pm 20$ MHz	dB	50		
Minimum Insertion Loss ⁽¹⁾	dB		21	23
Amplitude Ripple within $F_c \pm 4.5$ MHz	dB _{p-p}		0.7	1.0
Phase Linearity within $F_c \pm 4.5$ MHz	deg _{p-p}		5.5	8.0
Input & Output Return loss over $F_c \pm 4.5$ MHz ⁽¹⁾	dB	10		
Maximum Input Power	W			1.0
Package type & size		SMP 12		
Length x Width	mm ²		24.7 x 9.0	
Height	mm			2.34
Pin Out				
Input	10	Output	5	
Input return	1	Output return	6	
Case Ground	2, 3, 4, 7, 8, 9	To Be Grounded	2, 3, 4, 5, 7, 8, 9, 10	

Note:

⁽¹⁾With Matching Network

Matching Network for 50 Ω / 50 Ω Configuration



Temex Microsonics test fixture	Customer PC board
$L_1 = 39$ nH, $L_2 = 22$ nH, $Q > 40$ (Coilcraft 1008CS) $R_1 = 1$ k Ω	$L_1 =$ TBD, $L_2 =$ TBD, $Q > 40$ $R_1 =$ TBD
$L_3 = 22$ nH, $L_4 = 33$ nH, $Q > 40$ (Coilcraft 1008CS) $R_2 = 220$ Ω	$L_3 =$ TBD, $L_4 =$ TBD, $Q > 40$ $R_2 =$ TBD

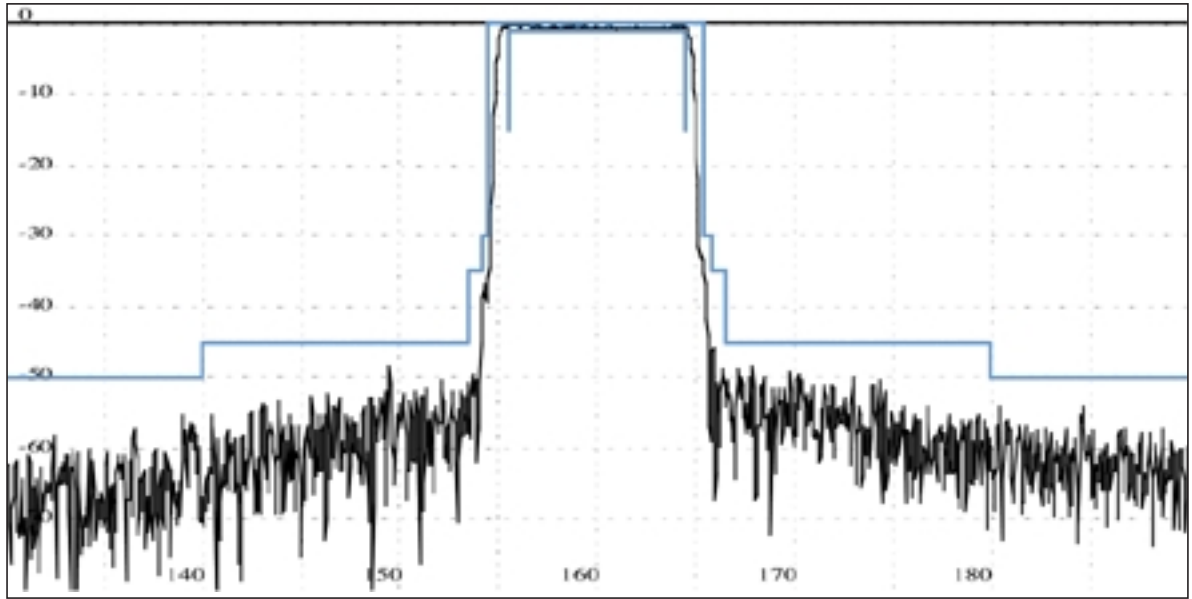
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Typical S21 response

