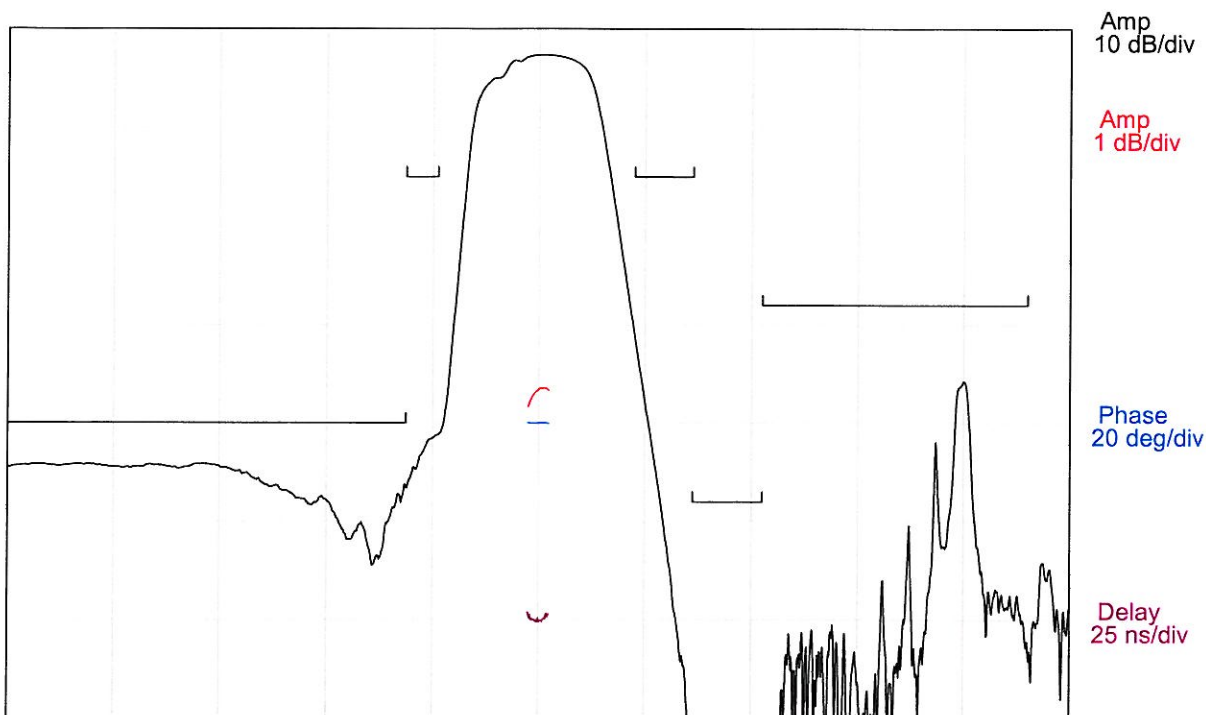


## DESCRIPTION

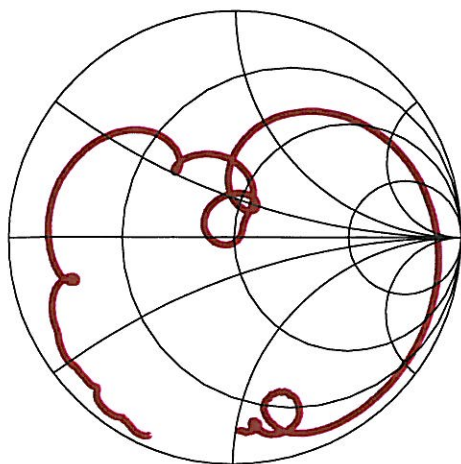
- 869 MHz SAW Filter with 2 MHz bandwidth.
- 3 x 3 mm LCC package, 6 pads.
- RoHS compliant.

## TYPICAL PERFORMANCE

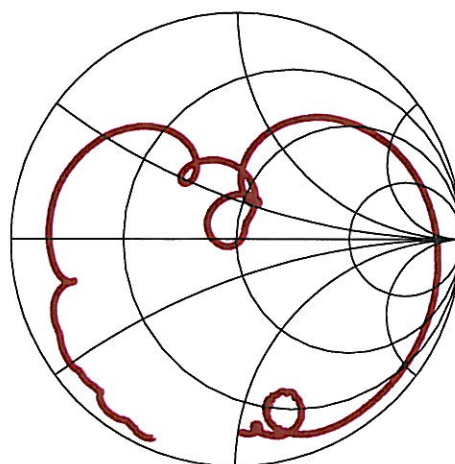


Center = 869 MHz, 10 MHz/div (62.5 kHz incr)

