SAWTEK INCORPORATED

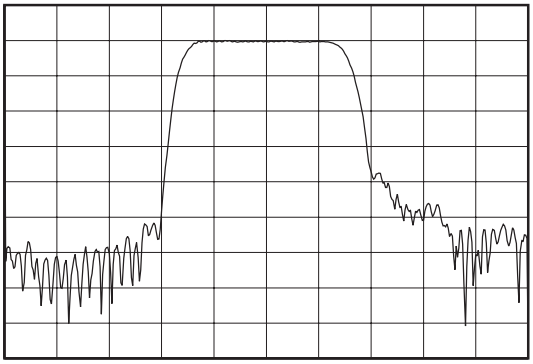
Data Sheet

374 MHz Bandpass Filter

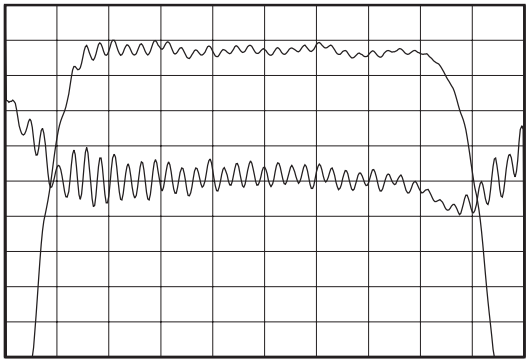
17 MHz Bandwidth

Part Number 855653

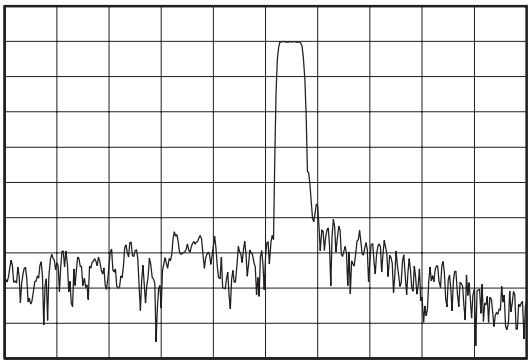
Typical Performance



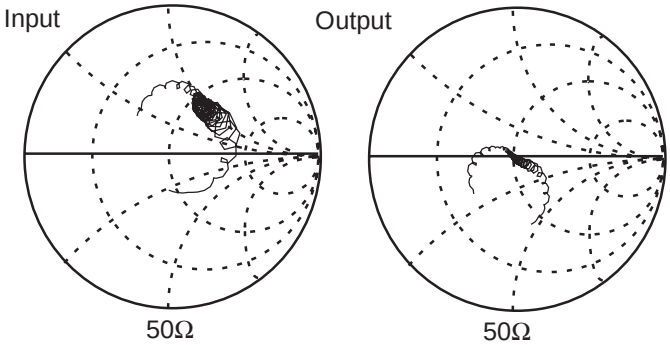
Horizontal: 8 MHz/Div
Vertical: 10 dB/Div



Horizontal: 3 MHz/Div
Vertical: 1 dB/Div, 30 nsec/Div



Horizontal: 50 MHz/Div
Vertical: 10 dB/Div



Specifications

Parameter	Unit	Minimum	Typical	Maximum
Center Frequency	MHz	-	374	-
Insertion Loss	dB	-	8.5	11
3 dB Bandwidth	MHz	± 8.5	± 12	-
Passband Ripple (over 90% of 1 dB BW)	dB p-p	-	0.6	1
Group Delay Ripple	nsec	-	60	100
Rejection: 274 - 341 MHz	dB	50	55	-
Rejection: 341 - 352 MHz	dB	40	60	-
Rejection: 352 - 357.5 MHz	dB	10	50	-
Rejection: 390.5 - 396 MHz	dB	10	37	-
Rejection: 396 - 430 MHz	dB	30	45	-
Rejection: 430 - 474 MHz	dB	45	50	-
Triple Transit Suppression	dB	30	40.5	-
Substrate Material	-	-	YZ $LiNbO_3$	-
Operating Temperature Range	°C	-40	25	85

10/20/99

(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 500 ohms.

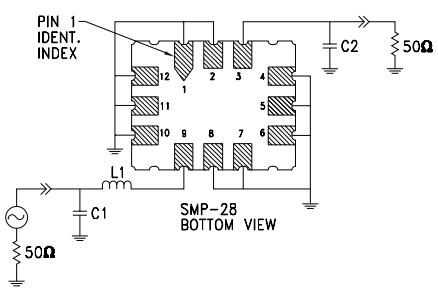
(2) The typical insertion loss may vary slightly depending on actual source and load impedances, matching configuration and PC board layout.

(3) No Triple Transit gating required.

(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.

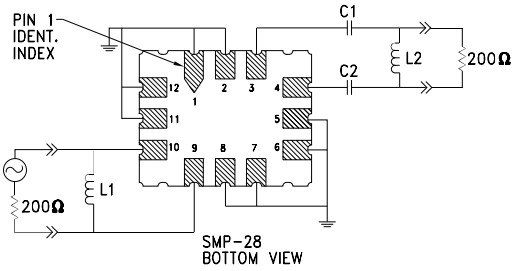
50Ω Single-ended



L1 = 22 nH

C1 = 12 pf, C2 = 15 pf

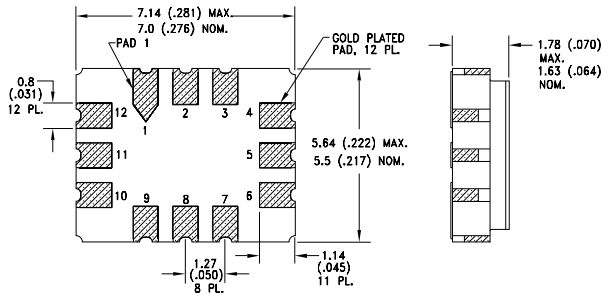
200Ω Balanced / 200Ω Balanced



L1 = 27 nH, L2 = 15nH

C1 = 22 pf, C2 = 22 pf

SMP-28B



Dimensions shown are in millimeters (inches).