SAWTEK INCORPORATED

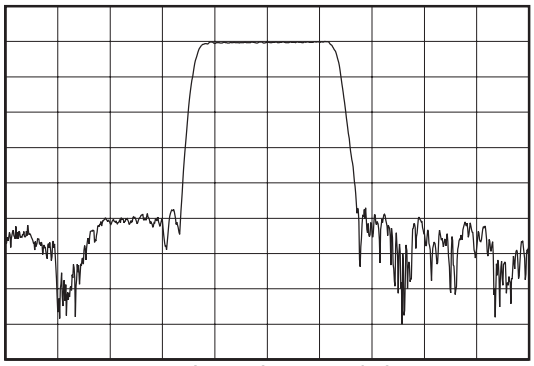
Data Sheet

# 70 MHz Low-Loss Filter

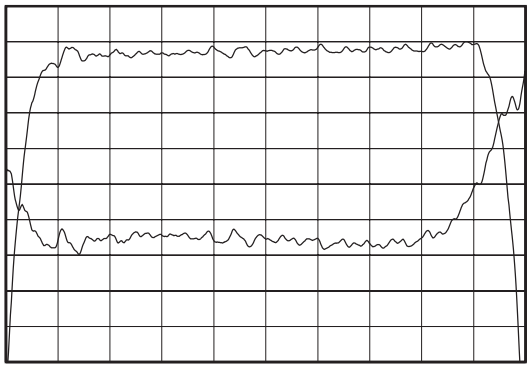
**18 MHz Bandwidth**

**Part Number 854669**

## Typical Performance



Horizontal: 7 MHz/Div
Vertical: 10 dB/Div

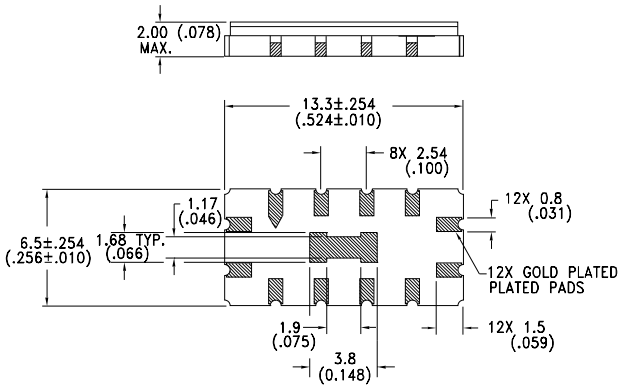


Horizontal: 2 MHz/Div
Vertical: 1 dB/Div
Vertical: 5 deg/Div

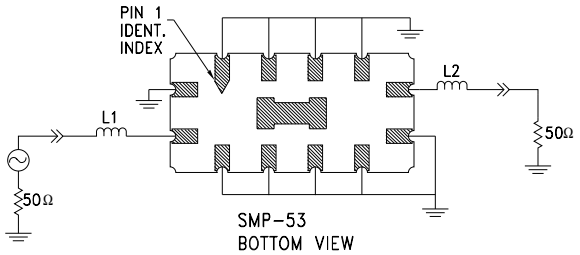
## Specifications

| Parameter | Unit | Minimum | Typical | Maximum |
|---|---|---|---|---|
| Center Frequency | MHz | 69.8 | 70 | 70.2 |
| Insertion Loss at $F_o$ | dB | - | 13.5 | 14.5 |
| 1 dB Bandwidth | MHz | 17.25 | 17.55 | - |
| 3 dB Bandwidth | MHz | 18 | 18.5 | - |
| 40 dB Bandwidth | MHz | - | 23.4 | 24.1 |
| Passband Ripple | dB | - | 0.7 | 1 |
| Phase Linearity (90% of 3dB Bandwidth) | deg | - | 9.25 | 12 |
| Group Delay Variation (90% of 3dB Bandwidth) | nsec | - | 70 | 100 |
| Absolute Delay | µsec | - | 1.07 | - |
| Substrate Material | - | - | YZ $LiNbO_3$ | - |
| Temperature Coefficient | ppm/°C | - | -94 | - |
| Ambient Temperature | °C | - | 25 | - |

## Package Outline




## Matching Configuration




L1 = 120, L2 = 100nH
Nominal Source/Load Impedance = 50Ω
Package Style SMP-53

11/29/99

Sawtek Inc. Telephone: (407) 886-8860 Fax: (407) 886-7061