



Total Solution Provider in Saw Device

SA1960BL1

US-PCS Rx, Balanced RF SAW Filter
Revision 0:



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

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□ Electrical Characteristics

Maximum Ratings

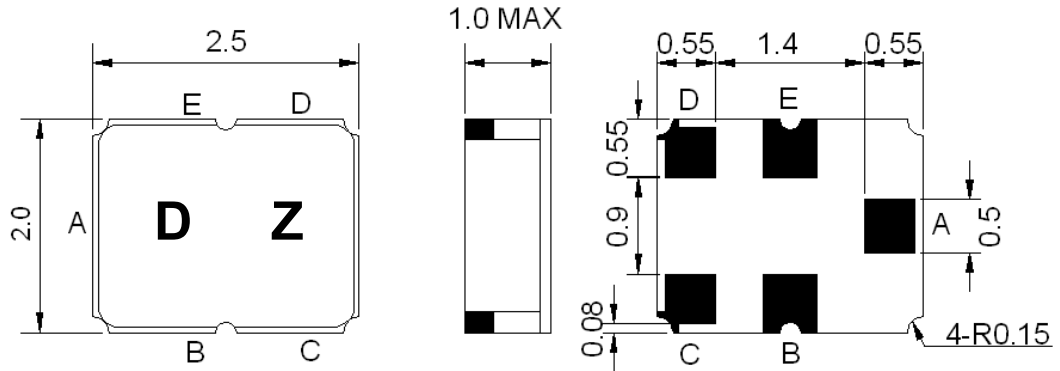
Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-30	-	+85
Storage Temperature Range	°C	-40	-	+85
Maximum DC Voltage	V	-	-	5
Maximum Input Power	dBm	-	-	12
Source Impedance (single ended) ⁽¹⁾	Ω	-	50	-
Load Impedance (balanced ended) ⁽¹⁾	Ω	-	200//3.3nH	-
Package type & size	L1			
Length x Width	mm ²	-	2.5 x 2.0	-
Height	mm	-	-	1.0

Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	1960	-
Insertion Loss within 1930~1990MHz	dB	-	3.3	4.0
Amplitude Ripple within 1930~1990MHz	dB _{p-p}	-	0.7	2.4
Attenuation:				
D.C. ~ 1000 MHz	dB	45	55	-
1000 ~ 1830 MHz	dB	25	30	-
1830 ~ 1900 MHz	dB	15	25	-
1900 ~ 1910 MHz	dB	7	15	-
2010 ~ 2030 MHz	dB	5	7.5	-
2030 ~ 2070 MHz	dB	12	17	-
2070 ~ 2310 MHz	dB	20	22	-
2310 ~ 2380 MHz	dB	33	36	-
2380 ~ 4600 MHz	dB	30	44	-
4600 ~ 6000 MHz	dB	23	50	-
Input VSWR within 1930~1990 MHz	-	-	1.7	2.4
Output VSWR within 1930~1990 MHz	-	-	2.0	2.4
Symmetry in band (1930~1990 MHz)	-			
Output Amplitude balance(S31 / S21)	dB	-2.2	-	2.2
Output phase balance(Φ(s31)-Φ(s21)+180)	degree	-15	-	15

