

SAW BANDPASS FILTER

ACT PART NO.: ACTF9445_1950MHz_DCC6C_V1.0

Product Type:		Customer:	
SAW Filter			
ACT Part NO.:		Customer Part NO.:	
ACTF9445_1950MHz_DCC6C_V1.0		Issued Date:	

PREPARED BY	CHECKED BY	APPROVED BY

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

ISO9001 Registered

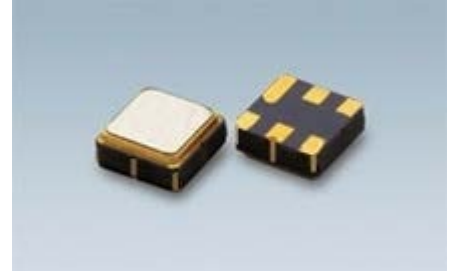
For quotations or further information please contact us at:

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

<http://www.actcrystals.com>

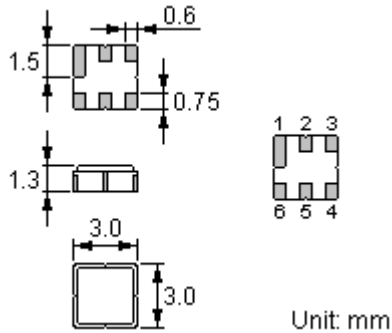
Features

- 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

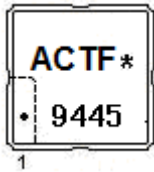
Ceramic Package: **DCC6C**



Pin Configuration

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

Marking



Top View, Laser Marking

- "ND": Manufacturer's mark "F": SAW filter
 "9445": 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
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
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

Maximum Ratings

Rating		Value	Unit
Input Power Level	P	15max	dBm
DC Voltage	V_{DC}	7.5	V
Operating Temperature Range	T_A	-40 ~ +85	°C
Storage Temperature Range	T_{stg}	-40 ~ +85	°C
ESD-HBM for all pin	E_{SD}	150	V

