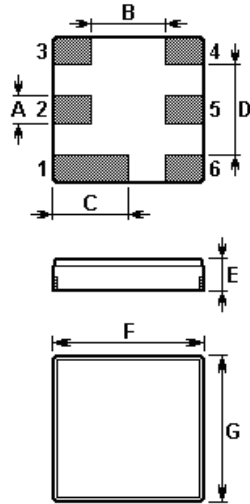


ACTF9401-866MHz-DCC6C-F866BMB is a low-loss, compact, and economical surface-acoustic-wave (SAW) RF filter in a surface-mount ceramic DCC6C case with center frequency 866.000 MHz.

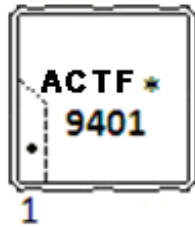
1. Package Dimensions (DCC6C)



Pin	Configuration
2	Input / Output
5	Output / Input
1, 3, 4, 6	Case Ground

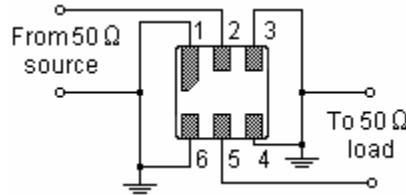
Sign	Data (unit: mm)	Sign	Data (unit: mm)
A	0.6	E	1.1
B	1.5	F	3.0
C	1.5	G	3.0
D	1.8		

2. Marking



Laser Printing, Top View, "*"—Data code

3. Test Circuit



4. Performance

4-1. Maximum Ratings

Rating		Value	Unit
Input Power Level	P	13	dBm
DC Voltage	V_{DC}	12	V
Operable Temperature Range	T_A	-25 to +70	°C
Storage Temperature Range	T_{stg}	-40 to +85	°C

In line with our ongoing policy of product evolution and improvement, the above specification may subject to change without notice

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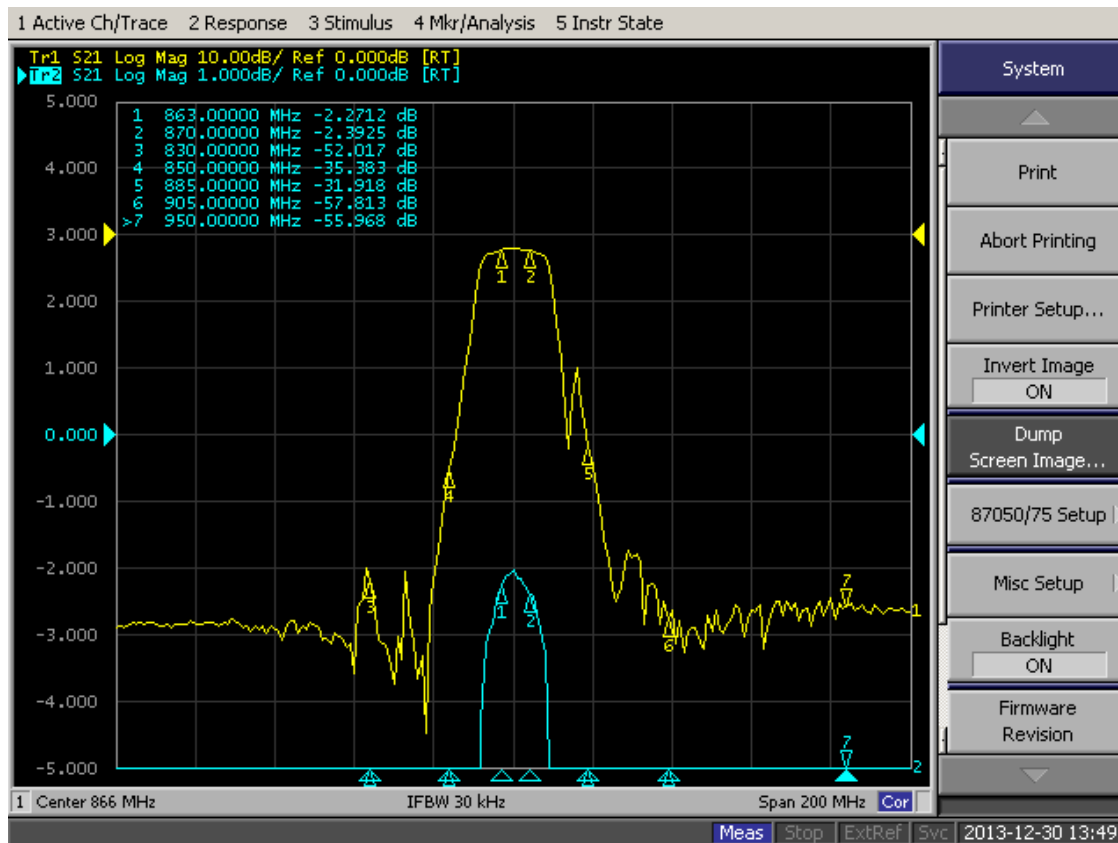
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4-2. Electronic Characteristics