Notes : (1) With Matching Network

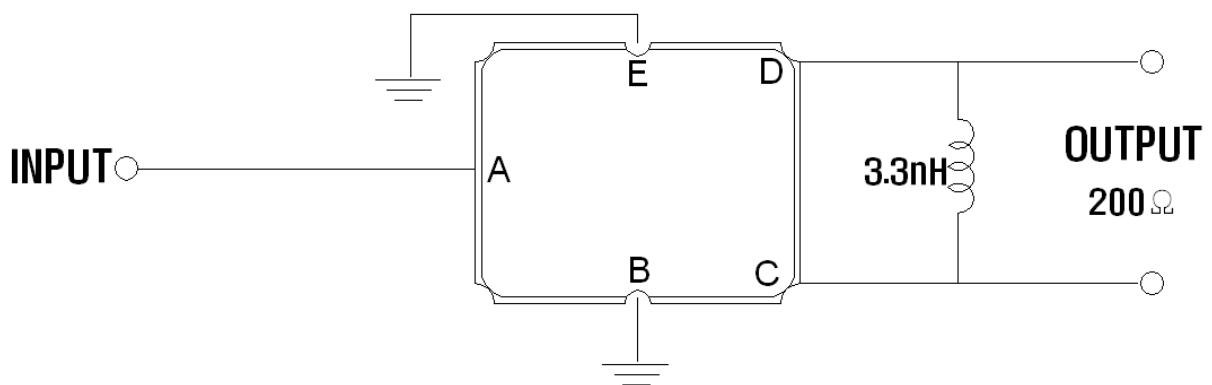
Package Dimensions



Marking Descriptions	
D	Series Number
Z	DateCode(Year+Month)

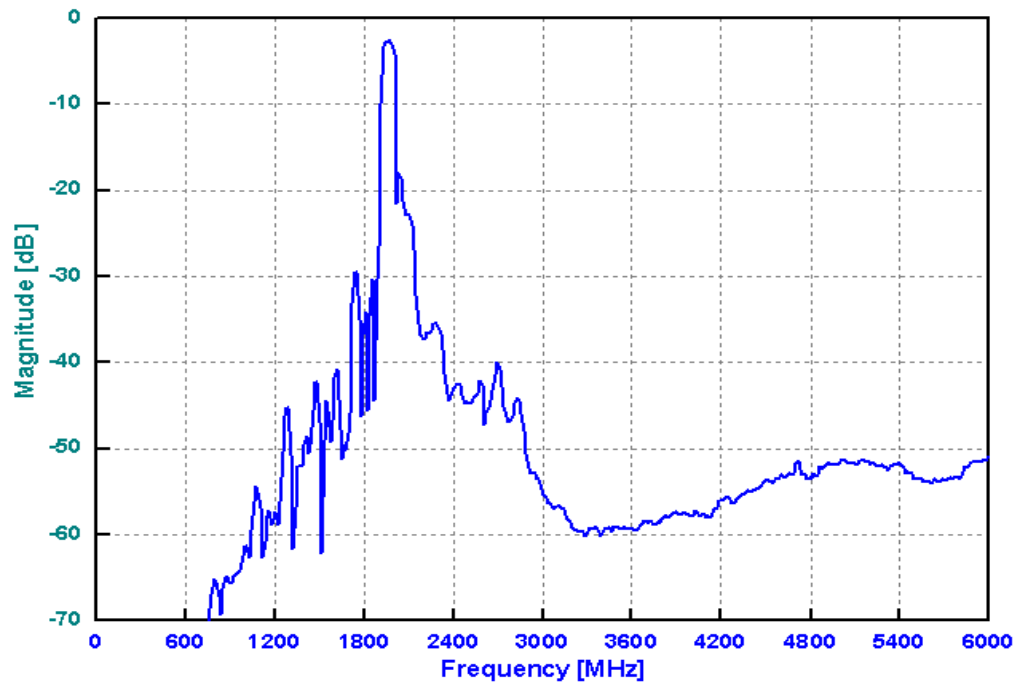
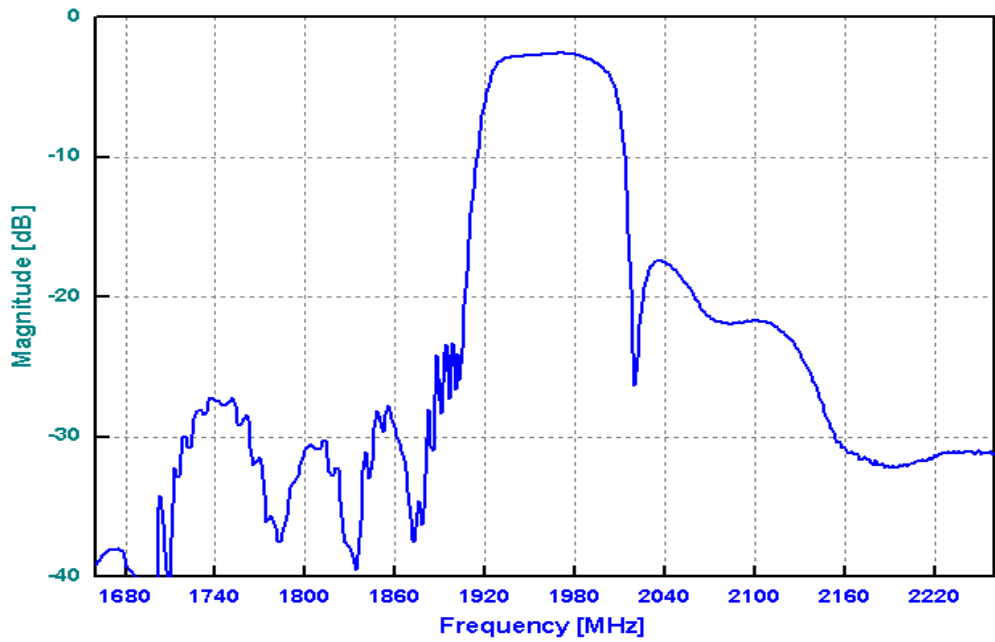
Pin Description	
B, E	Ground
A	In
C, D	Out

