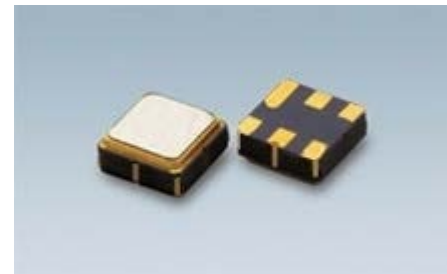


ACTF878RMA-DCC6C-PRE-20131212

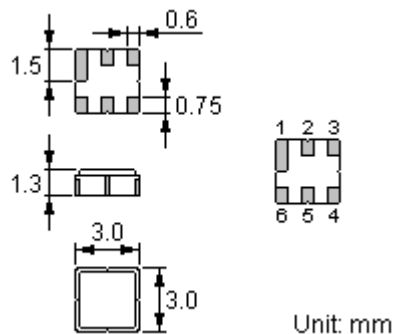
Features

- Low-loss RF filter for mobile systems
- Low amplitude ripple
- No matching network required for operation at 50Ω
- Ceramic package for **Surface Mounted Technology (SMT)**
- Lead-free production and **RoHS** compliant



Package Dimensions

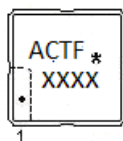
Ceramic Package: **DCC6C**



Pin Configuration

2	Input
5	Output
1, 3, 4, 6	Ground

Marking



Top View, Laser Marking

"ACT": Manufacturer's mark

"F": SAW filter

"XXXX": Part number

Code	1	2	3	4	5	6	7	8	9	10	11	12
2011	a	b	c	d	e	f	g	h	i	j	k	m
2012	n	p	q	r	s	t	u	v	w	x	y	z
2013	A	B	C	D	E	F	G	H	J	K	L	M
2014	N	P	Q	R	S	T	U	V	W	X	Y	Z

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

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Maximum Ratings

Rating		Value	Unit
Input Power Level	P	13 dBm CW, $T_a=85^{\circ}\text{C}$, life time>10 years	
DC Voltage	V_{DC}	12	V
Operating Temperature Range	T_A	-40 ~ +85	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	-40 ~ +85	$^{\circ}\text{C}$

Electrical Characteristics

Parameter		Unit	Minimum	Typical	Maximum
Center frequency		MHz		878.0	
Insertion Loss (862~894MHz)		dB		2.0	2.5
Amplitude Variation(862~894MHz)		dB		0.8	1.1
Group delay Variation(862~894MHz)		ns		30	60
Absolute Attenuation	DC~780MHz	dB	30		
	780~849MHz	dB	30		
	855MHz	dB	15	20	
	914~970MHz	dB	30		
	970~1049MHz	dB	30		
	1049~2000MHz	dB	30		
Input/ Output VSWR (862~894MHz)		dB		1.5	1.9
Input/Output Impedance		ohm		50	

