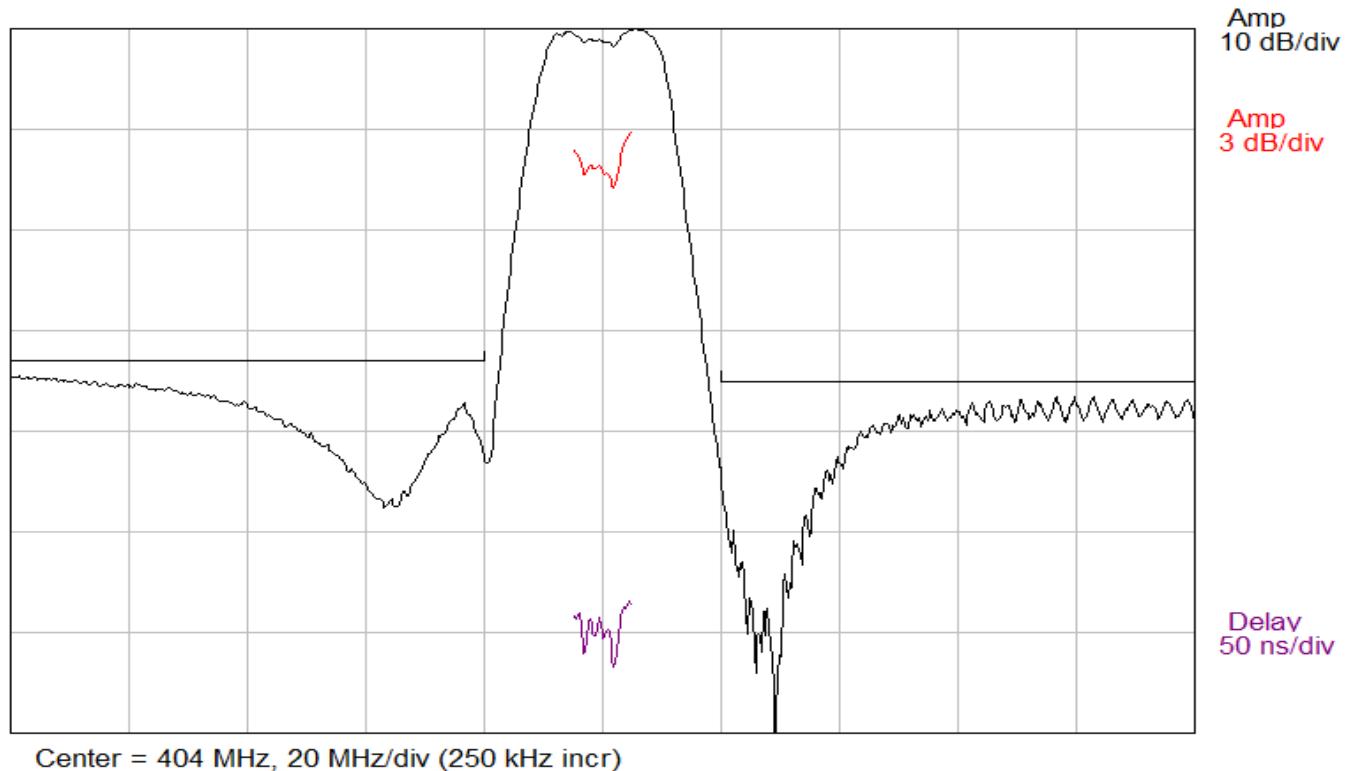
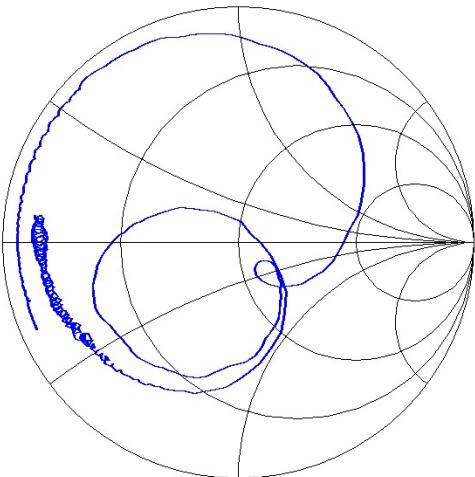


- 404 MHz Filter with 12 MHz Bandwidth
- 3.8 x 3.8 mm Ceramic LCC Package, 6 Pads
- RoHS compliant

