



PRODUCT SPECIFICATION

REV A January 2010

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
861-RF1842.5M-C	PCN, Balanced RF SAW Filter

Specification Contents

- o Mechanical Dimensions
- o Test Circuit
- o Maximum Ratings
- o Electrical Specification
- o Frequency Performance
- o VSWR
- o Smith Chart

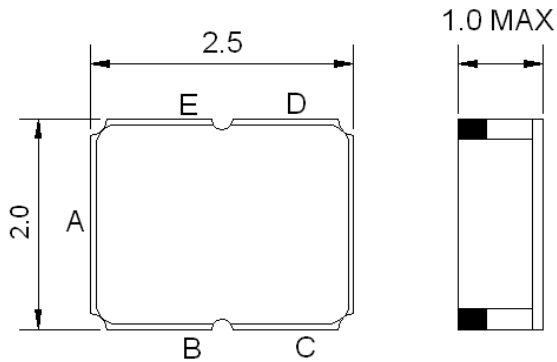
Notes

- 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)

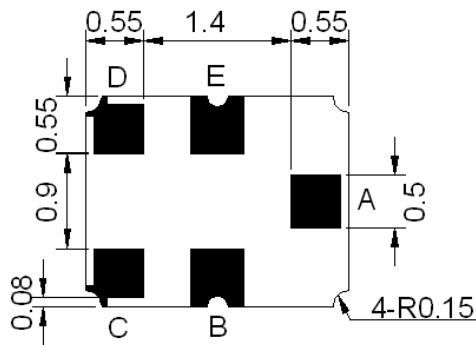




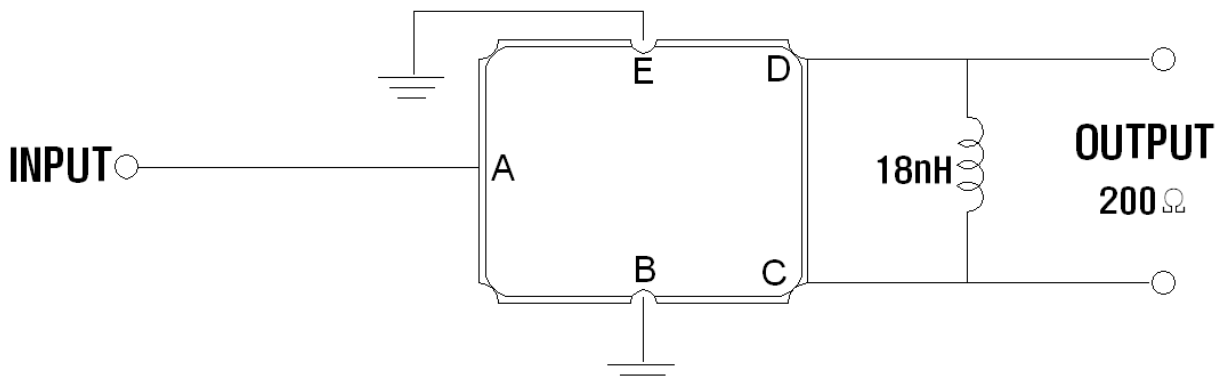
Mechanical Dimensions (mm)



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



Test Circuit





Maximum Ratings

Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-20	-	+75
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 (single ended)(1)	Ω	-	200//18nH	-

