Tel : 0044 (0) 118 979 1238
Fax : 0044 (0) 118 979 1283
email : info@actcrystals.com

SAW BANDPASS FILTER

PART NO.: ACTF9466_2155M_DCC6C

Product Type:		Customer:
SAW Filter		
		Customer Part NO.:
		Issued Date:

PREPARED BY	CHECKED BY	APPROVED BY

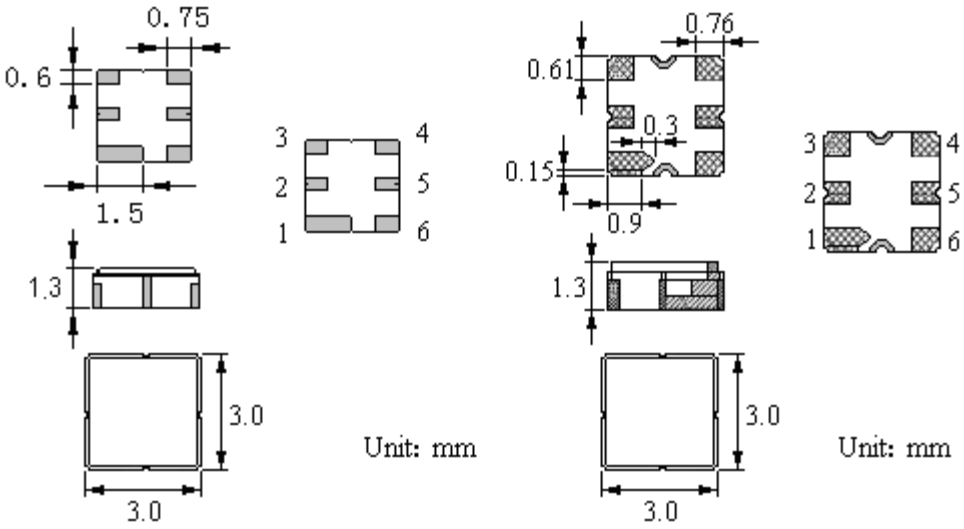
ISO9001 Registered
For quotations or further information please contact us at:
3 The Business Centre, Molly Millars Lane, Wokingham, Berkshire, RG41 2EY, UK
http://www.actcrystals.com

Features

- Low-loss RF filter for mobile systems
- Low amplitude ripple
- No matching network required for operation at 50Ω
- Ceramic package for **S**urface **M**ounted **T**echnology (**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

"**9466**": 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*	12dBm CW，Ta=95°C，pass band top frequency，test 10years continuously ,electrical characters meet demand；	
		17dBm CW，Ta=95°C，pass band top frequency，test 1000 hours continuously ,electrical characters meet demand；	
		24dBm CW，Ta=95°C，pass band top frequency，test 2 hours continuously ,electrical characters meet demand；	
DC Voltage	V_{DC}	12	V
Operating Temperature Range	T_A	-40 ~ +95	°C
Storage Temperature Range	T_{stg}	-40 ~ +95	°C

