



*Total Solution Provider in Saw Device*

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# SA942HL1

EGSM, Balanced RF SAW Filter  
Revision 0: March 2004



- Electrical Characteristics
  - Package Dimensions
  - Testing Environment
  - Frequency Characteristics
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## Electrical Characteristics

### Maximum Ratings

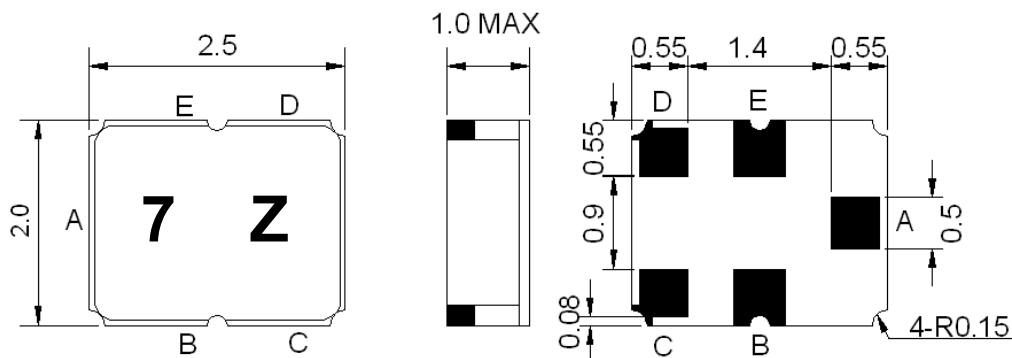
Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-30	-	+85
Storage Temperature Range	°C	-40	-	+85
Maximum DC Voltage	V	-	-	0
Maximum Input Power	dBm	-	-	15
Source Impedance (single ended) <sup>(1)</sup>	Ω	-	50	-
Load Impedance (balanced ended) <sup>(1)</sup>	Ω/nH	-	150//72	-
Package type & size	L1			
Length x Width	mm <sup>2</sup>	-	2.5 x 2.0	-
Height	mm	-	-	1.0

### Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	942.5	-
Insertion Loss within 925~960MHz	dB	-	2.8	4.0
Amplitude Ripple within 925~960MHz	dB <sub>p-p</sub>	-	1.0	2.4
Input/Output VSWR within 925~960 MHz	-	-	1.8	2.5
<b>Attenuation:</b>				
D.C. ~ 880 MHz	dB	50	52	-
880 ~ 905 MHz	dB	30	44	-
905 ~ 915 MHz	dB	10	27	-
980 ~ 1050 MHz	dB	21	27	-
1050 ~ 6000 MHz	dB	50	54	-
Symmetry in band (925~960 MHz)	-			
Output Amplitude balance( S <sub>31</sub>  / S <sub>21</sub>  )	dB	-1.3	0	1.2
Output phase balance(Φ(s <sub>31</sub> )-Φ(s <sub>21</sub> )+180)	degree	-10	0	10

**Notes :** (1) With Matching Network

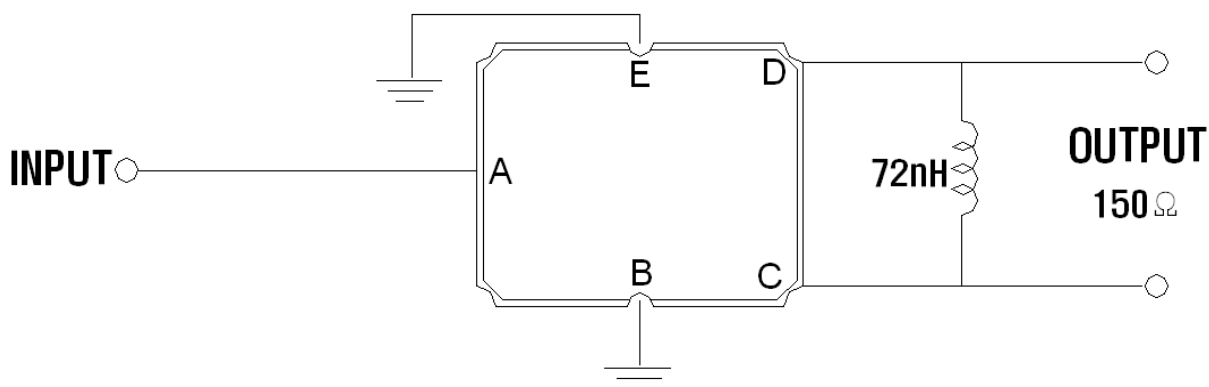
**Package Dimensions**



Marking Descriptions	
7	Series Number
Z	Date Code(Year+Month)