Characteristic		Min.	Typ.	Max.	Unit
Center Frequency	f_c		866		MHz
Insertion Loss at Fc	IL	--	2.3	3.0	dB
Pass band Ripple	$\Delta\alpha$	--	0.4	1.3	dB
Relative Attenuation (relative to IL)	α_{rel}				
10 830.00 MHz		45	49	--	dB
830.00 MHz 850.00 MHz		22	35	--	dB
885.00 MHz 905.00 MHz		27	35	--	dB
905.00 MHz 950.00 MHz		45	49	--	dB
950.00 MHz 1500.00 MHz		40	47	--	dB
1500.00 MHz 3000.00 MHz		25	28	--	dB
Input / Output Impedance		50			Ω
VSWR(863.0 MHz 870.0 MHz)			1.5	2.0	

5. Typical Frequency Response



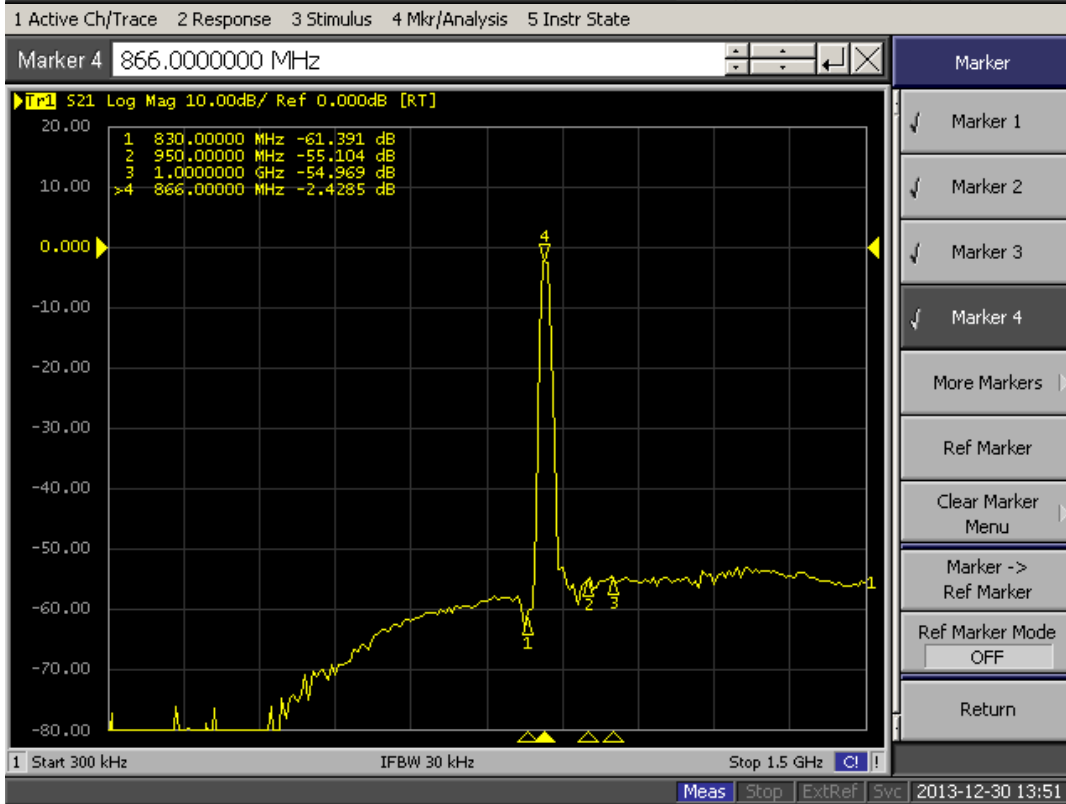
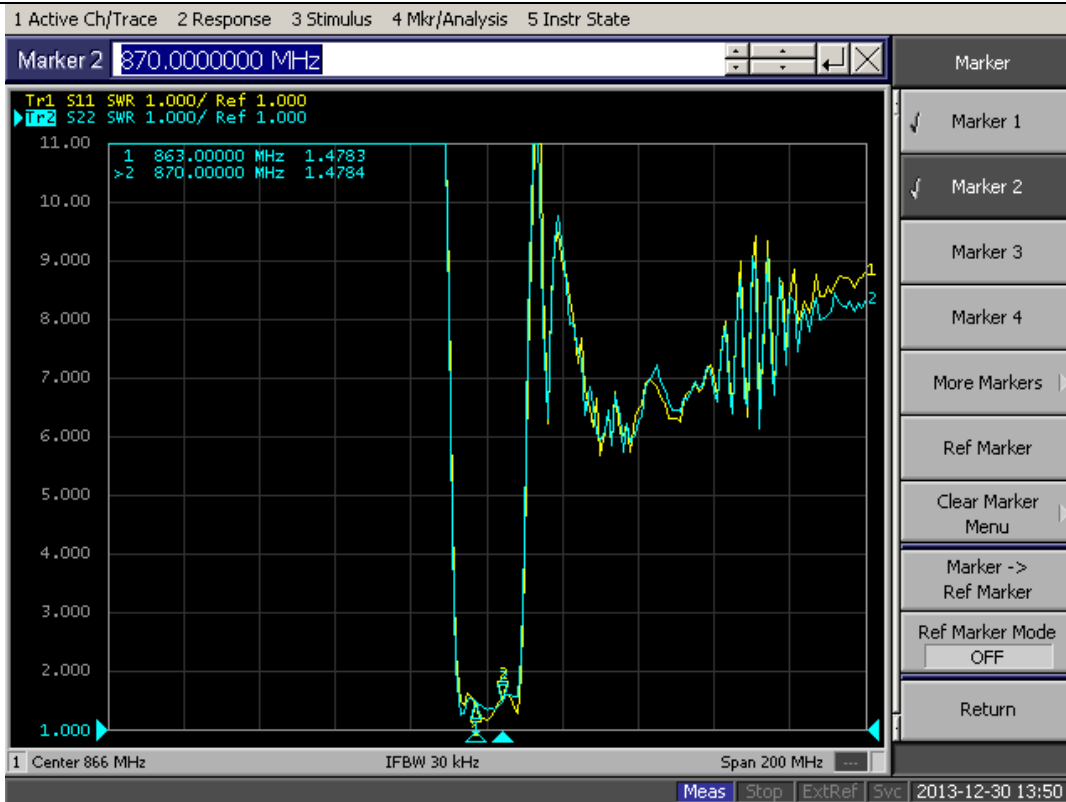
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Stability Characteristics

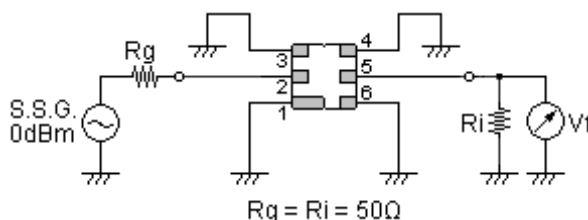
	Test item	Condition of test
1	Mechanical shock	(a) Drops: 3 times on concrete floor (b) Height: 1.0 m
2	Vibration resistance	(a) Frequency of vibration: 10~55Hz (c) Directions: X,Y and Z (b) Amplitude: 1.5 mm (d) Duration: 2 hours
3	Moisture resistance	(a) Condition: 40°C, 90~95% R.H. (c) Wait 4 hours before measurement (b) Duration: 96 hours
4	Climatic sequence	(a) +70°C for 16 hours (c) -25°C for 2 hours (e) Wait 4 hours before measurement (b) +55°C for 24 hours, 90~95% R.H. (d) +40°C for 24 hours, 90~95% R.H.
5	High temperature exposure	(a) Temperature: 70°C (c) Wait 4 hours before measurement (b) Duration: 250 hours
6	Thermal impact	(a) +70°C for 30 minutes ⇒ -25°C for 30 minutes repeated 3 times (b) Wait 4 hours before measurement

Requirements: The SAW filter shall remain within the electrical specifications after tests.

