

## SAW BANDPASS FILTER

**PART NO.: ACTF9450\_1575.42M\_DCC6C**

<b>Product Type:</b>	<b>Customer:</b>
SAW Filter	
	<b>Customer Part NO.:</b>
	<b>Issued Date:</b>

<b>PREPARED BY</b>	<b>CHECKED BY</b>	<b>APPROVED BY</b>

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

**ISO9001 Registered**

For quotations or further information please contact us at:

3 The Business Centre, Molly Millars Lane, Wokingham, Berkshire, RG41 2EY, UK

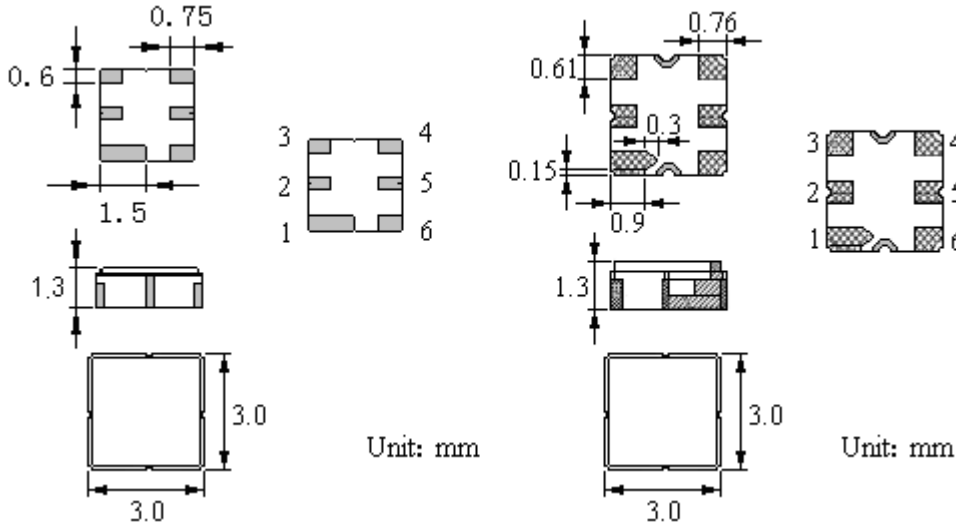
<http://www.actcrystals.com>

### 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

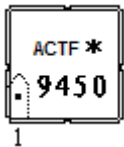
Ceramic Package: **DCC6C**



### Pin Configuration

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

### Marking



Top View, Laser Marking

- "ACT": Manufacturer's mark
- "F": SAW filter
- "9450": Part number
- " . ": Terminal 1
- "\*": Lot number (The code shown below varies in a 4-year cycle)

Code	1	2	3	4	5	6	7	8	9	10	11	12
2015	a	b	c	d	e	f	g	h	i	j	k	m
2016	n	p	q	r	s	t	u	v	w	x	y	z
2017	A	B	C	D	E	F	G	H	J	K	L	M
2018	N	P	Q	R	S	T	U	V	W	X	Y	Z

### Maximum Ratings

Rating	Value	Unit
Input Power Level	$P$	23dBm CW, $T_a=85^{\circ}\text{C}$ , pass band top frequency, test 2 hours continuously, electrical characters meet demand;
DC Voltage	$V_{DC}$	12 V
ESD Voltage (HB)	$V_{ESD}$	150 V
Operating Temperature Range	$T_A$	-40 ~ +85 $^{\circ}\text{C}$
Storage Temperature Range	$T_{stg}$	-40 ~ +85 $^{\circ}\text{C}$

