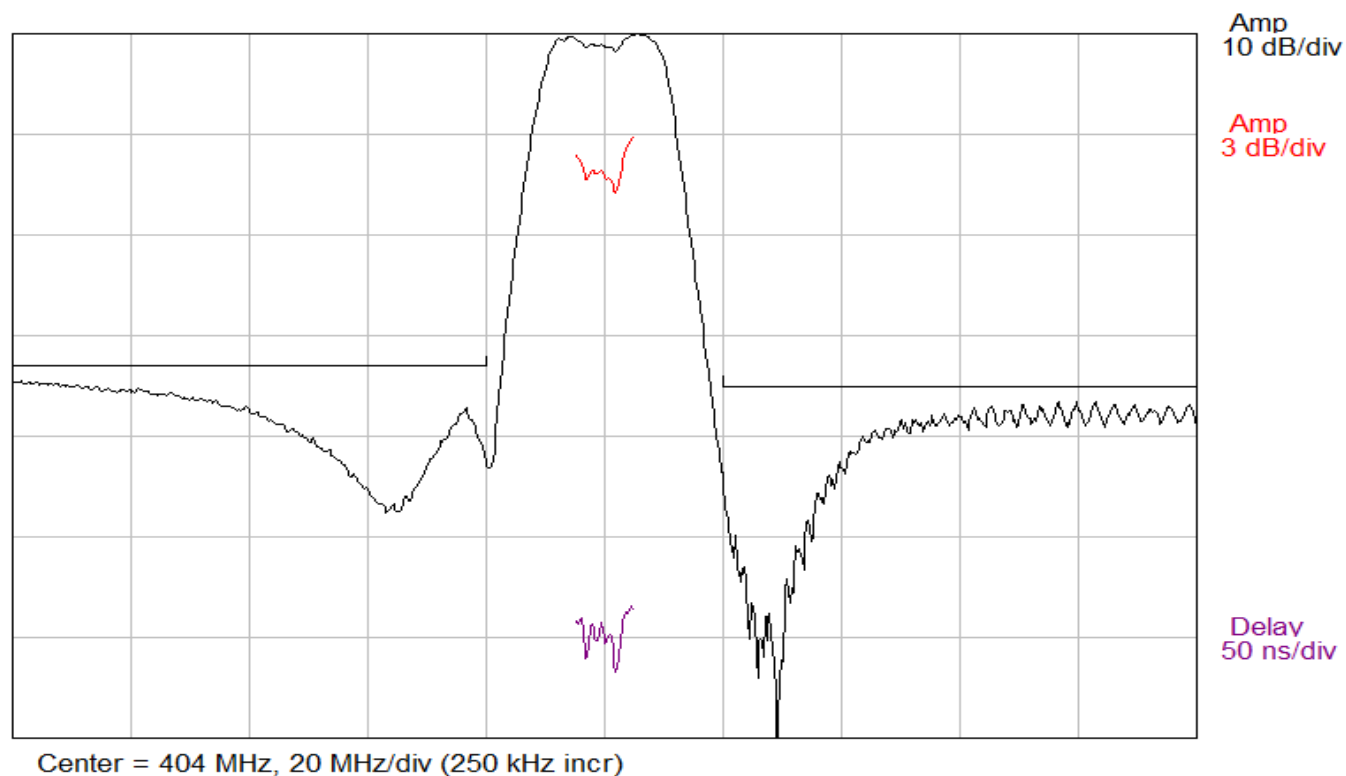
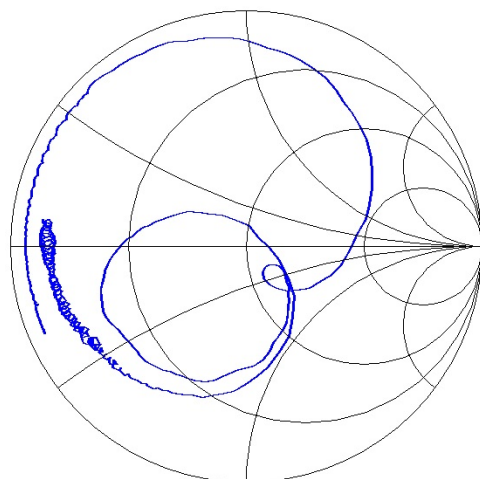


- 404 MHz Filter with 12 MHz Bandwidth
- 3.8 x 3.8 mm Ceramic LCC Package, 6 Pads
- RoHS compliant