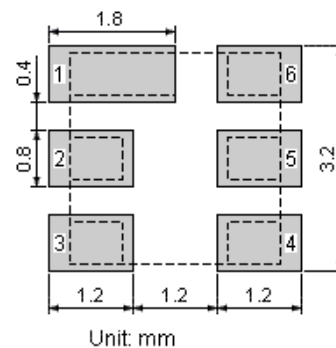
Remarks

- SAW devices should not be used in any type of fluid such as water, oil, organic solvent, etc.
- Be certain not to apply voltage exceeding the rated voltage of components.
- Do not operate outside the recommended operating temperature range of components.
- Sudden change of temperature shall be avoided, deterioration of the characteristics can occur.
- Be careful of soldering temperature and duration of components when soldering.
- Do not place soldering iron on the body of components.
- Be careful not to subject the terminals or leads of components to excessive force.
- SAW devices are electrostatic sensitive. Please avoid static voltage during operation and storage.
- Ultrasonic cleaning shall be avoided. Ultrasonic vibration may cause destruction of components.

Test Circuit



Recommended Land Pattern



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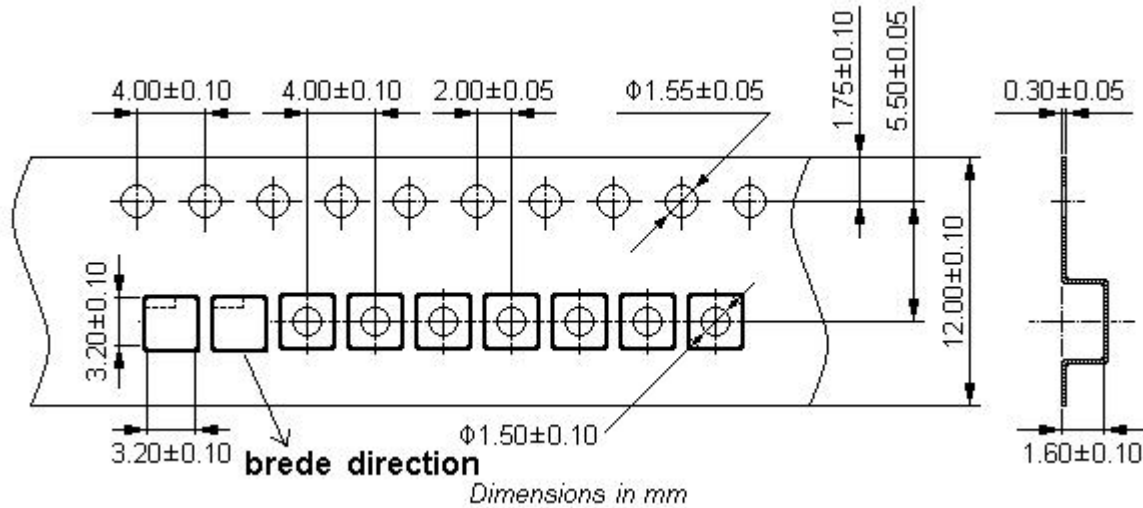
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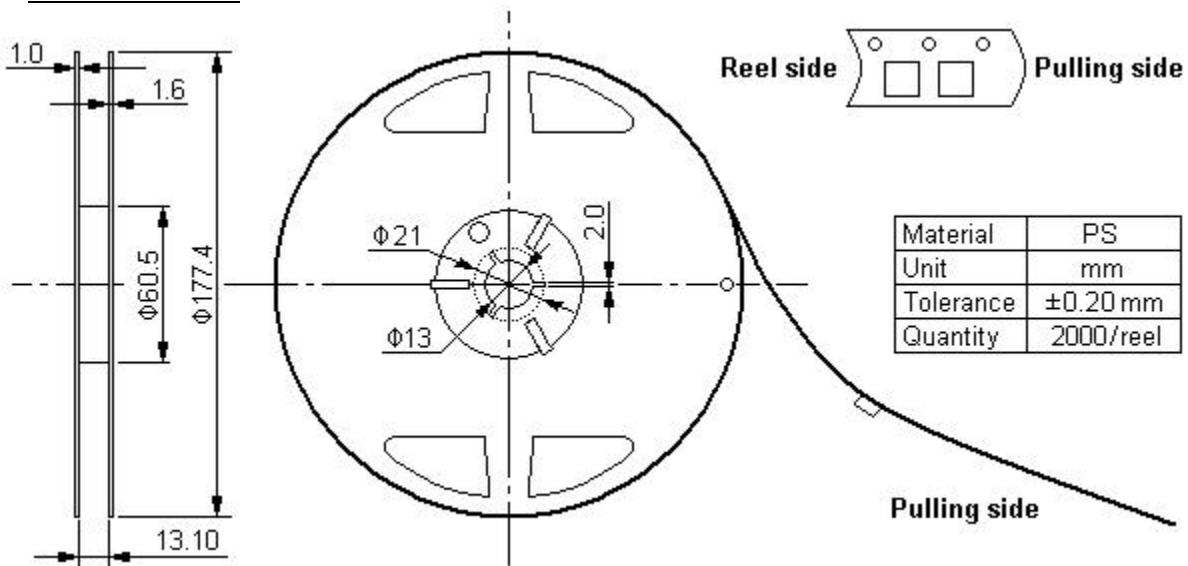
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Packing Information