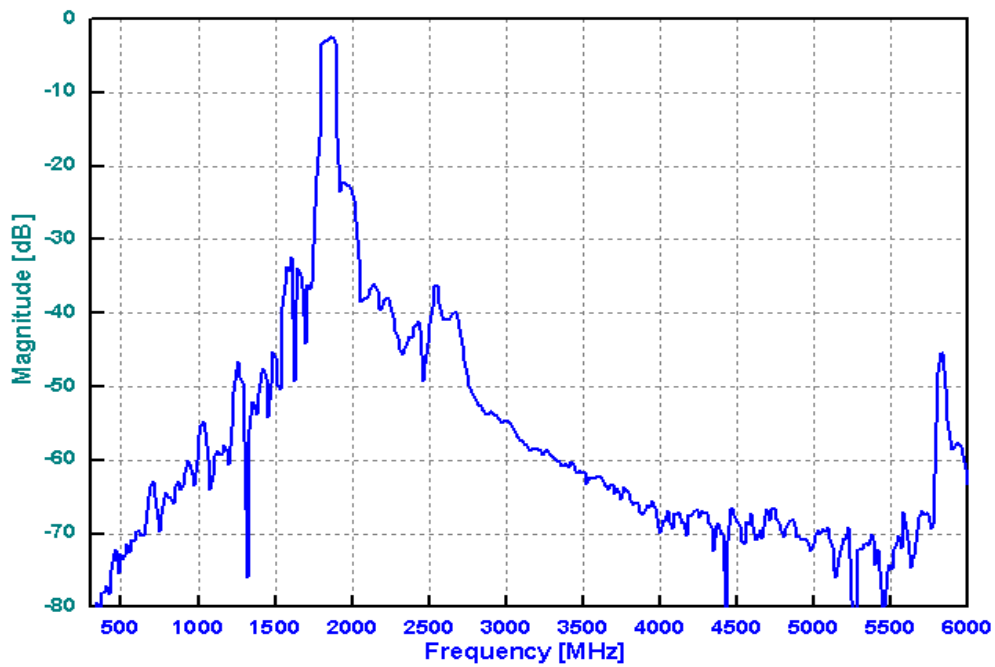
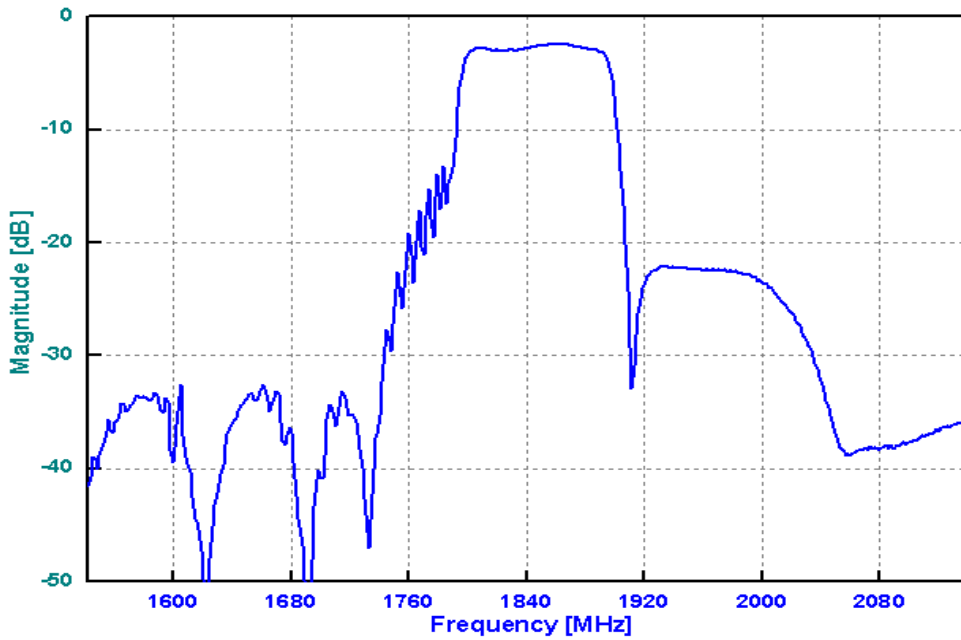
Notes: (1) With Matching Network

Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	1842.5	-
Insertion Loss within 1805~1880MHz	dB	-	2.8	4.0
Amplitude Ripple within 1805~1880MHz	dB _{p-p}	-	0.7	1.5
Attenuation:				
D.C. ~ 1200 MHz	dB	40	48	-
1200 ~ 1705 MHz	dB	30	33	-
1705 ~ 1785 MHz	dB	9	14.5	-
1920 ~ 1980 MHz	dB	10	22.5	-
1980 ~ 2200 MHz	dB	20	23.5	-
2200 ~ 3000 MHz	dB	30	36	-
3000 ~ 6000 MHz	dB	40	44	-
Input / Output VSWR within 1805~1880 MHz	-	-	2.0	2.5
Symmetry in band (1805~1880 MHz)				
Output Amplitude balance(S31 / S21)	dB	-1.8	0	1.4
Output phase balance($\Phi(s31)-\Phi(s21)+180$)	degree	-12	0	12

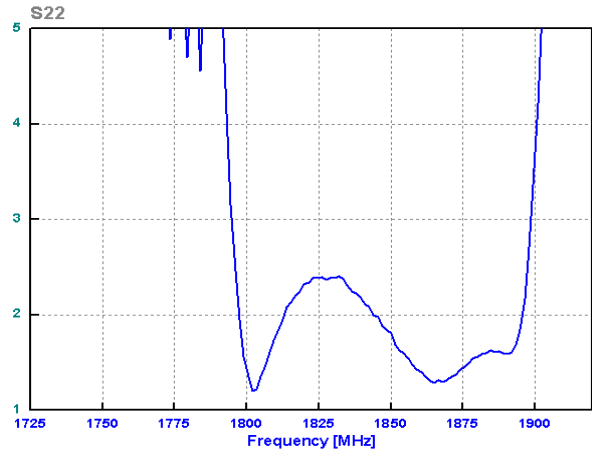
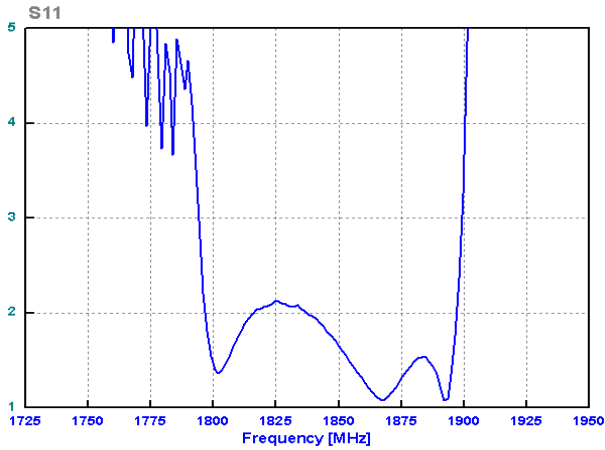


Frequency Performance





VSWR



Smith Chart