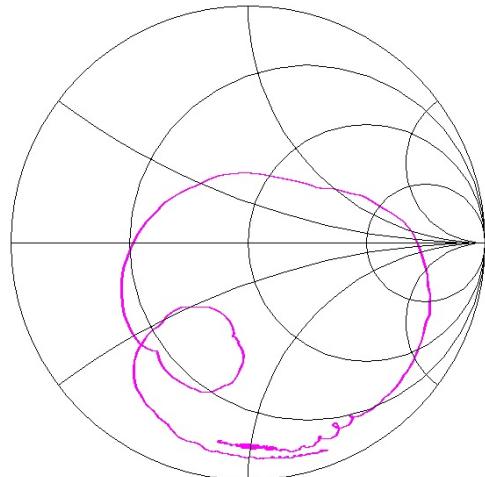
**TYPICAL PERFORMANCE**



**$S_{11}$  (304-504 MHz)**



**$S_{22}$  (304-504 MHz)**



Parameter	Min	Type	Max	Units
Insertion Loss	---	4.0	4.4	dB
Device Delay	---	0.033	---	μsec
Center frequency (FC, 3dB) <sup>1</sup>	---	404.11	---	MHz
3 dB Bandwidth <sup>1</sup>	12	19.91	---	MHz
Lower 3 dB Frequency <sup>1</sup>	---	394.15	398	MHz
Upper 3 dB Frequency <sup>1</sup>	410	414.06	---	MHz
35 dB Bandwidth <sup>1</sup>	---	35.51	---	MHz
Lower 35 dB Frequency <sup>1</sup>	384	386.19	---	MHz
Upper 35 dB Frequency <sup>1</sup>	---	421.70	424	MHz
Amplitude Ripple (399-409 MHz)	---	1.65	3	dB p-p
Rejection (306-393 MHz) <sup>1</sup>	33	35	---	dB
Rejection (418-506 MHz) <sup>1</sup>	35	37	---	dB
Input Return Loss (399-409 MHz) <sup>2</sup>	---	5.1	---	dB
Output Return Loss (399-409 MHz) <sup>2</sup>	---	4.9	---	dB
Material Temperature Coefficient	-50			ppm/°C
Source and Load Impedance	50			ohms
Ambient Temperature	25			°C

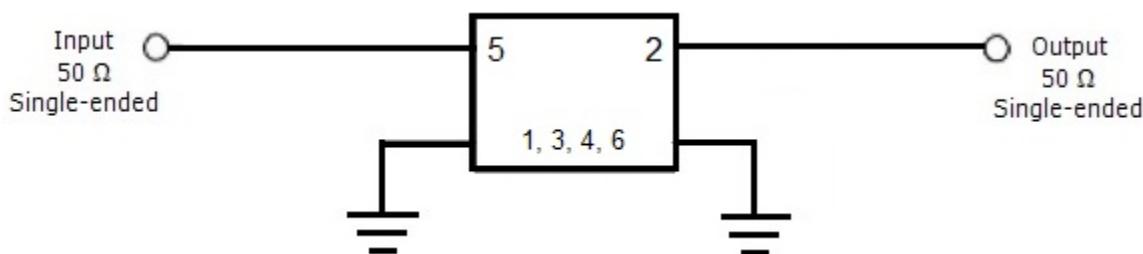
Notes:

1. Parameter value is referenced to the insertion loss value.
2. Part is to operate in a 50 ohm single-ended system.

## MAXIMUM RATINGS

Parameter	Min	Max	Units
Storage Temperature Range	-55	125	°C
Input Power Level	-	+30	dBm

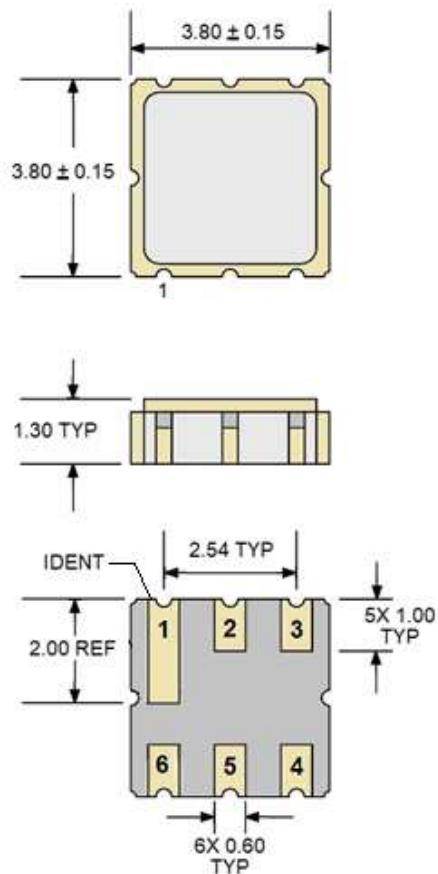
## CIRCUIT



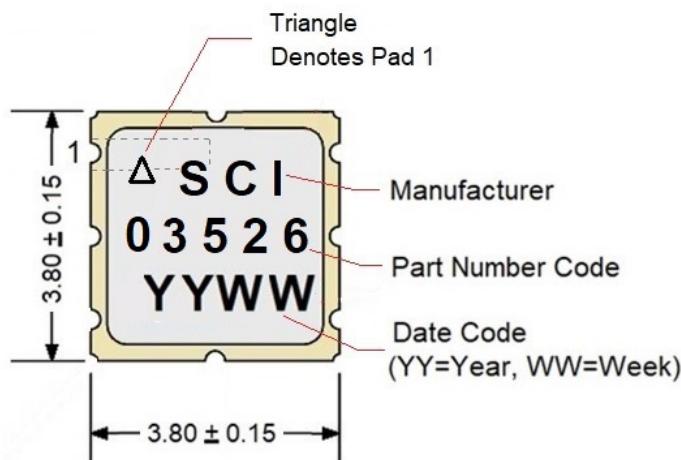
### Notes:

- 1) Matching components are not required.
- 2) Recommended operation is in a 50 ohm system.

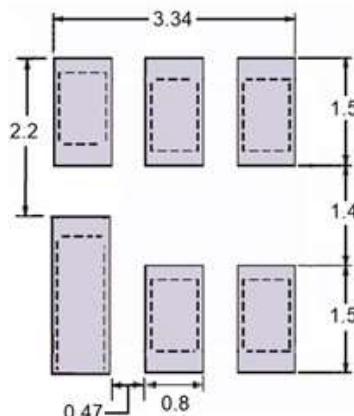
## PACKAGE OUTLINE



## MARKING



## SUGGESTED FOOTPRINT



**Units:** mm

Typical tolerances are  $\pm 0.15$  mm except where indicated.

**Pad Configuration:**

Input:	5
Output:	2
Ground:	All other pads

**Package Material:**

Body:  $\text{Al}_2\text{O}_3$  ceramic  
 Lid: Kovar, Ni plated  
 Terminations: Au plating 1 um min, over a 1.3-8.9 um Ni plating

ISO 9001  
Registered