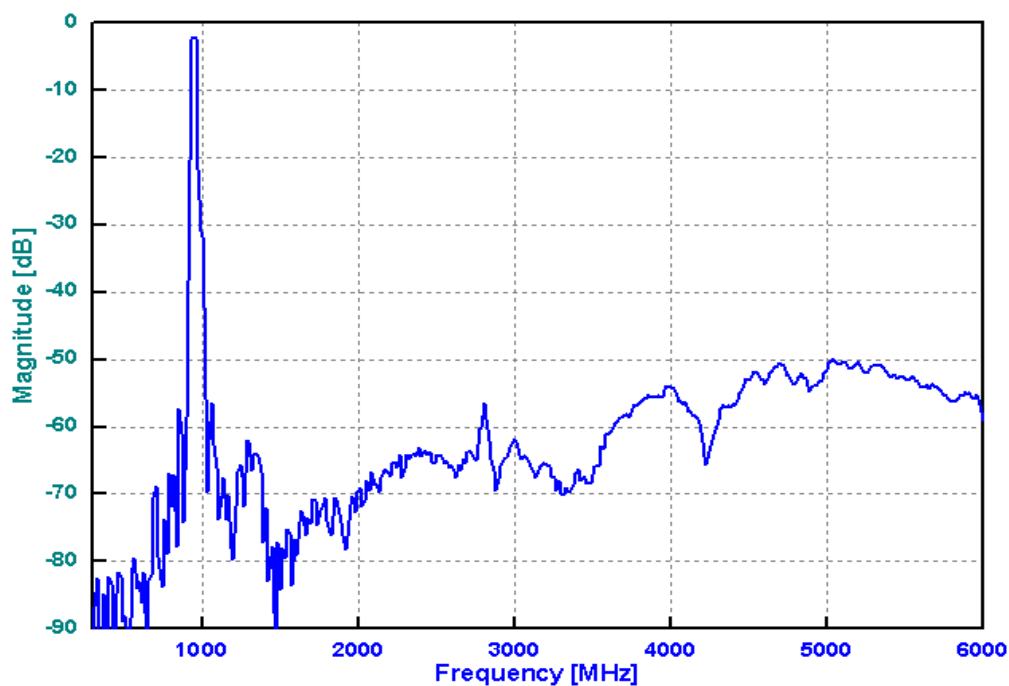
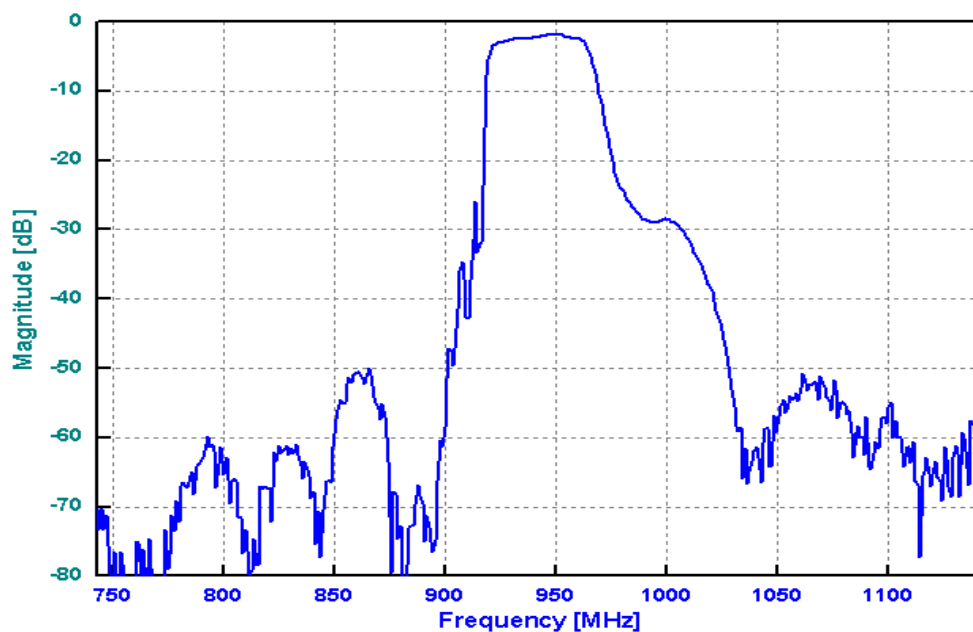
Pin Description	
B, E	Ground
A	In
C,D	Out

**Testing Environment**



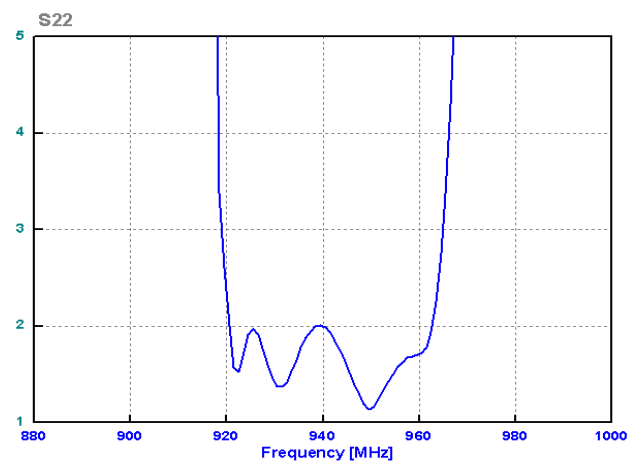
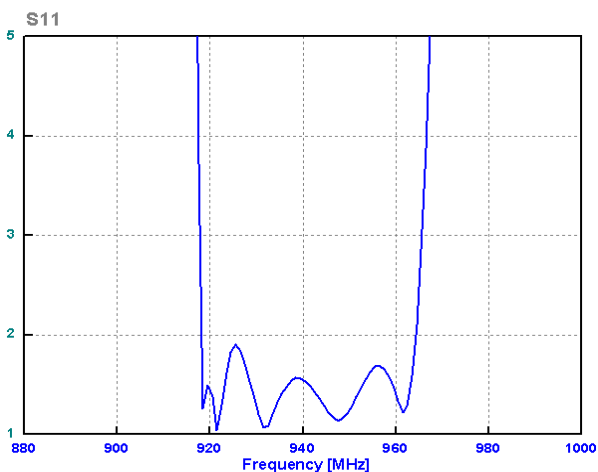
## □ Frequency Characteristics

Frequency Response





VSWR



Smith Chart