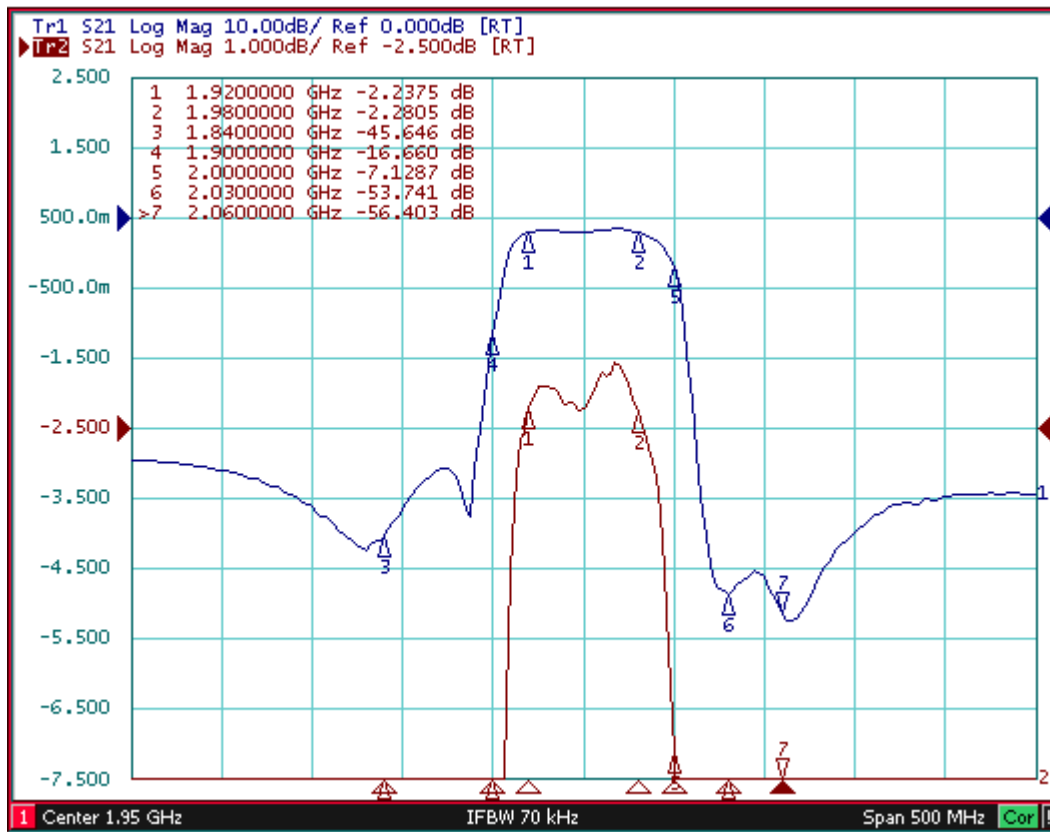
Electrical Characteristics

Item		Minimum	Typical	Maximum	Unit
Center Frequency	f_c		1950		MHz
Insertion Loss 1920.00 1980.00 MHz	IL		2.5	3.5	dB
Passband Ripple 1920.00 1980.00 MHz			0.8	1.5	dB
Group Delay Ripple 1920.00 1980.00 MHz			10	25	ns
Absolute Attenuation	α				
0 1840MHz		25	33		dB
1840 1900 MHz		10	17		dB
2000 2030MHz		4.5	8		dB
2030.... 2060MHz		35	50		dB
2060.... 5000 MHz		22	26		dB
VSWR 1920.00 1980.00 MHz			1.6	2.0	
Input / Output Impedance (Nominal)			50		Ω

