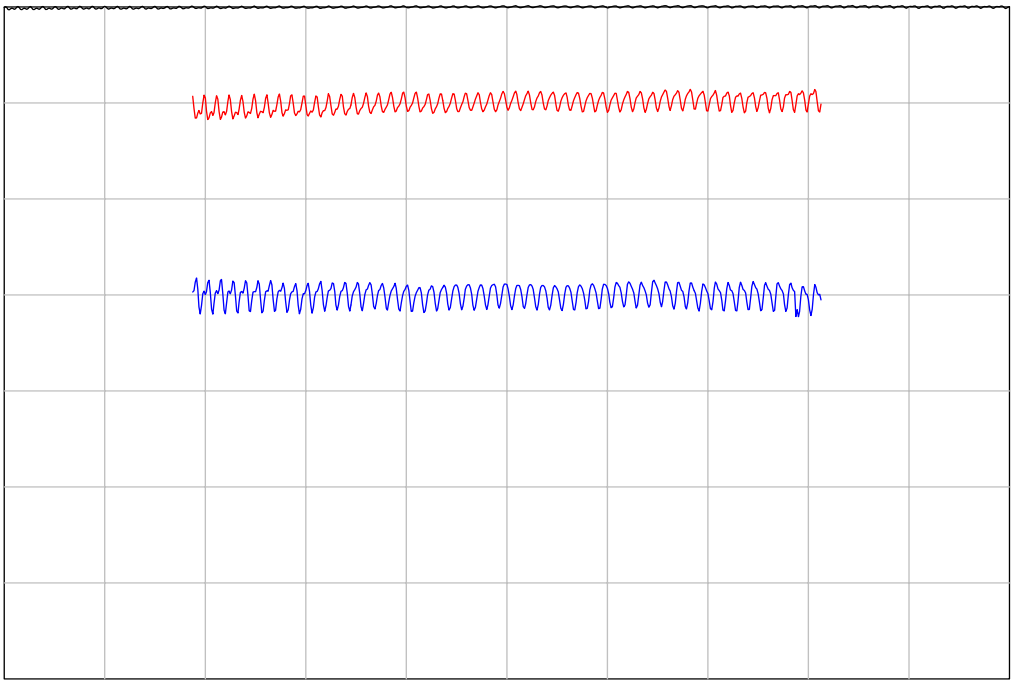
881.5 MHz SAW delay Line
25 MHz Bandwidth
Part Number: SF0881DL02211S

DESCRIPTION

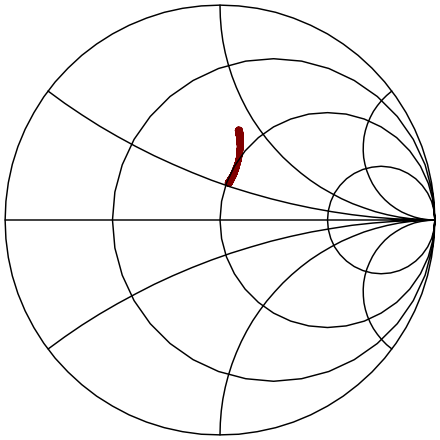
- 881.5 MHz SAW delay line with 25 MHz minimum bandwidth.
- 13.3 x 6.5 mm LCC package.
- RoHS compliant.

TYPICAL PERFORMANCE

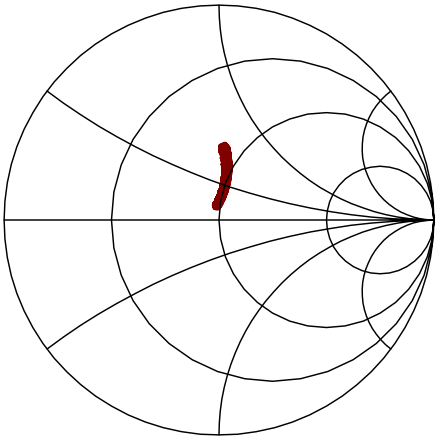


Horizontal:	Frequency :	4	MHz/div
Vertical from Top:	Relative Magnitude :	10	dB/div
	Relative magnitude :	1	dB/div
	Phase Linearity :	5	deg/div

S11 (861.5-901.5 MHz)



S22 (861.5-901.5 MHz)



