SAWTEK INCORPORATED

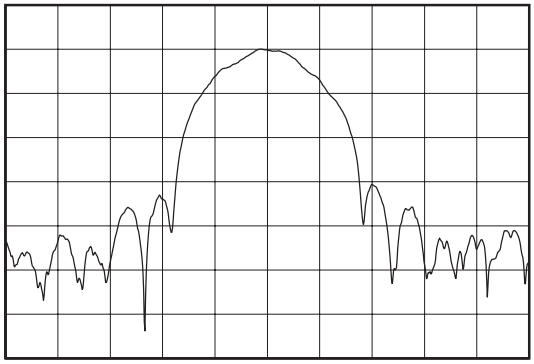
Data Sheet

130.380 MHz CDMA

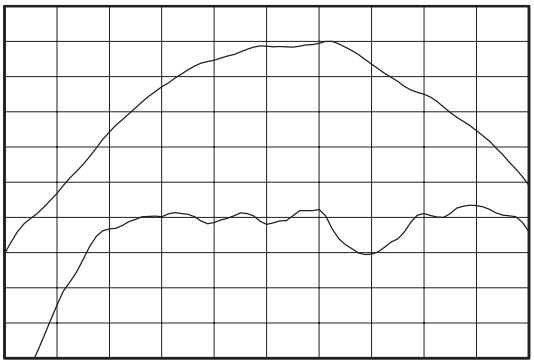
Subsrciber Transmitter Filter

Part Number 855769

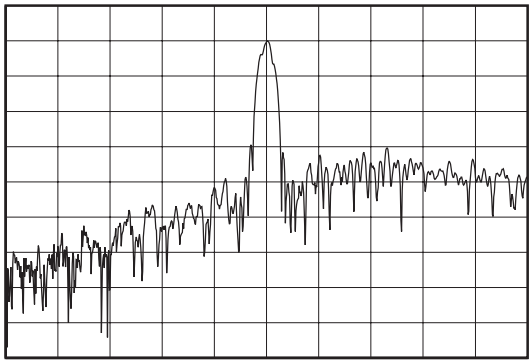
Typical Performance



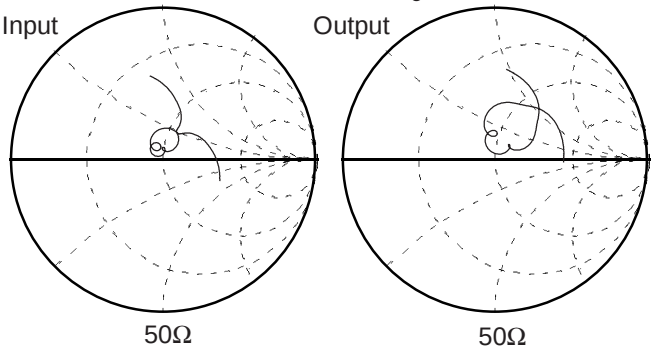
Horizontal: 3 MHz/Div
Vertical: 10 dB/Div



Horizontal: 300 kHz/Div
Vertical: .5 dB/Div
Vertical: 2 deg/Div



Horizontal: 20 MHz/Div
Vertical: 10 dB/Div



Specifications

Parameter[1]	Unit	Minimum	Typical	Maximum
Center Frequency, f_o	MHz	-	130.38	-
Insertion Loss at f_o	dB	-	5.0[2]	7.5
Lower 3 dB Bandedge	MHz	-	128.96	129.765
Upper 3 dB Bandedge	MHz	130.995	132.12	-
Lower 25 dB Bandedge	MHz	124.38	125.47	-
Upper 25 dB Bandedge	MHz	-	135.53	136.38
Phase Linearity($f_o \pm 0.5$ MHz)	deg RMS	-	0.4	2.5
Group Delay Variation	nsec	-	68	150
Passband Ripple[3]	dB	-	0.1	1
Ultimate Rejection	dB	30	50	-
Source/Load Characteristics	Ω	-	50/50 to 1K/1K Single-ended or Differential	-
Substrate Material	-	-	$LiNbO_3$	-
Operating Temperature Range[5]	°C	-30	25	75

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3/10/00

NOTES

(1) Sawtek's production specifications reflect the typical performance in a 50 ohm single-ended system. This filter can be used in both single-ended and/or differential modes at each port. In addition, similar performance can be achieved in source and load impedances ranging from 50 to 1000 ohms.

(2) The typical insertion loss may vary slightly depending on actual source and load impedances, matching configuration and PC board layout. In a 1000 ohm source and 1000 ohm load, single-ended or balanced configuration, the typical insertion loss is 6.0 dB.

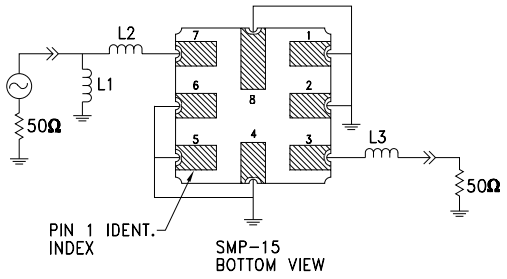
(3) Passband Ripple is defined to be maximum peak to adjacent valley amplitude change within the passband excluding roll-offs.

(4) Inductors with ±2% tolerance may be required.

(5) In production, devices will be tested at room temperature to a guardbanded specification to ensure electrical compliance over temperature.

Matching Configurations

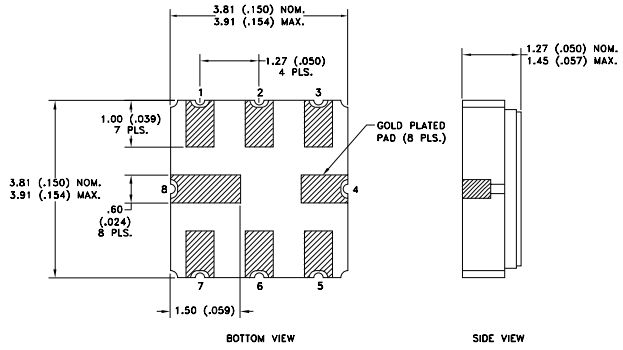
50Ω Single-ended



L1 = 180 nH , L2 = 82 nH , L3 = 56 nH

Package Outline

SMP-15



Dimensions shown are in millimeters (inches)