Testing Environment



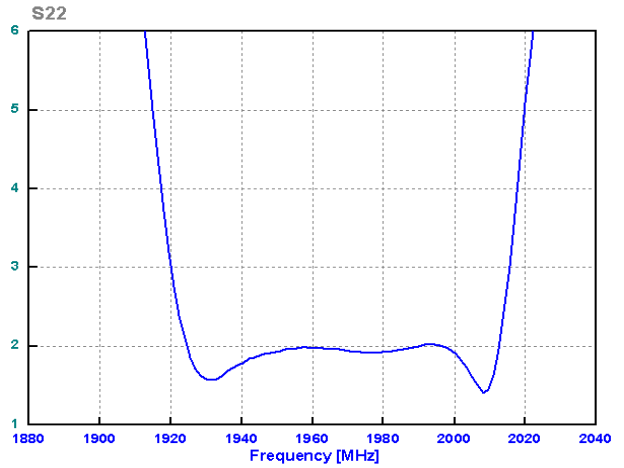
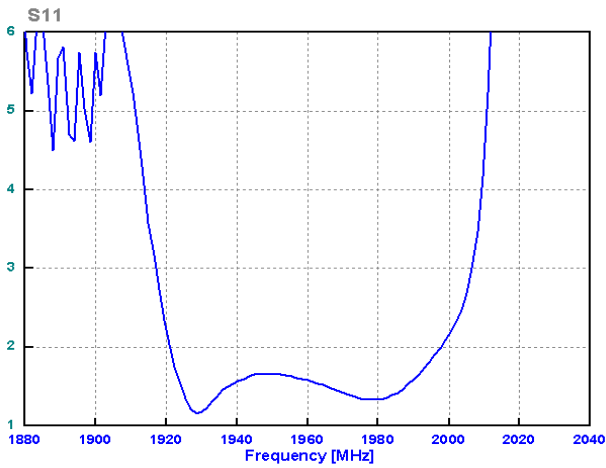
□ Frequency Characteristics

Frequency Response



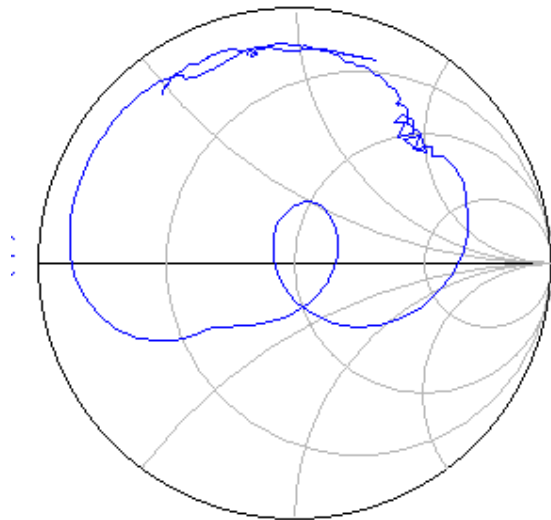


VSWR



Smith Chart

S11



S22