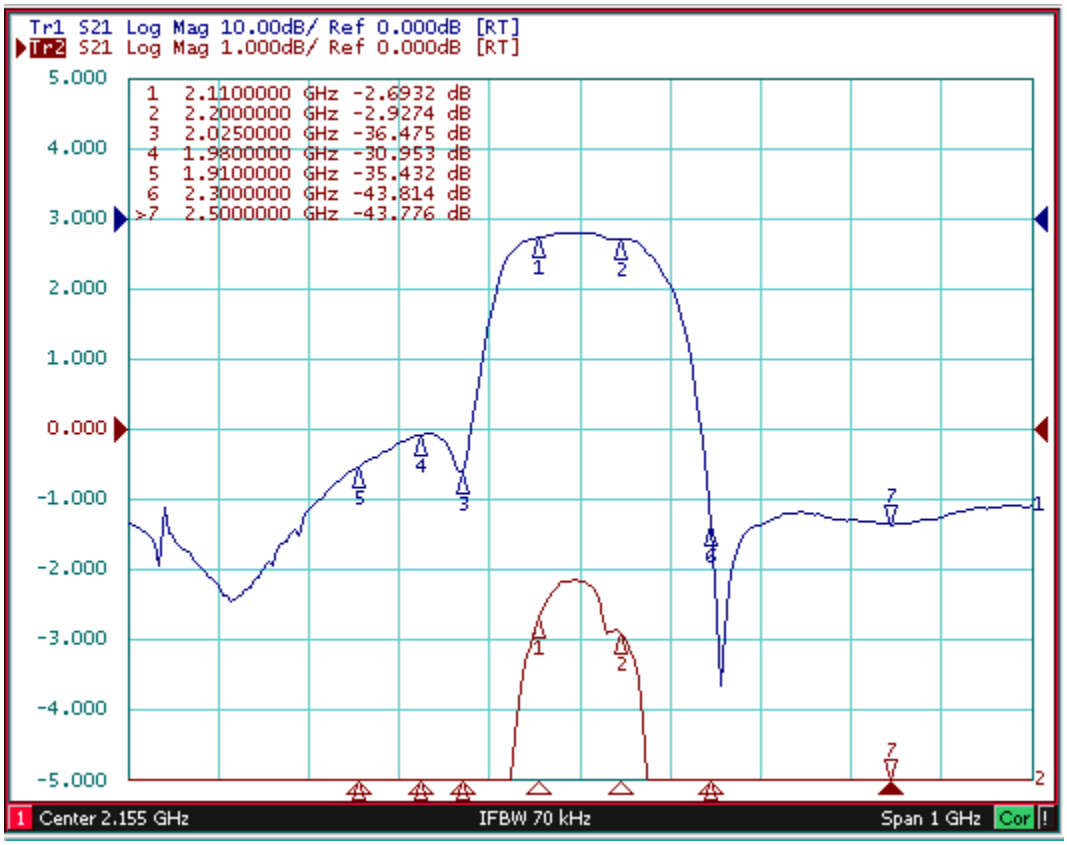
Electrical Characteristics（-40 —— +95°C）

Item		Minimum	Typical	Maximum	Unit
Center Frequency	f_C		2155		MHz
Insertion Loss @ 2110.00 ···. 2200.00 MHz		--	3.0	3.5	dB
Amplitude Ripple (p-p) 2110.00 ···. 2200.00 MHz	$\Delta\alpha$		0.8	1.5	dB
Absolute Attenuation	α				
DC ….1400.00MHz		25	32		dB
1400.00….1600.00MHz		27	33		dB
1600.00….1910.00MHz		30	35		dB
1910.00 …. 1995.00 MHz		32	34		dB
1980.00 …. 2025.00 MHz		25	30		dB
2300.00 …. 3700.00 MHz		25	32		dB
3700.00 …. 5300.00 MHz		20	26		dB
5300.00 …. 5700.00 MHz		13	17		dB
VSWR 2110.00 ···. 2200.00 MHz			1.5	2.0	
Input / Output Impedance (Nominal)			50		Ω

RoHS Compliant **Electrostatic Sensitive Device**

Typical Frequency Response

S21




Tr1 S22 SWR 1.000/ Ref 1.000
Tr2 S11 SWR 1.000/ Ref 1.000
1 2.1100000 GHz 1.2726
>2 2.2000000 GHz 1.2388
11.00
10.00
9.000
8.000
7.000
6.000
5.000
4.000
3.000
2.000
1.000
1 Center 2.155 GHz
IFBW 70 kHz
Span 1 GHz


Tr1 S21 Log Mag 10.00dB/ Ref 0.000dB
20.00
10.00
0.000
-10.00
-20.00
-30.00
-40.00
-50.00
-60.00
-70.00
-80.00
1 Start 300 kHz
IFBW 70 kHz
Stop 5.7 GHz
Off

