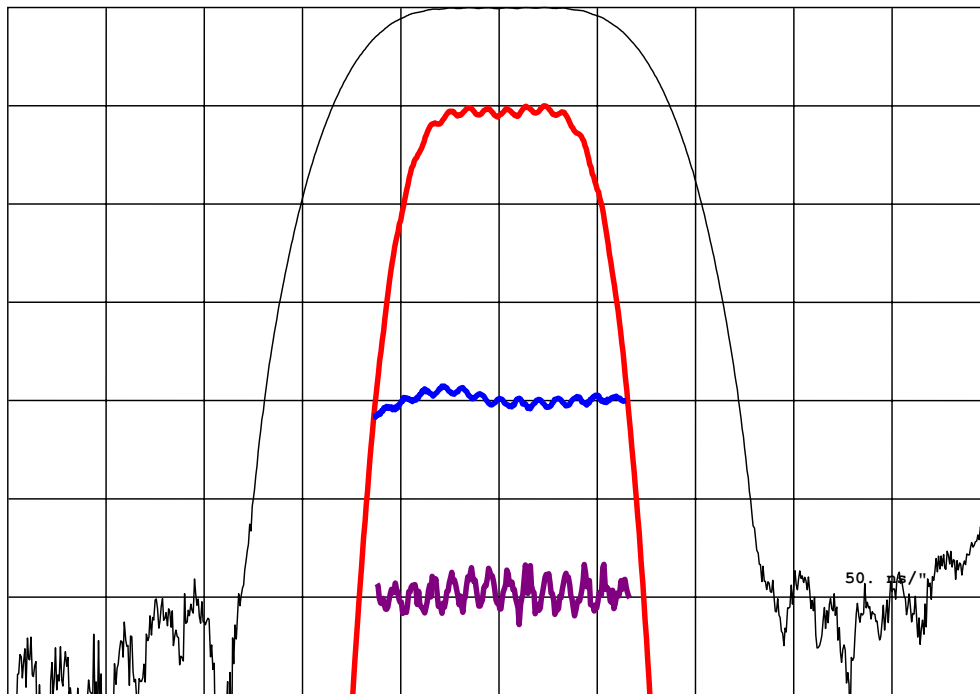


DESCRIPTION

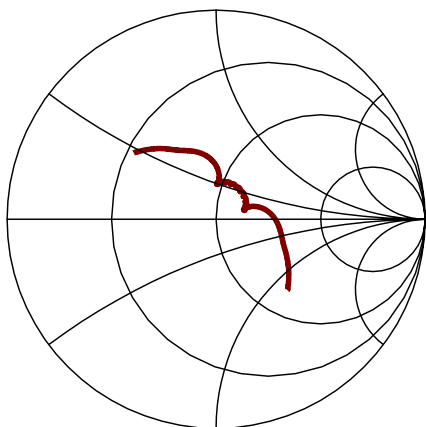
- 115 MHz SAW filter with 1.4 MHz bandwidth for CDMA applications.
- 24.9 x 12.95 mm DIP package.
- RoHS compliant.

TYPICAL PERFORMANCE

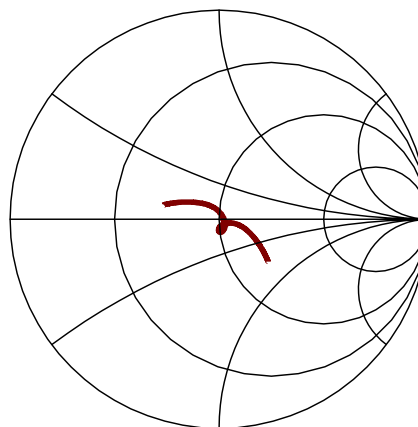


Horizontal: Frequency : 1 MHz/div
 Vertical from Top: Relative Magnitude : 10 dB/div
 Relative magnitude : 1 dB/div
 Phase : 5 deg/div
 Group Delay : 100 ns/div

S11 (110 to 120 MHz)



S22 (110 to 120 MHz)



