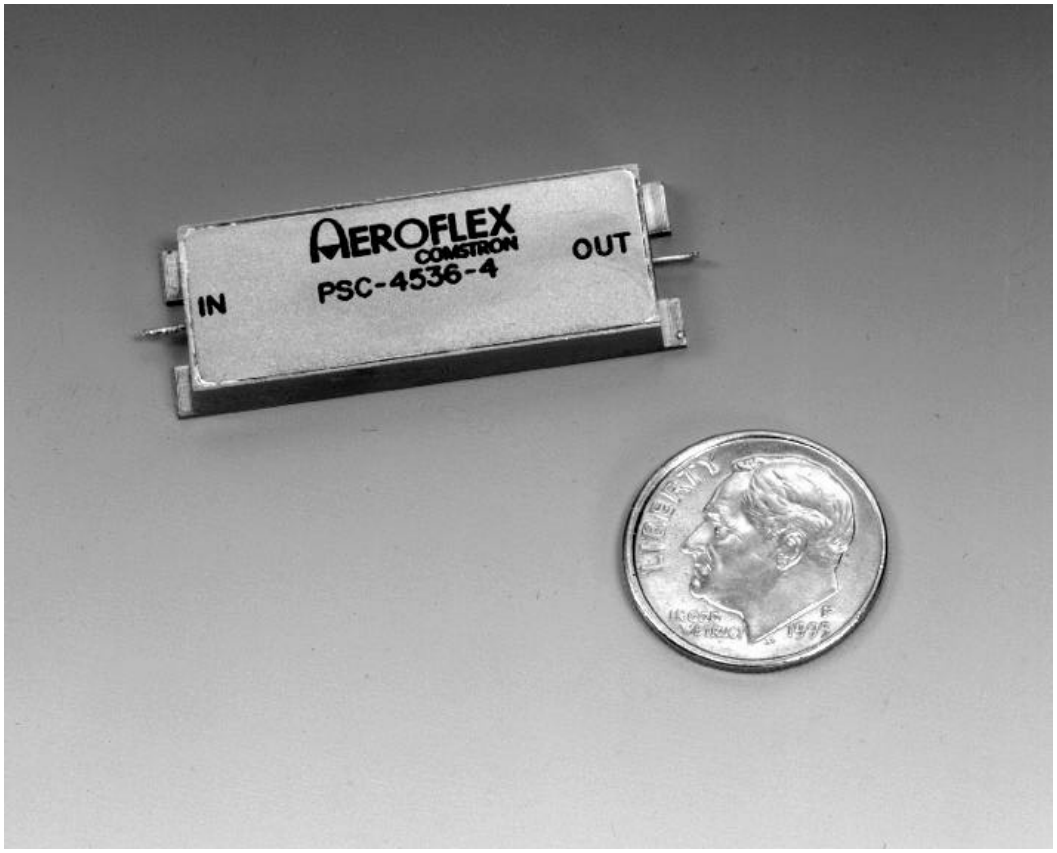
# PSC-4536-4

# SURFACE MOUNT 70 MHZ SQUARE ROOT RAISED COSINE FILTER WITH .160 INCH HEIGHT




## FEATURES

- SURFACE MOUNTABLE
- LOW PROFILE FOR **SEM** APPLICATION
- HIGH PERFORMANCE
- FREQUENCY RANGE 70MHZ- 18 GHZ

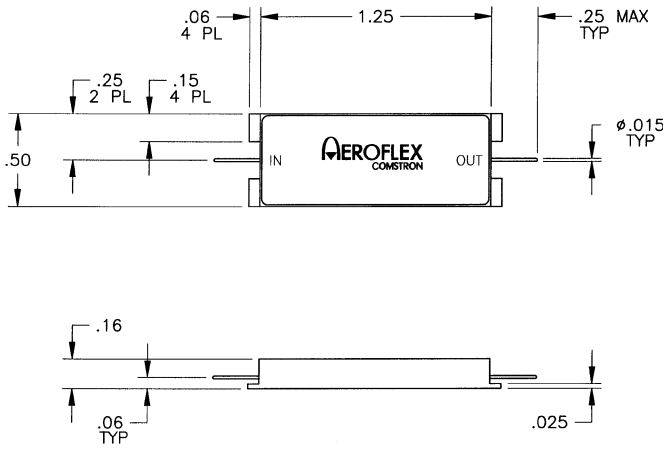
## DESCRIPTION

The Comstron Model PSC-4536-4 is a square-root raised cosine bandpass filter that serves to normalize the amplitude response of an input $|(\sin x)/x|$ signal spectrum and produces minimum time domain distortion in a **PAM** system. The filters small size and low profile of only **.160 inches** allows its use in a Military **SEM** Package .

## SPECIFICATIONS

| CHARACTERISTICS | LIMITS |
|---|---|
| CENTER FREQUENCY | 70.0 MHz |
| 1 DB BANDWIDTH<br>TOLERANCE | ± .975 MHz<br>±.1 dB |
| 3 DB BANDWIDTH<br>TOLERANCE | ± 1.625 MHz<br>± .4 dB |
| 10 DB BANDWIDTH<br>TOLERANCE | ± 2.6 MHz<br>± 1.0 dB |
| 30 DB BANDWIDTH<br>TOLERANCE | ± 3.25 MHz<br>± 4.0 dB |
| ULTIMATE ATTENUATION TO 200 MHZ | 50 dB MINIMUM |
| INSERTION LOSS | 15 dB NOMINAL |
| IMPULSE RESPONSE | 10% MAXIMUM |
| NYQUIST FREQUENCY | 3.25 MHz |
| CHANNEL ROLLOFF FACTOR | α=1.0 |
| OPERATING TEMP. | -55° T0 + 100 °C |

## OUTLINE DRAWING




## RESPONSE CURVES

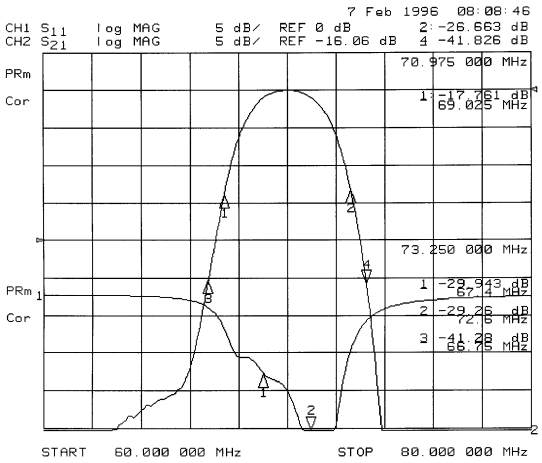



***Figure 1: Frequency Response***

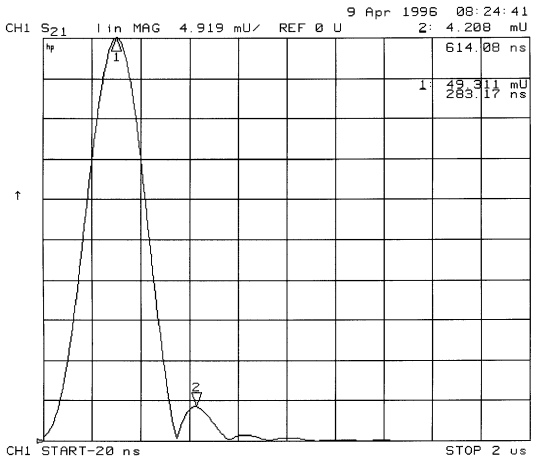



***Figure 2: Impulse Response***