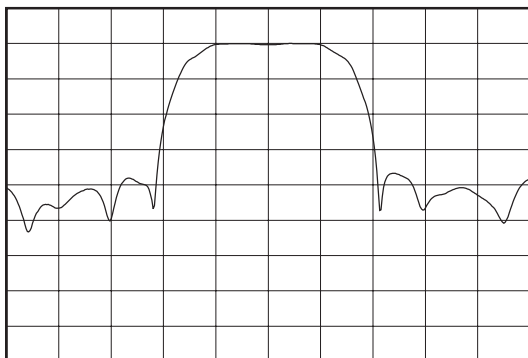
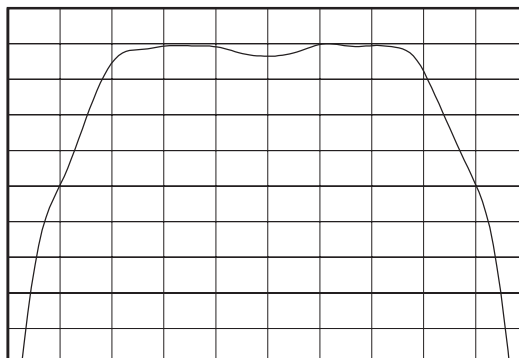


# Preliminary Specifications

## Typical Performance



Horizontal: 420 kHz/Div  
 Vertical: 10 dB/Div



Horizontal: 150 kHz/Div  
 Vertical: 1 dB/Div

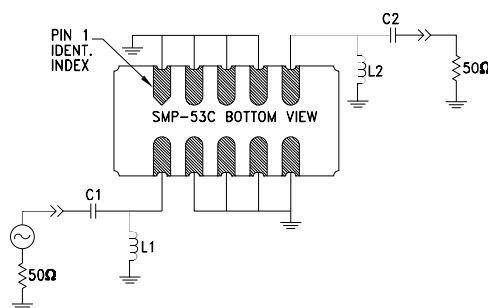
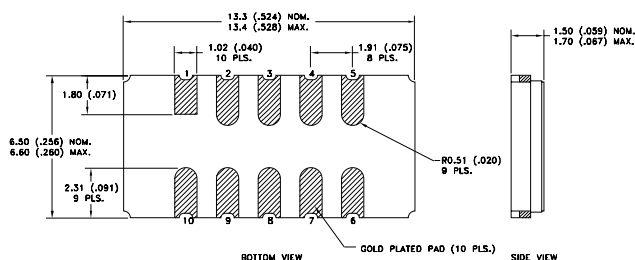
## Specifications

| Parameter                                  | Unit               | Minimum | Typical                                                    | Maximum |
|--------------------------------------------|--------------------|---------|------------------------------------------------------------|---------|
| Center Frequency                           | MHz                | -       | 85.38                                                      | -       |
| Insertion Loss                             | dB                 | -       | 10.7                                                       | 12      |
| Attenuation @ $f_o \pm 0.630$ MHz          | dB                 | -       | 3.5                                                        | 5       |
| Attenuation @ $f_o \pm 0.9$ MHz            | dB                 | 33      | 40 - 50                                                    | -       |
| Attenuation @ $f_o \pm 1.25$ MHz           | dB                 | 33      | 35 - 40                                                    | -       |
| Attenuation @ $f_o \pm 1.7$ MHz            | dB                 | 33      | 46 - 48                                                    | -       |
| Attenuation @ $f_o \pm 2.05$ MHz           | dB                 | 33      | 40 - 43                                                    | -       |
| Amplitude Variation ( $f_o \pm 0.300$ MHz) | dB p-p             | -       | 0.35                                                       | 0.7     |
| Phase Linearity ( $f_o \pm 0.630$ MHz)     | deg rms            | -       | 1.9                                                        | 3       |
| Ultimate Rejection                         | dB                 | 45      | 55                                                         | -       |
| Source/Load Characteristics *              | $\Omega$           | -       | 1K $\Omega$ / 500 $\Omega$<br>Single-ended or Differential | -       |
| Substrate Material                         |                    | -       | Quartz                                                     | -       |
| Operating Temperature Range                | $^{\circ}\text{C}$ | -30     | 25                                                         | 80      |

## Package Outline

## Matching Configuration

\* Can be used 50 $\Omega$  to 1K $\Omega$  with degradation in Insertion Loss



L1 = 220 nH , L2 = 180 nH  
 C1 = 3 pf , C2 = 3 pf  
 Nominal Source/Load Impedance = 50 $\Omega$   
 Package Style SMP-53C