



REV A January 2010

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
861-RF1960.0M-B	US-PCS Rx, Balanced RF SAW Filter

Specification Contents

- o Mechanical Dimensions
- o Test Circuit
- o Maximum Ratings
- o Electrical Specification
- o Frequency Performance
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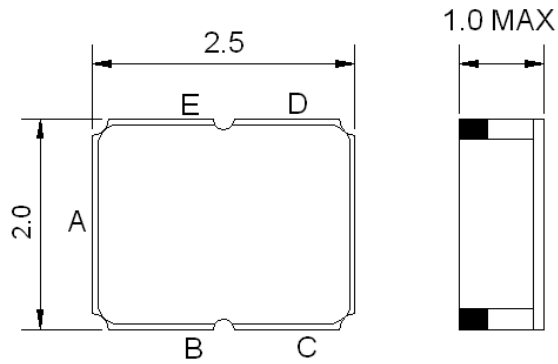
Notes

- o Electrostatic Sensitive Device (ESD) 
- o Avoid excessive ultrasonic exposure
- o Solderability compatible with JEDEC J-STD-020C Pb-free process, 260°C peak reflow temperature
- o This product complies with EU directive 2002/95/EC (RoHS compliance)

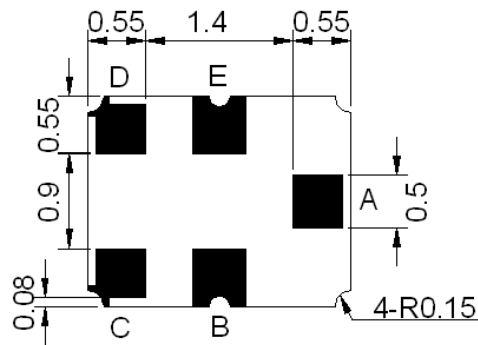




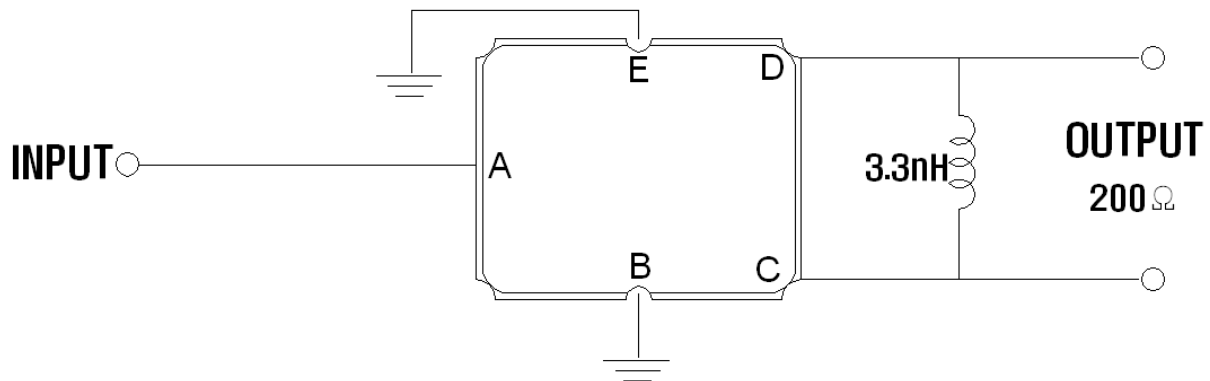
Mechanical Dimensions (mm)