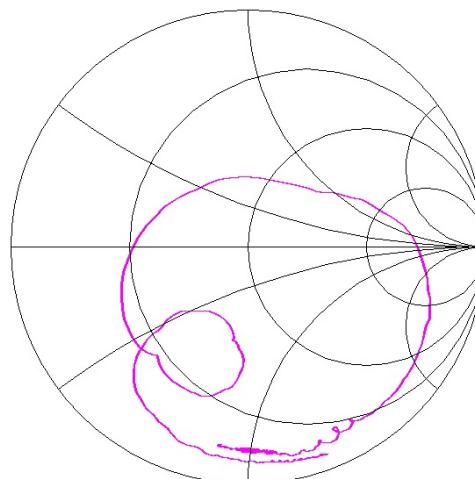
## TYPICAL PERFORMANCE



**S<sub>11</sub> (304-504 MHz)**



**S<sub>22</sub> (304-504 MHz)**



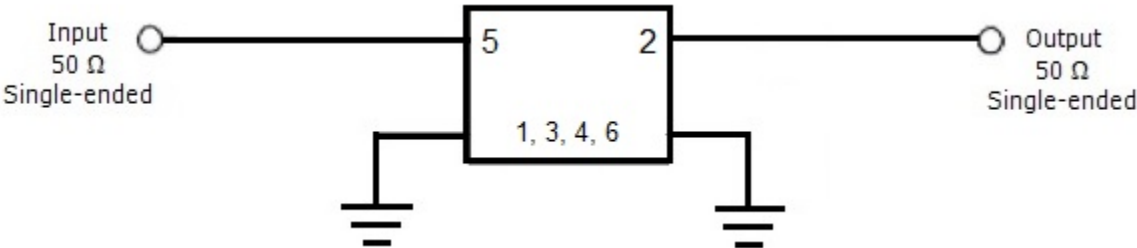
Parameter	Min	Type	Max	Units
Insertion Loss	---	4.0	4.4	dB
Device Delay	---	0.033	---	μsec
Center frequency (FC, 3dB) <sup>1</sup>	---	404.11	---	MHz
3 dB Bandwidth <sup>1</sup>	12	19.91	---	MHz
Lower 3 dB Frequency <sup>1</sup>	---	394.15	398	MHz
Upper 3 dB Frequency <sup>1</sup>	410	414.06	---	MHz
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

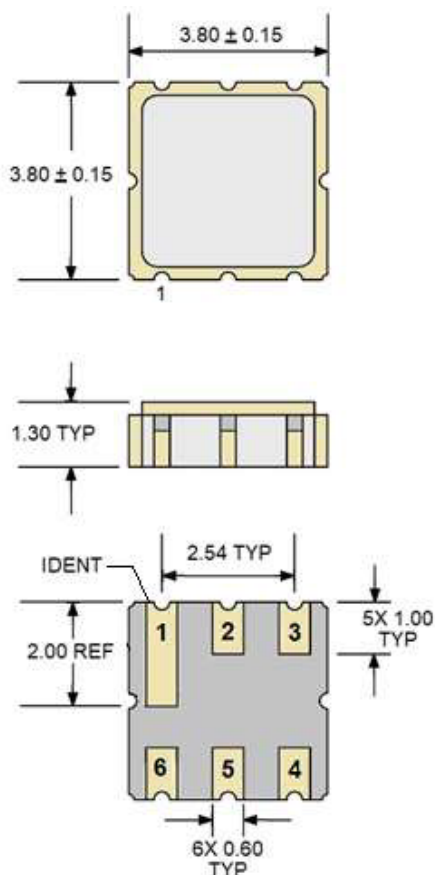
Parameter	Min	Max	Units
Storage Temperature Range	-55	125	°C
Input Power Level	-	+30	dBm

CIRCUIT

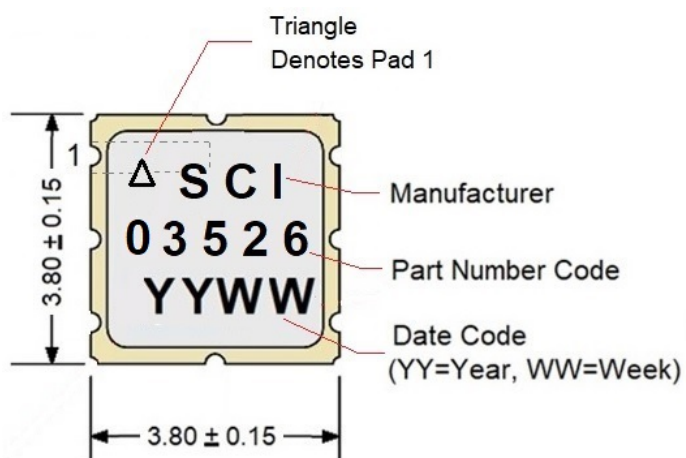


Notes:  
1) Matching components are not required.  
2) Recommended operation is in a 50 ohm system.

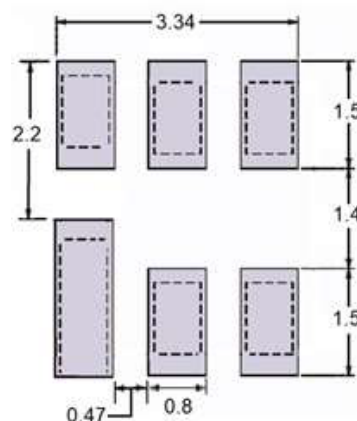
## PACKAGE OUTLINE



## 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  $\mu\text{m}$  min,  
over a 1.3-8.9  $\mu\text{m}$  Ni plating

ISO 9001  
Registered