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SPECIFICATION

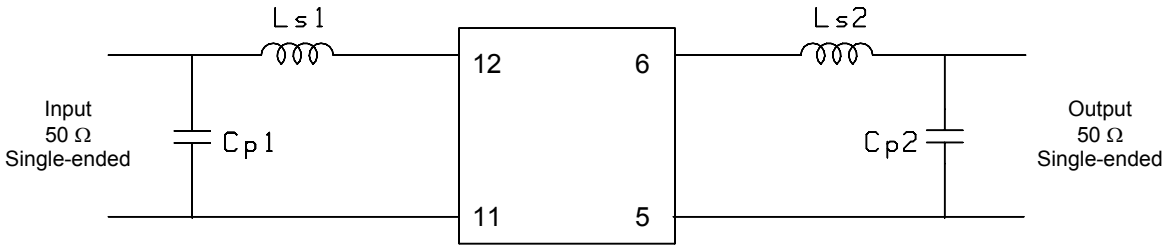
Parameter [2]	Min	Typ	Max	Units
Center Frequency (Fc) [1]	-	881.5	-	MHz
Lower Passband Frequency	869	-	-	MHz
Upper Passband Frequency	-	-	894	MHz
Amplitude Ripple over any 1.25 MHz interval [2]	-	0.6	1.0	dB p-p
RMS Phase Ripple over any 1.25 MHz interval [2]	-	1.2	1.8	deg
Insertion Loss	-	21.2	22.5	dB
Delay [3]	2.000	2.024	-	us
RF Feedthrough Suppression (GBD) [3]	30	40	-	dB
Triple Travel Suppression (GBD) [3]	30	35	-	dB
Source and Load Impedance	-	50	-	ohms
Output 3rd Order Intercept Point (IP3) (GBD) [3]	-	+13	-	dBm
Temp Coefficient of Delay	-	94	100	ppm/°C
Ambient Temperature	-	25	-	°C

Notes: 1. Fixed Reference.
2. To be satisfied across the interval bounded by the Upper and Lower Passband Frequencies.
3. GBD = Guaranteed by design.

MAXIMUM RATINGS

Parameter	Min	Typ	Max	Units
Storage Temperature Range	-40	25	85	˚C
Operating Temperature Range	20	25	70	˚C
Input Power Level	-	10	13	dBm

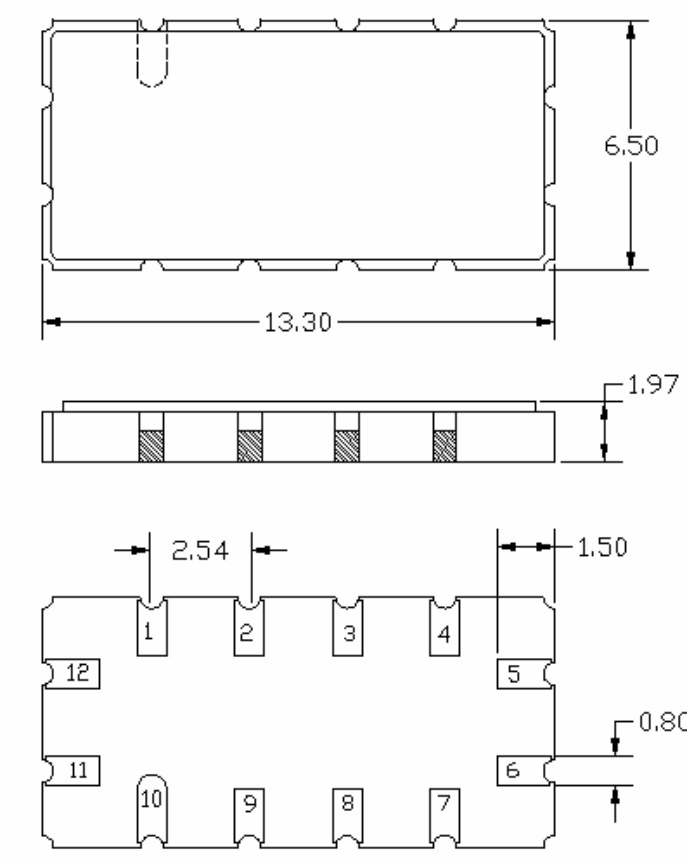
MATCHING CIRCUIT



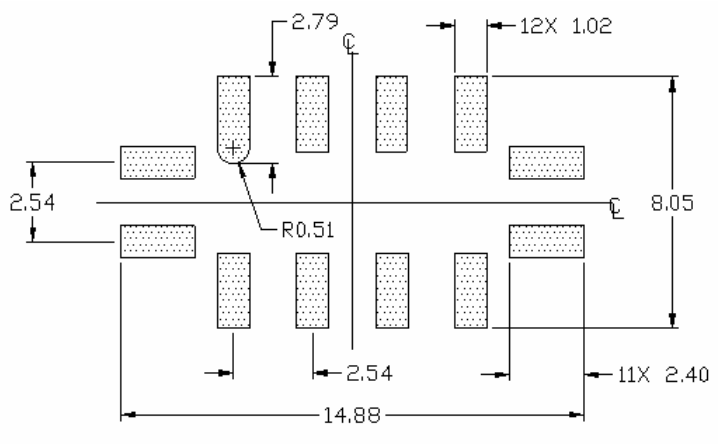
Typical component values: Ls1 = 8.2 nH Ls2 = 8.2 nH
Cp1 = 5.6 pF Cp2 = 5.6 pF

Notes:
1. Recommend use of 2% tolerance matching components. Inductor Q=45.
2. Tuning values shown are for reference only. Values may change depending upon board layout.

PACKAGE OUTLINE



SUGGESTED FOOTPRINT



Units: mm

Tolerances are ±0.15 mm except where indicated.

Pad Configuration:

Input:	12
Input return:	11
Output:	6
Output return:	5
Ground:	all other pads

Package Material:
Body: Al_2O_3 ceramic
Lid: *Kovar, Ni* plated
Terminations: *Au* plating 1 µm min, over a 1.3-8.9 µm *Ni* plating

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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