**S11 (819-919 MHz)**



**S22 (819-919 MHz)**



## SPECIFICATION

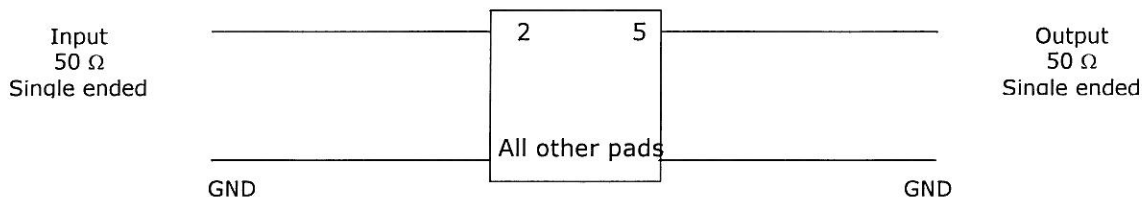
| Parameter                                         | Min | Typ <sup>(1)</sup> | Max | Units  |
|---------------------------------------------------|-----|--------------------|-----|--------|
| Center Frequency $F_c$                            | -   | 869                | -   | MHz    |
| Insertion Loss (868-870 MHz)                      | -   | 2.8                | 3.4 | dB     |
| Amplitude Ripple (868-870 MHz)                    | -   | 0.3                | 1.5 | dB     |
| 3 dB Bandwidth                                    | -   | 9.5                | -   | MHz    |
| Source Impedance (Single Ended)                   | 50  |                    |     | ohms   |
| Load Impedance (Single Ended)                     | 50  |                    |     | ohms   |
| Absolute Attenuation (DC to 300 MHz) <sup>2</sup> | 45  | 52                 | -   | dB     |
| 300 to 856.5 MHz <sup>2</sup>                     | 40  | 44                 | -   | dB     |
| 856.5 to 859.5 MHz <sup>2</sup>                   | 15  | 40                 | -   | dB     |
| 878 to 883.5 MHz <sup>2</sup>                     | 15  | 30                 | -   | dB     |
| 883.5 to 890 MHz <sup>2</sup>                     | 48  | 70                 | -   | dB     |
| 890 to 915 MHz <sup>2</sup>                       | 28  | 36                 | -   | dB     |
| 915 to 1500 MHz <sup>2</sup>                      | 40  | 50                 | -   | dB     |
| Temperature Coefficient of Frequency              |     | -                  | -36 | ppm/°C |

Notes: 1). Typical values are nominal performance at room temperature.  
2). Reference level from 0 db.

## MAXIMUM RATINGS

| Parameter                                | Min | Max | Units |
|------------------------------------------|-----|-----|-------|
| Storage Temperature Range                | -40 | 85  | °C    |
| Operating temperature Range              | -40 | 85  | °C    |
| Input Power Level                        | -   | +15 | dBm   |
| Max. D. C. Voltage between Each Terminal | -   | 3   | V     |

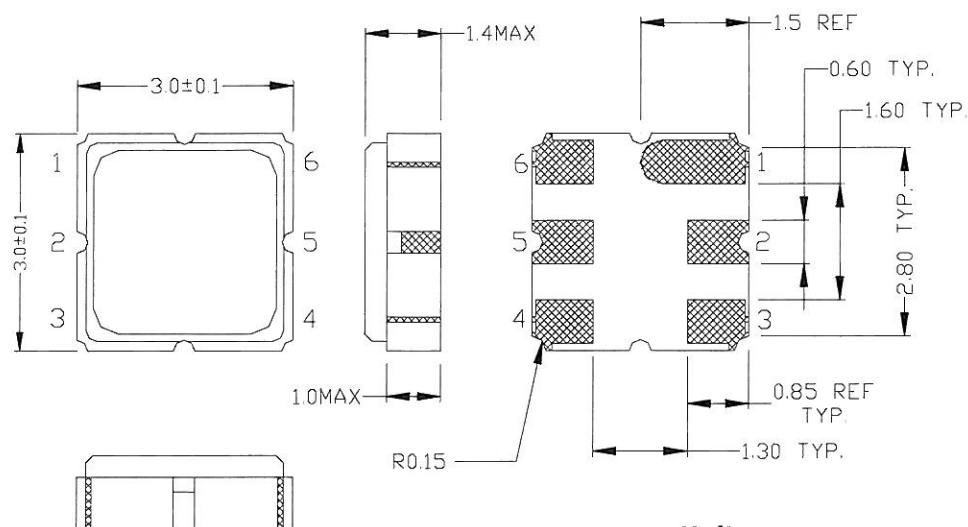
## MATCHING CIRCUIT



Notes:

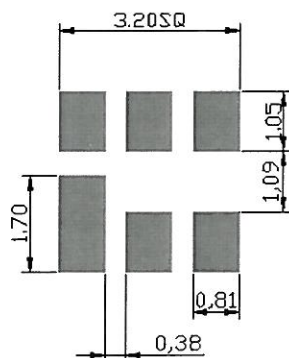
- External matching components are not required.
- Device is intended to operate in a 50  $\Omega$  single ended system.

## PACKAGE OUTLINE



**Units:** mm

## SUGGESTED FOOTPRINT



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

### Pad Configuration:

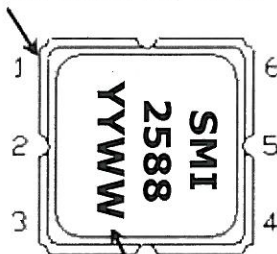
Input: 2  
Output: 5  
Ground: All other pads

### Package Material:

Body:  $Al_2O_3$  ceramic  
Lid: Kovar, Ni plated  
Terminations: Au plating 1  $\mu$ m min, over a 1.3-8.9  $\mu$ m Ni plating

## MARKING

### ODD SHAPED PAD



DATE CODE (YEAR, WEEK)

**ISO 9001**  
**Registered**

All specifications are believed to be accurate and reliable. However, Spectrum Microwave reserves the right to make changes without notice.  
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