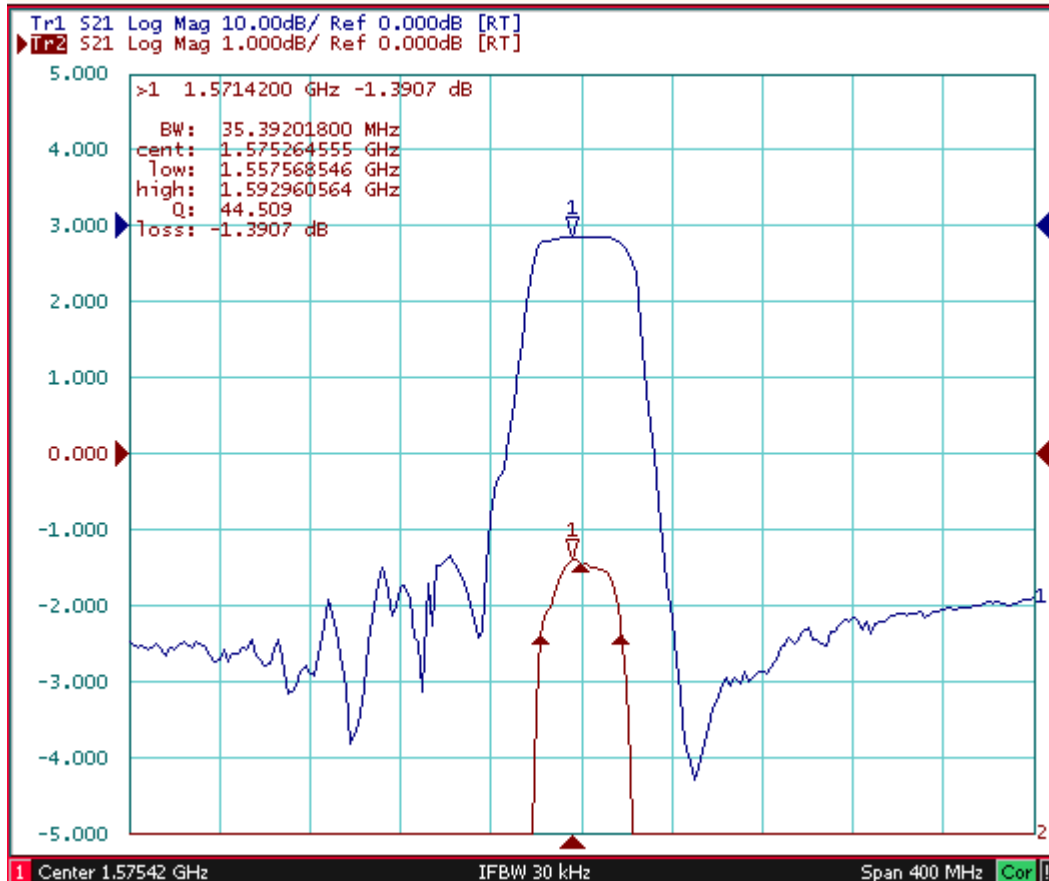
## Electrical Characteristics

Item	Minimum	Typical	Maximum	Unit
Center Frequency $f_c$		1575.42		MHz
Insertion Loss 1574.42 .... 1576.42 MHz $IL$		1.4	1.8	dB
Passband Ripple 1574.42 .... 1576.42 MHz		0.2	1.0	dB
Absolute Attenuation $\alpha$				
10 .... 1300MHz	52	57		dB
1300 .... 1400 MHz	48	53		dB
1400 .... 1525MHz	26	35		dB
1525.... 1535MHz	26	37		dB
1615.... 1625MHz	26	40		dB
1625.... 2000MHz	45	48		dB
2000.... 2500 MHz	35	40		dB
VSWR 1574.42 .... 1576.42 MHz		1.4	1.9	
Input / Output Impedance (Nominal)		50		$\Omega$