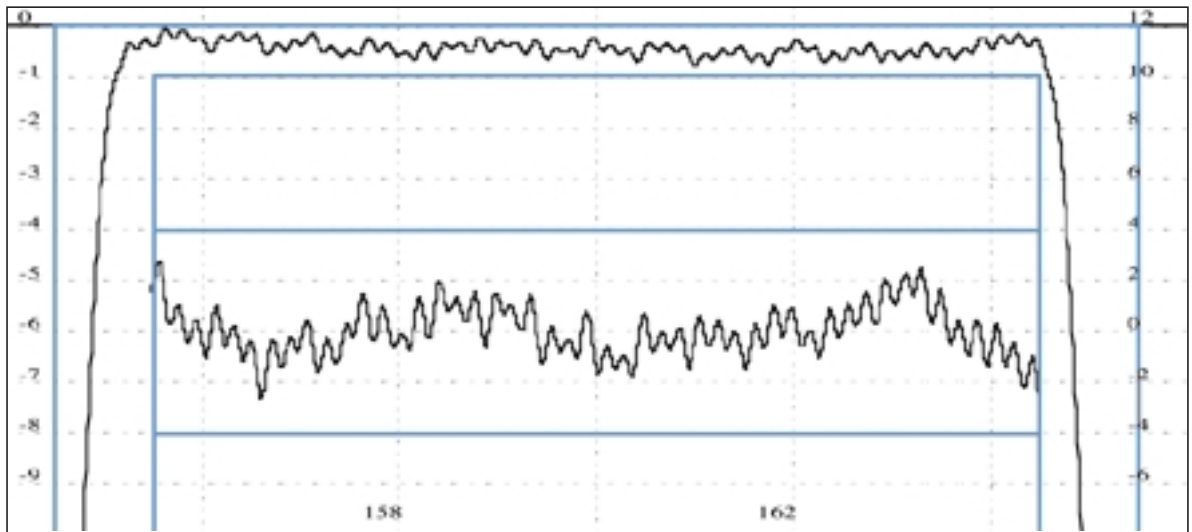
Plot bandwidth = 60 MHz
 Center frequency = 160 MHz
 Loss reference = 18.56 dB
 Delay reference = 2.65 μ s
 Phase reference = -146.9 deg

Scale frequency = 5 MHz/div
 Scale amplitude = 10 dB/div



Plot bandwidth = 12 MHz
 Center frequency = 160 MHz
 Loss reference = 18.56 dB
 Delay reference = 2.65 μ s
 Phase reference = -146.9 deg

Scale frequency = 2 MHz/div
 Scale amplitude = 1 dB/div
 Scale phase = 2 deg/div

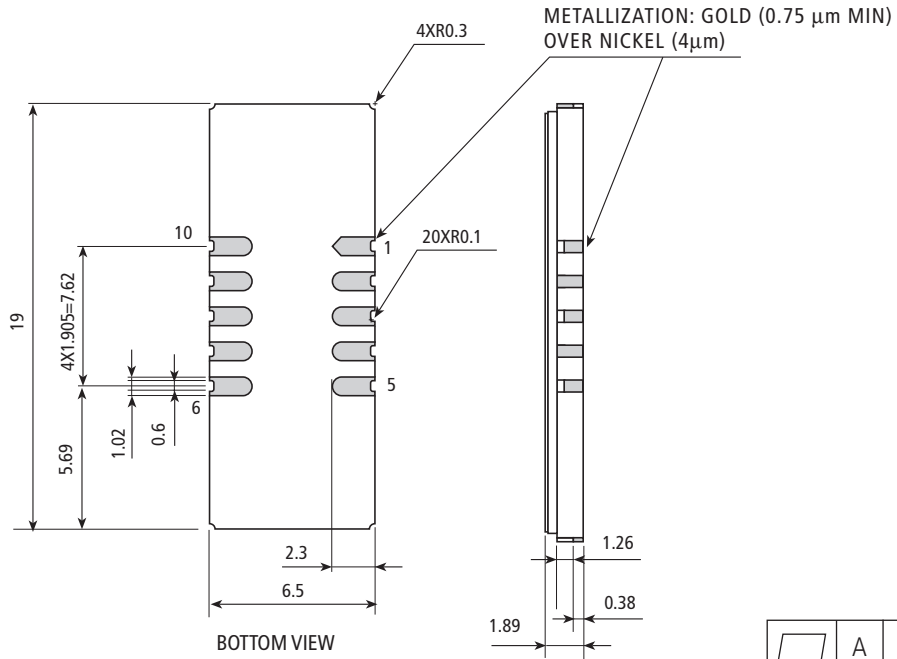


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Package

All dimensions are in mm



	A	0.1mm/25.4mm
General Tolerance		$\pm 0.2\text{mm}$