Stability Characteristics

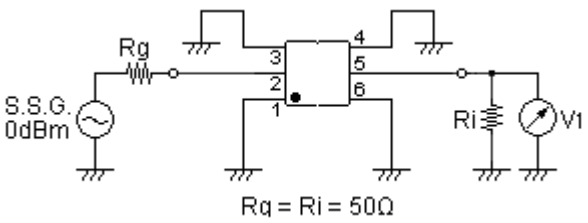
	Test item	Condition of test
1	Mechanical shock	(a) Drops: 3 times on concrete floor (b) Height: 1.0 m
2	Vibration resistance	(a) Frequency of vibration: 10~55Hz (b) Amplitude: 1.5 mm (c) Directions: X,Y and Z (d) Duration: 2 hours
3	Moisture resistance	(a) Condition: 40℃±2℃ , 93^{+2}_{-3}% RH. (b) Duration: 96 hours (c) Wait 4 hours before measurement
4	Climatic sequence	(a) +70°C for 16 hours (b) +55°C for 24 hours, 90~95% R.H. (c) -25°C for 2 hours (d) +40°C for 24 hours, 90~95% R.H. (e) Wait 4 hours before measurement
5	High temperature exposure	(a) Temperature: 85°C (b) Duration: 250 hours (c) Wait 4 hours before measurement
6	Temperature cycling	(a) +85°C for 30 minutes ⇒ -40°C for 30 minutes repeated 120 times (b) Wait 4 hours before measurement