 RoHS Compliant

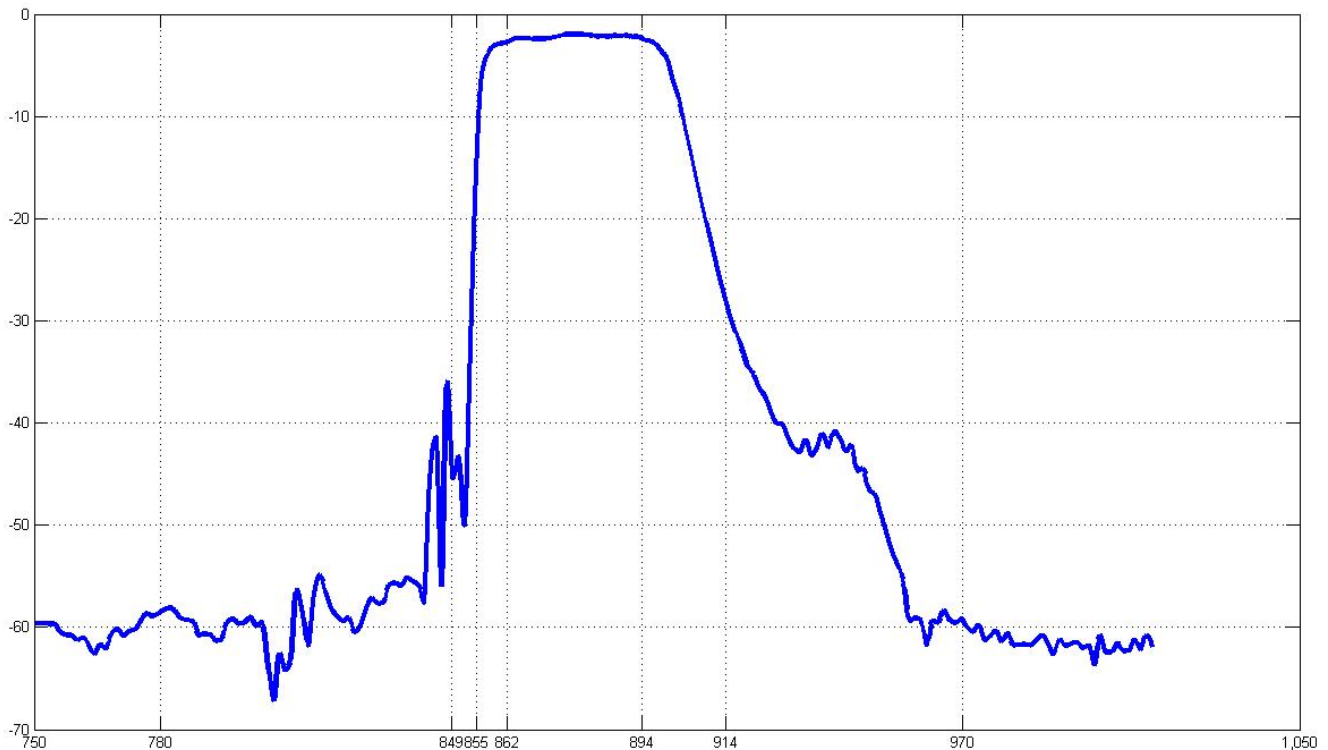
 Electrostatic Sensitive Device

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Typical Frequency Response



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.

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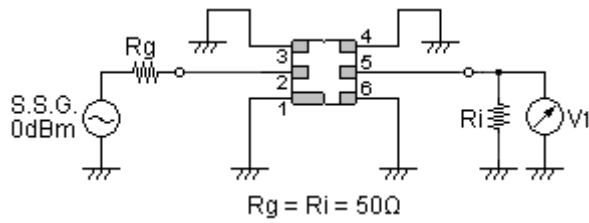
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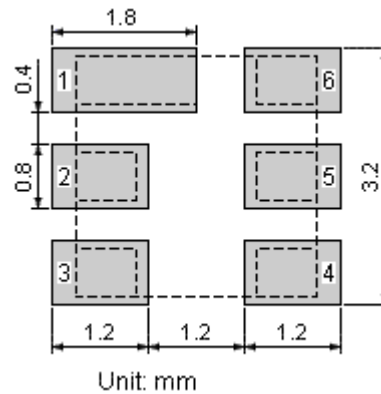
Remarks

- 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.