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



Test Circuit





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	-

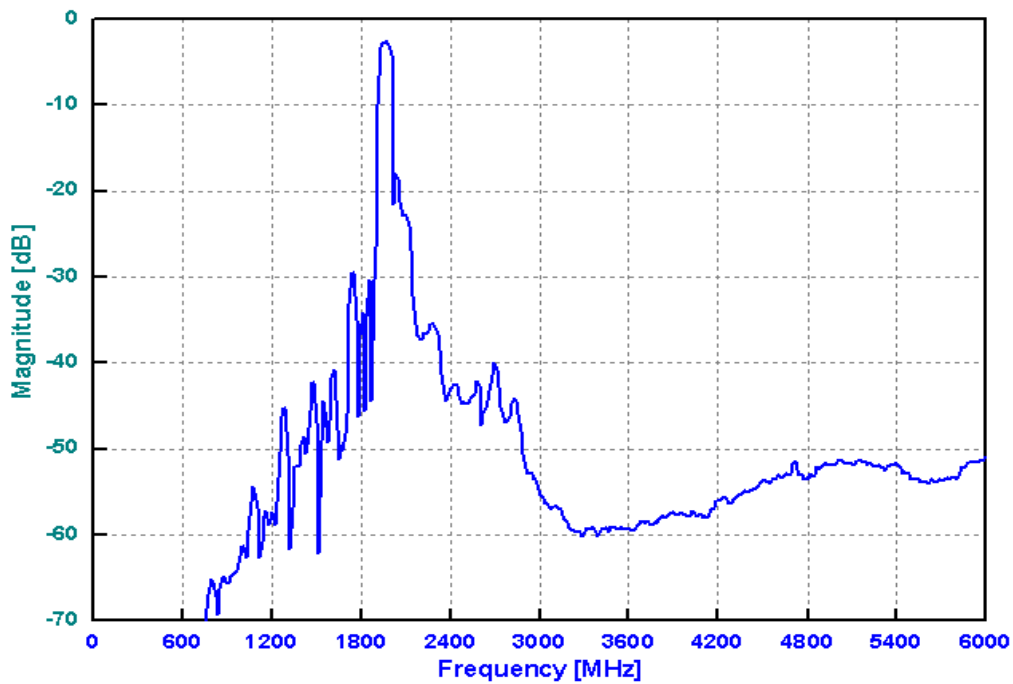
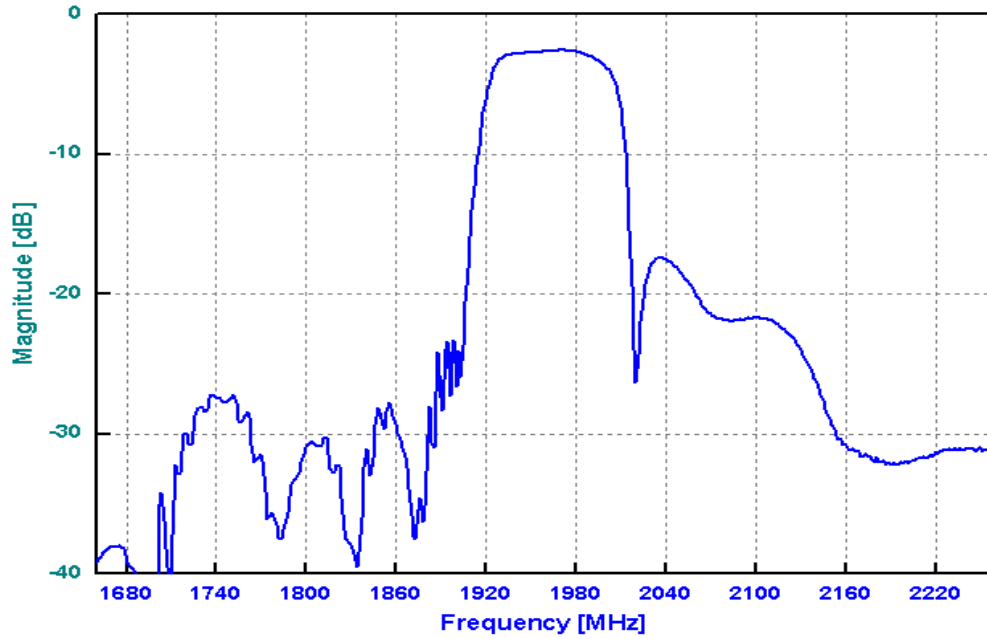
Notes: (1) With Matching Network

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($\Phi(s31)-\Phi(s21)+180$)	degree	-15	-	15

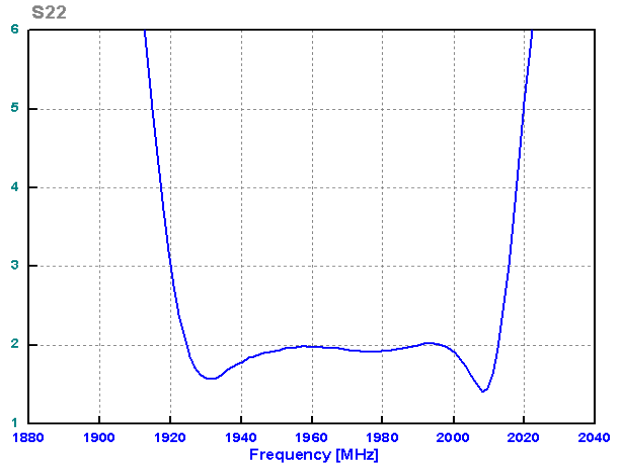
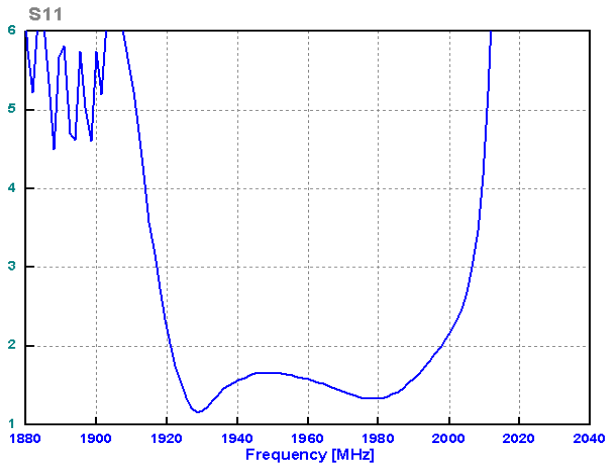


Frequency Performance





VSWR



Smith Chart