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

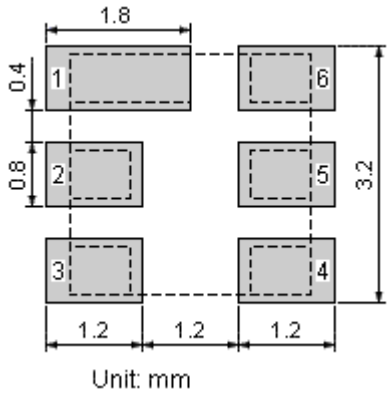
Remarks

- 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

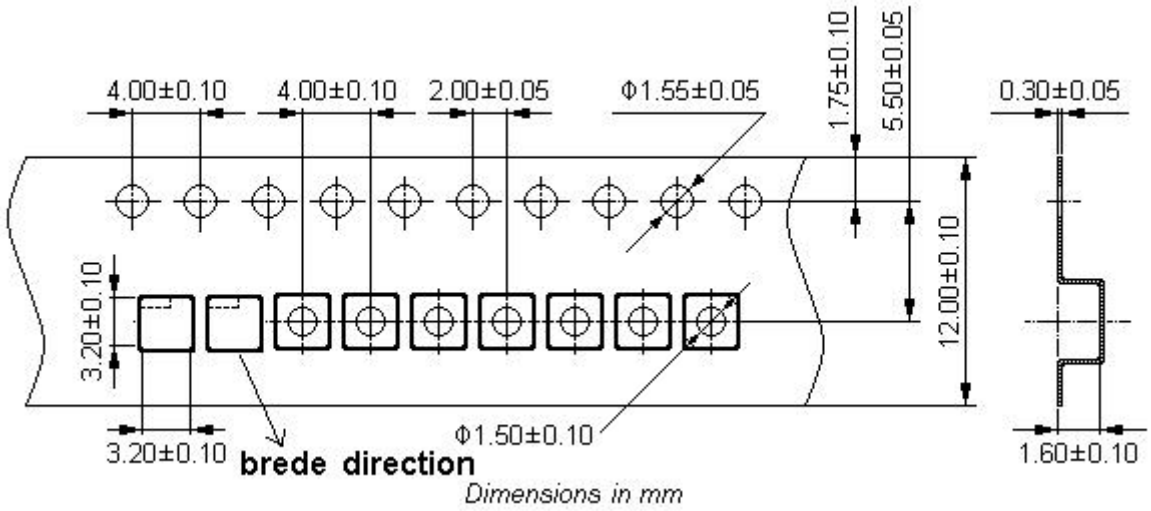


Recommended Land Pattern

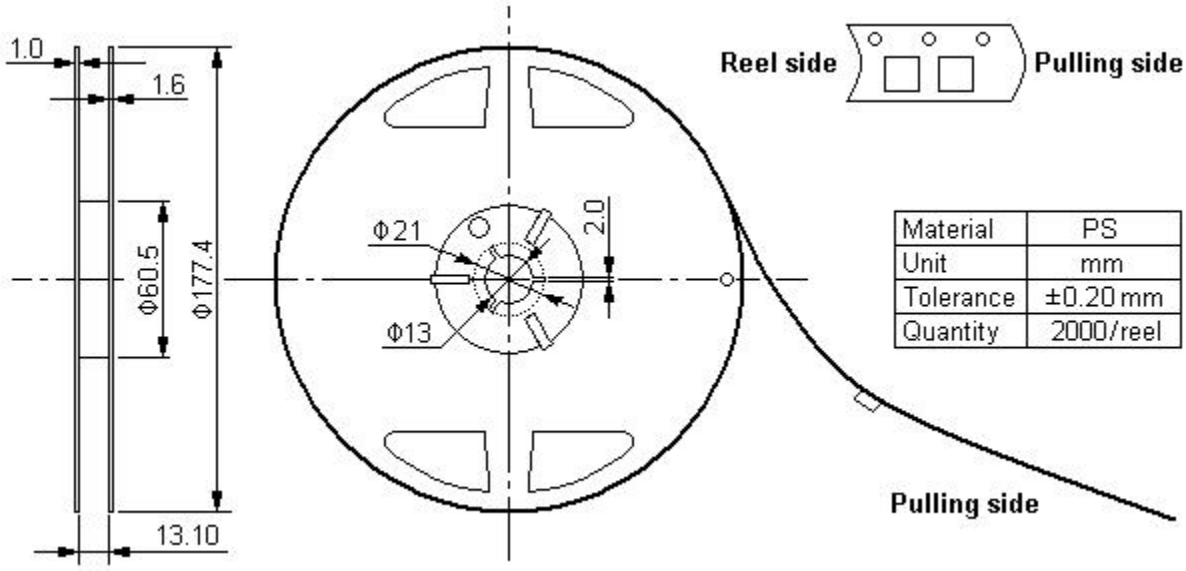


Packing Information

Carrier Tape



Reel Dimensions



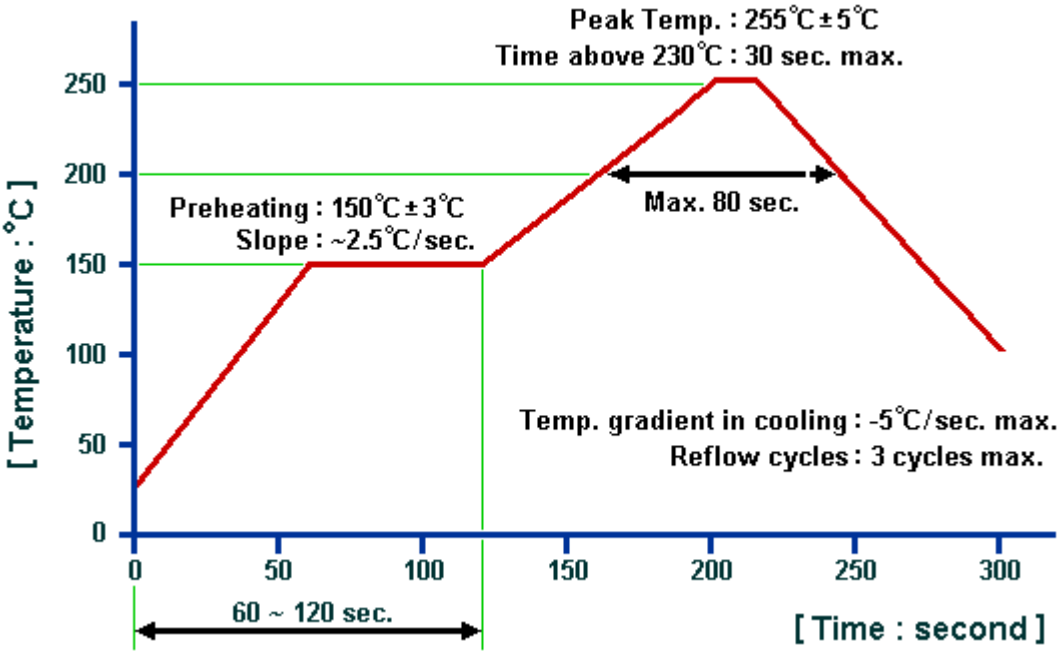
Material	PS
Unit	mm
Tolerance	±0.20 mm
Quantity	2000/reel

Outer Packing

Type	Quantity	Dimension	Description	Weight
Carton Box Ⅰ	10000	190×190×95	anti-static plastic bag & carton box 1 reel / bag 5 bags / box (10000 pcs) 10 bags / box (20000 pcs)	0.85
Carton Box Ⅱ	20000	190×190×190		1.80

Unit: mm Unit: kg

Recommended Soldering Profile



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.