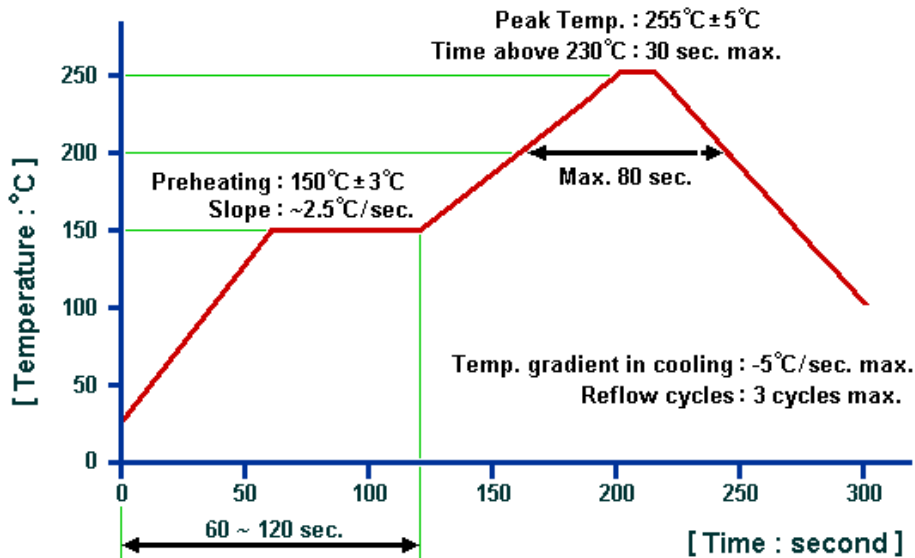
Test Circuit



Recommended Land Pattern



Recommended Soldering Profile



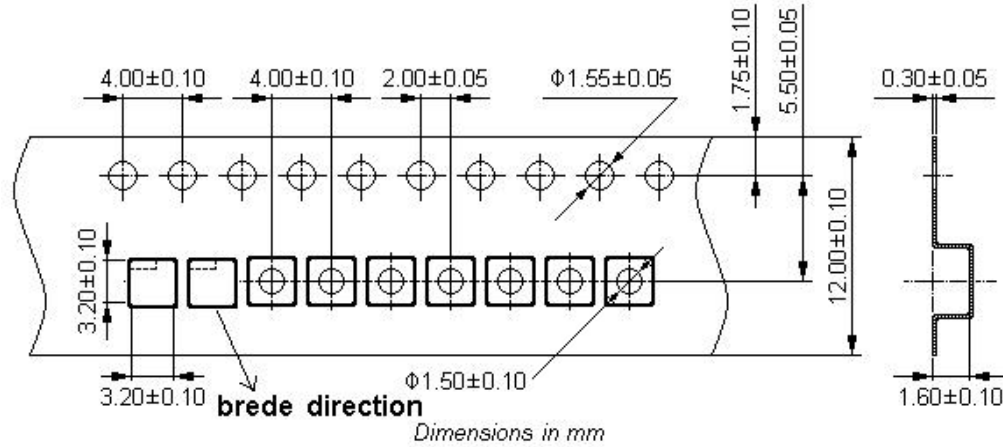
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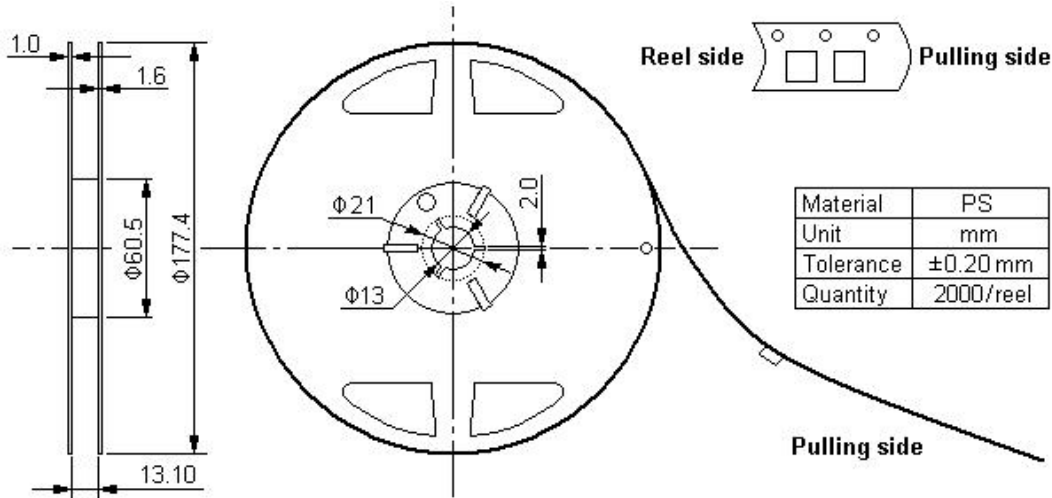
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Packing Information

Carrier Tape



Reel Dimensions



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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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