Carrier Tape



Reel Dimensions



Outer Packing

Type	Quantity	Dimension	Description	Weight
Carton Box I	10000	190x190x95	anti-static plastic bag & carton box 1 reel / bag	0.85
Carton Box II	20000	190x190x190	5 bags / box (10000 pcs) 10 bags / box (20000 pcs)	1.80

Unit: mm

Unit: kg

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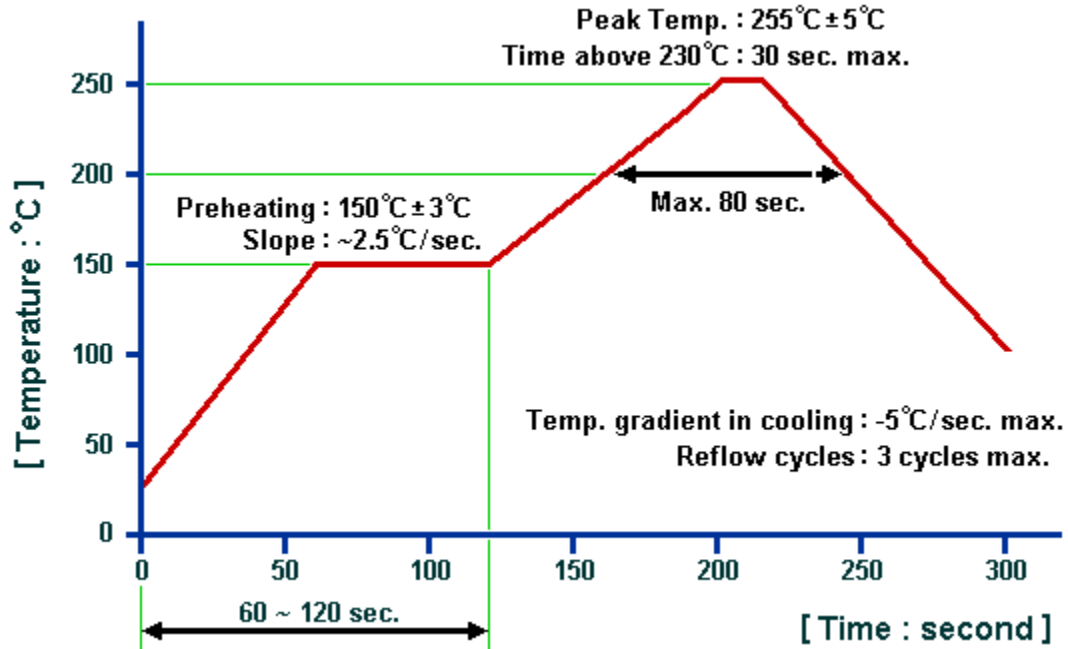
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Recommended Soldering Profile



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NOTE:

1. The specifications of this device are subject to change or obsolescence without notice.
2. Typically, equipment utilizing this device requires emissions testing and government approval, which is the responsibility of the equipment manufacturer.
3. Our liability is only assumed for the Surface Acoustic Wave (SAW) component(s) per se, not for applications, processes and circuits implemented within components or assemblies.

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