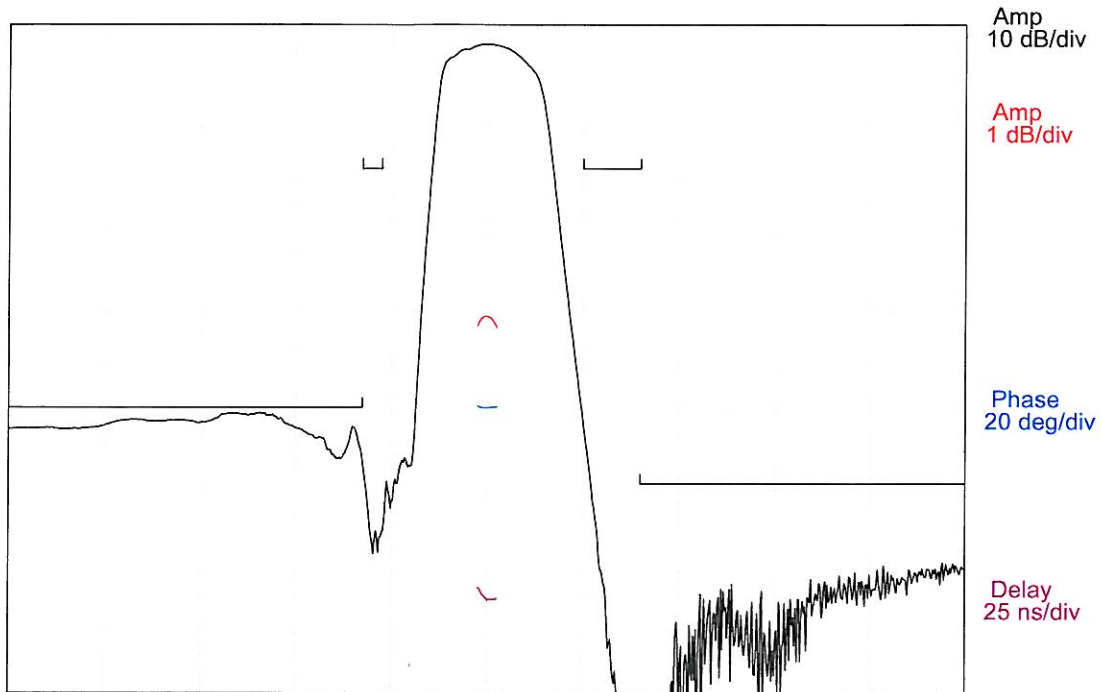


**DESCRIPTION**

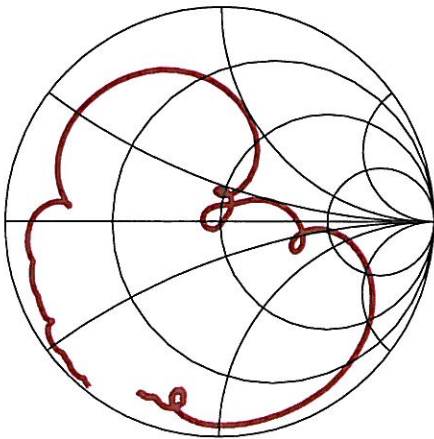
- Miniature 869 MHz SAW Filter with 5 MHz nominal bandwidth.
- 3 x 3 mm Ceramic LCC package, 6 pads.
- RoHS compliant.

**TYPICAL PERFORMANCE**

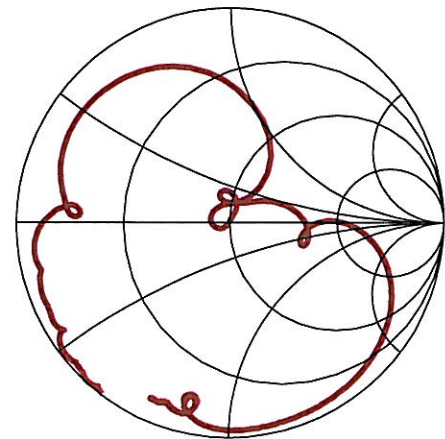


Center = 869 MHz, 10 MHz/div (125 kHz incr)