SPECIFICATION

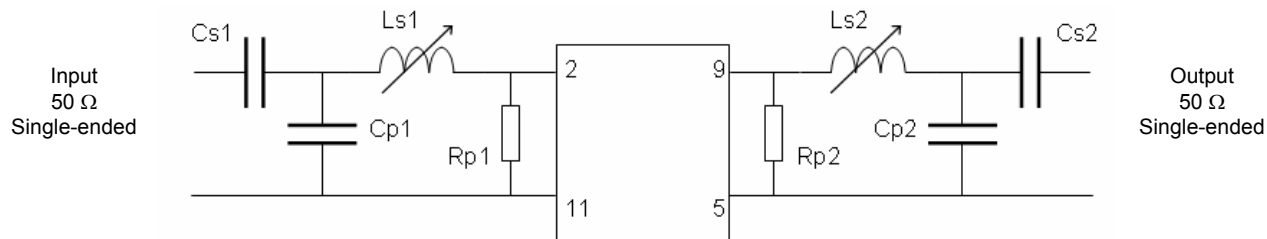
Parameter	Min	Typ	Max	Units
Center Frequency (Fo)	-	114.99	-	MHz
Lower 0.5 dB Frequency ¹	-	114.23	114.29	MHz
Upper 0.5 dB Frequency ¹	115.69	115.74	-	MHz
Attenuation at 110.04 MHz Single Tone ¹	65	70	-	MHz
Rejection (0.5 Fo to 112 MHz) ¹	55	58	-	dB
Rejection (118 MHz to 119 MHz) ¹	55	58	-	dB
Rejection (119 MHz to 122 MHz) ¹	50	55	-	dB
Rejection (122 MHz to 1.5 Fo MHz) ¹	55	58	-	dB
Insertion Loss ²	-	23.5	25.0	dB
Source and Load Impedance	-	50	-	Ω
Input Return Loss ²	14	18	-	dB
Output Return Loss ²	14	18	-	dB
Passband Ripple ^{2,3}	-	0.4	0.5	dB p-p
Deviation from Linear Phase ⁴	-	3.5	5.0	deg p-p
Integrated Phase Error ⁴	-	0.0011	0.0015	Rad ²

- Notes:
1. Levels are relative to the insertion loss at Fo.
 2. Into 50 Ω Matching Network shown below.
 3. Ripple is not part of loss from center to band edges in center 1.23 MHz.
 4. Over center 1.23 MHz including 50 Ω Matching Network shown below.

MAXIMUM RATINGS

Parameter	Min	Max	Units
Storage Temperature Range	-40	85	$^{\circ}\text{C}$
Operating Temperature Range	-10	70	$^{\circ}\text{C}$
Input Power Level	-	10	dBm

MATCHING CIRCUIT



Typical component values:

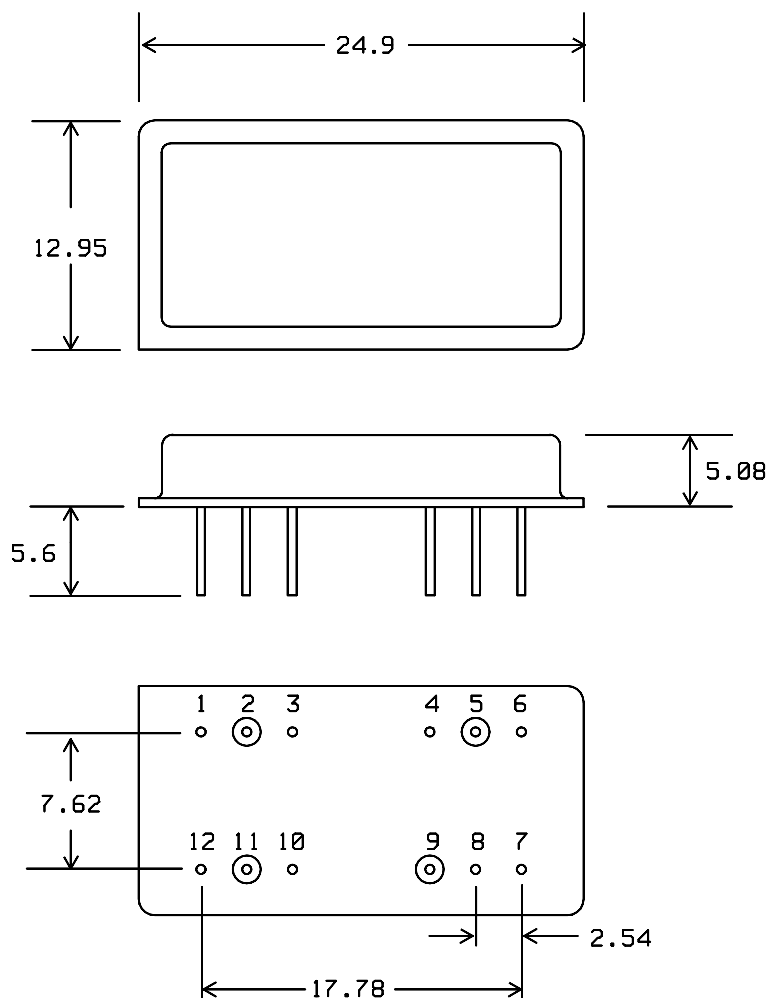
Cs1 = 220 pF	Cp1 = 33 pF	Rp1 = 2 K Ω
Cs2 = 110 pF	Cp2 = 33 pF	Rp2 = 1 K Ω
Ls1 = 172 to 216 nH	Ls2 = 142 to 184 nH	

Minimum Q=45

Notes:

1. Requires use of 2% tolerance components for all fixed value items.
2. Optimum values may differ from these when using a different fixture or board layout. The values shown here are intended as a guide only.

PACKAGE OUTLINE



Units: mm

Dimensions are nominal in mm. All tolerances are ± 0.15 mm except overall length and width.

Pin Configuration:

Input:	2
Input Return:	11
Output:	9
Output Return:	5
Ground:	1,3,4,6,7,8,10,12

ISO 9001
Registered

All specifications are believed to be accurate and reliable. However, Spectrum Microwave reserves the right to make changes without notice.
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