 RoHS Compliant

 Electrostatic Sensitive Device

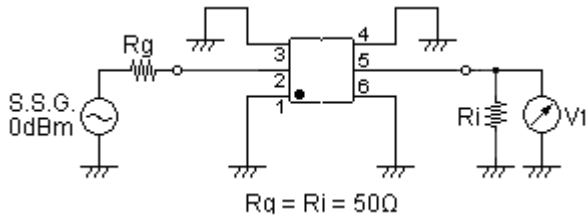
## Typical Frequency Response



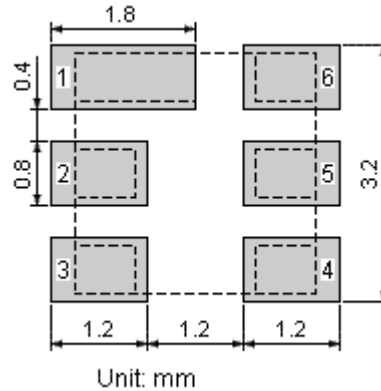
**Remarks**

- 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**

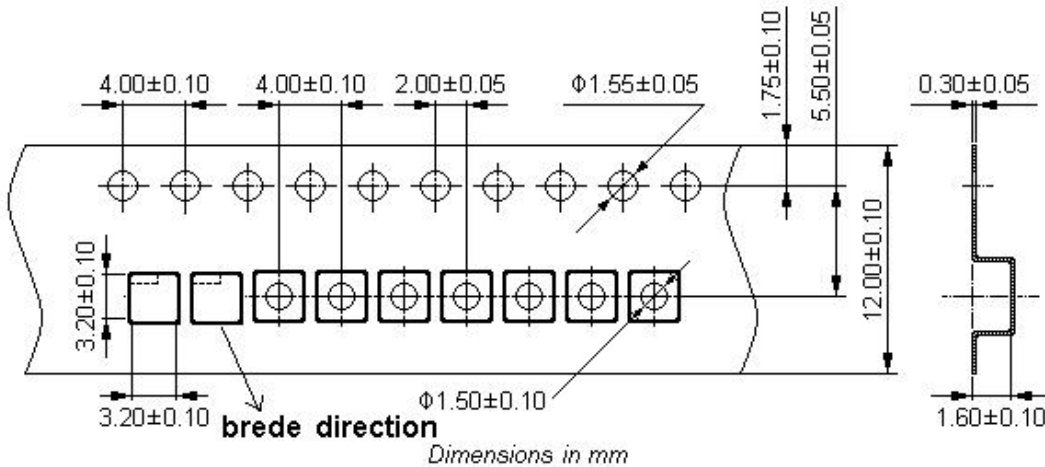


**Recommended Land Pattern**

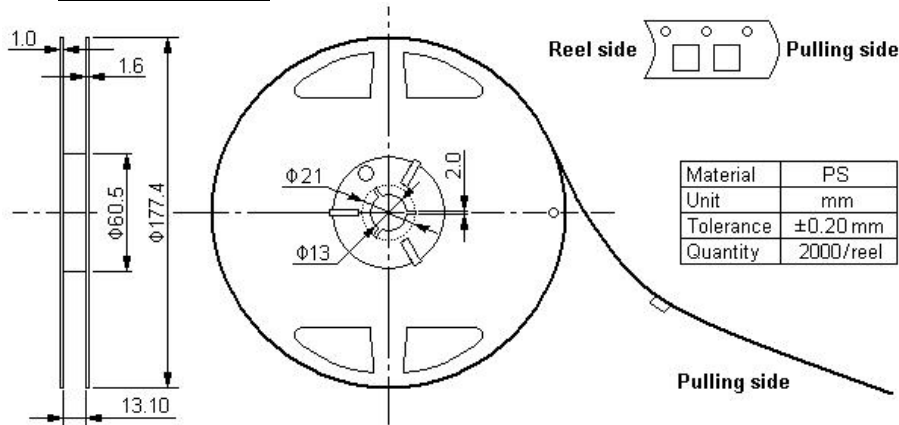


**Packing Information**

Carrier Tape



### Reel Dimensions



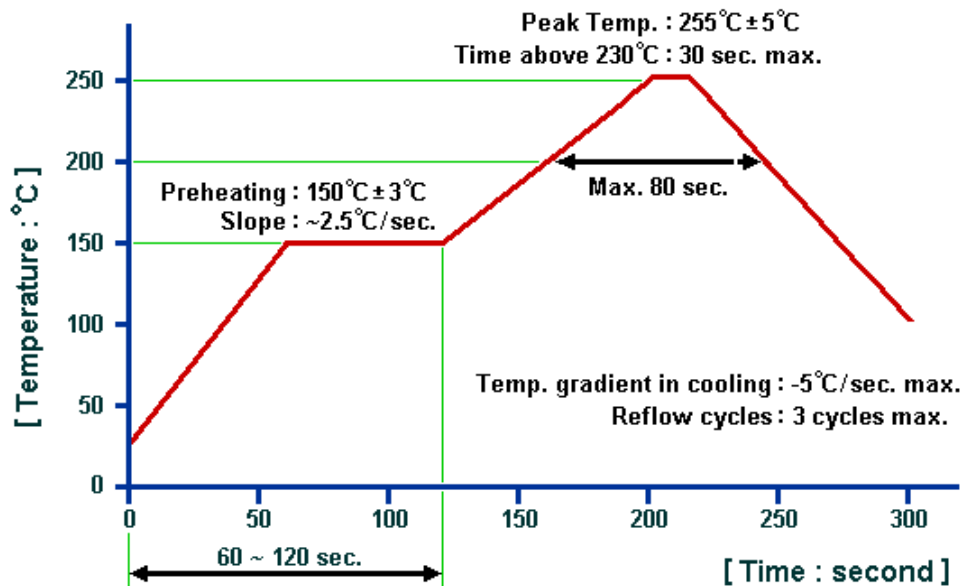
### Outer Packing

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

### Recommended Soldering Profile



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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.