**S11 (819-919 MHz)**



**S22 (819-919 MHz)**



## SPECIFICATION

Parameter	Min	Typ	Max	Units
Center Frequency $F_c$	-	869	-	MHz
3 dB Bandwidth	-	5.98	-	MHz
Insertion Loss (868 - 870 MHz)	-	2.2	3.5	dB
Ripple Deviation (868 - 870 MHz)	-	0.4	1.8	dB p-p
Rejection				
DC to 300 MHz <sup>1</sup>	45	52	-	dB
300 to 856 MHz <sup>1</sup>	40	45	-	dB
856 to 858 MHz <sup>1</sup>	15	45	-	dB
879 to 885 MHz <sup>1</sup>	15	40	-	dB
885 to 1500 MHz <sup>1</sup>	48	52	-	dB
Input/Output Impedance	50		$\Omega$	
Temp Coefficient of Frequency	-31		ppm/ $^{\circ}$ C	

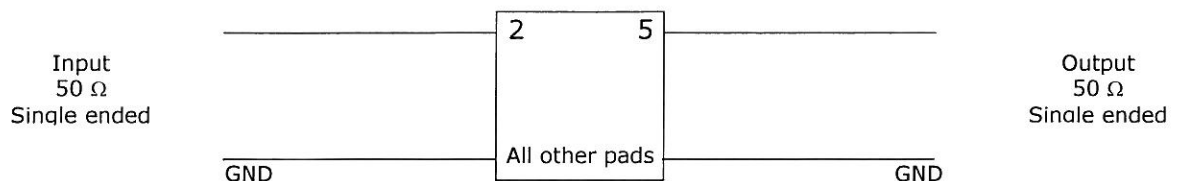
Note: 1. Reference level from 0 dB absolute.

## MAXIMUM RATINGS

Parameter	Min	Max	Units
Storage Temperature Range	-40	85	$^{\circ}$ C
Operating Temperature Range	-40	85	$^{\circ}$ C
Input Power Level <sup>1</sup>	-	+27	dBm
D.C. Voltage	-	10	V

Note: 1. The filter will operate without degradation for a minimum of 50,000 hours with GSM Signals (880-960 MHz) at +20 dBm.

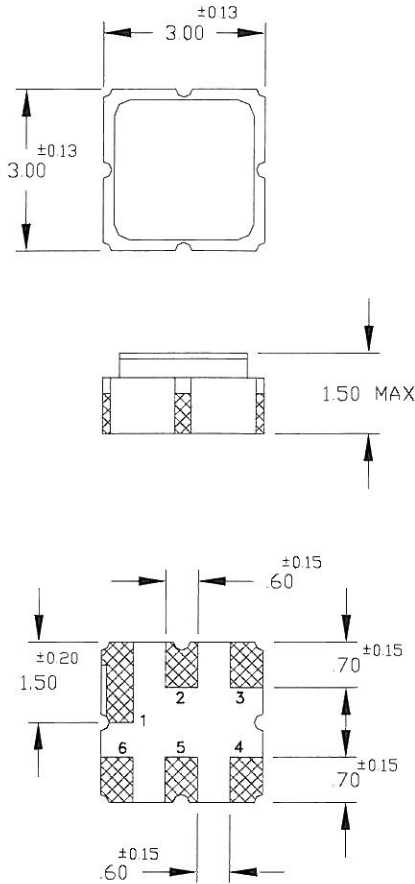
## MATCHING CIRCUIT



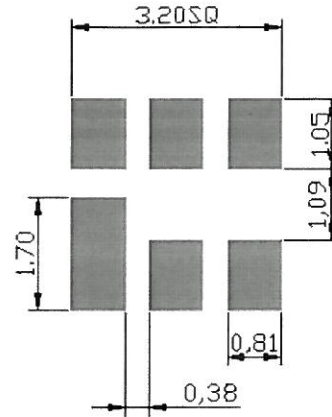
Notes:

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

**PACKAGE OUTLINE**



**SUGGESTED FOOTPRINT**



**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

**Units:** mm

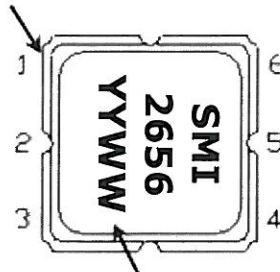
Tolerances are typically  $\pm 0.15$  mm  
except where indicated.

**Pad Configuration:**

Input: 2  
Output: 5  
Ground: 1,3,4,6

**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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