 RoHS Compliant

 Electrostatic Sensitive Device

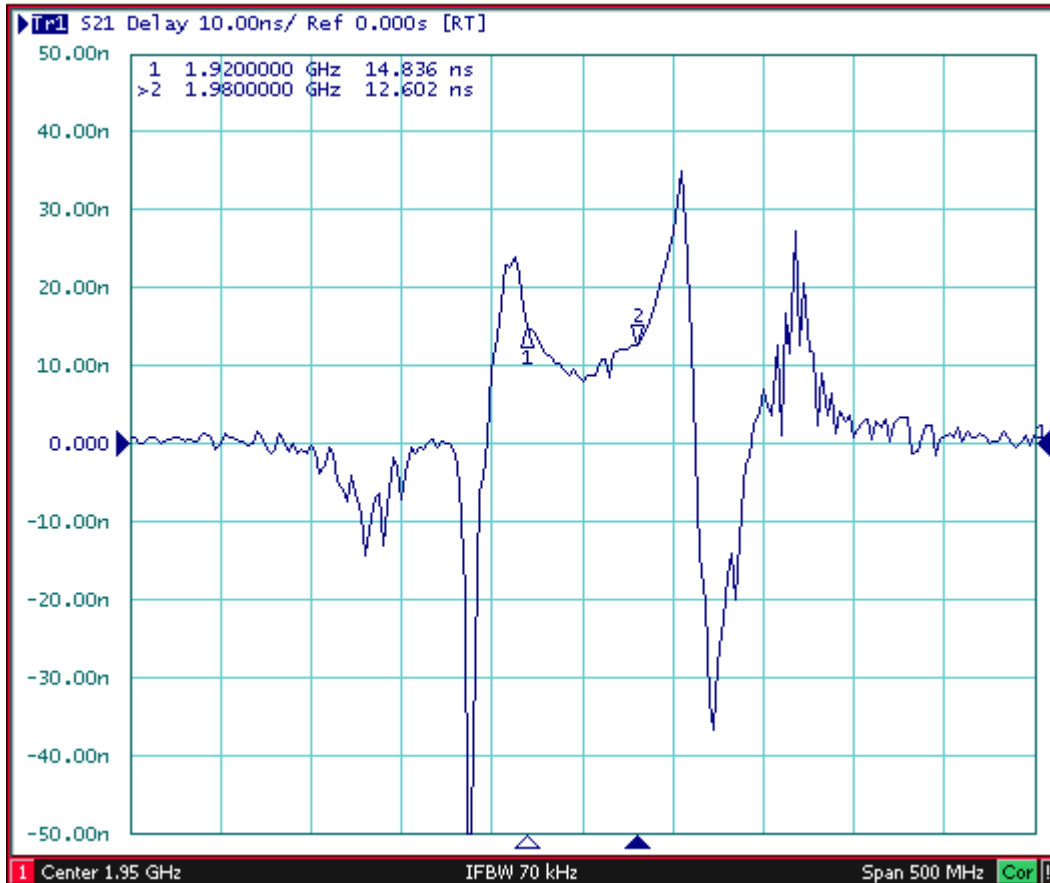
Typical Frequency Response



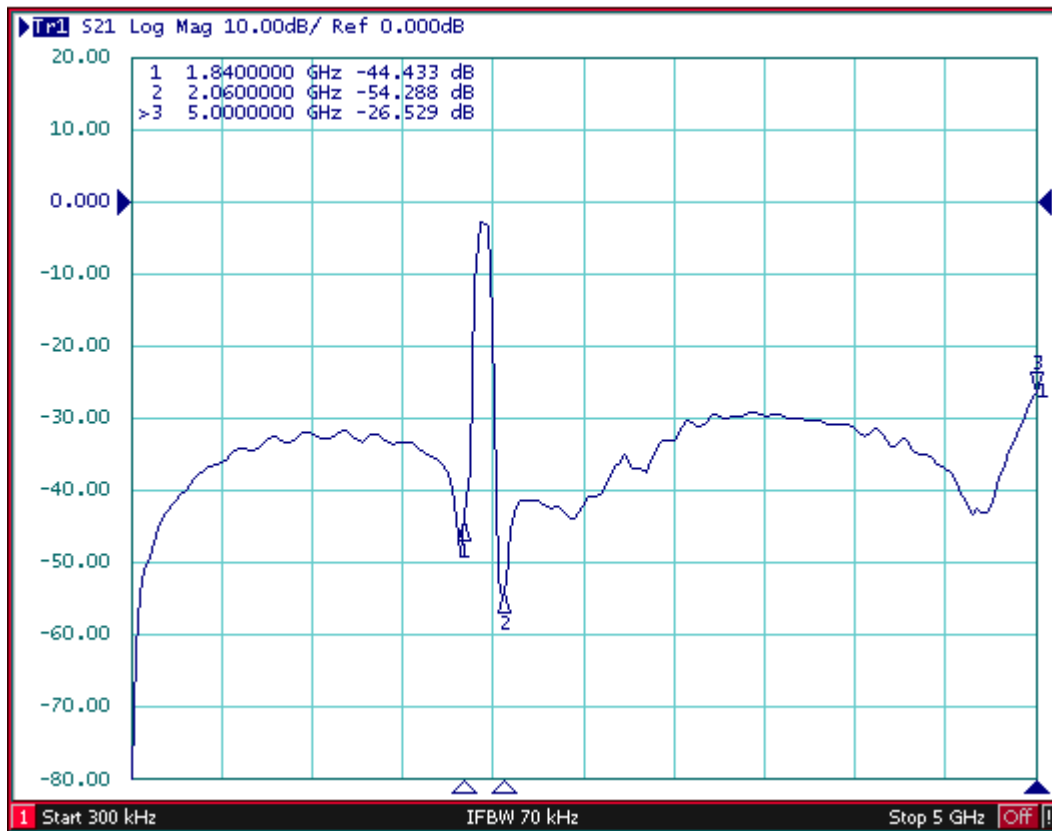
S11 S22



Group Delay



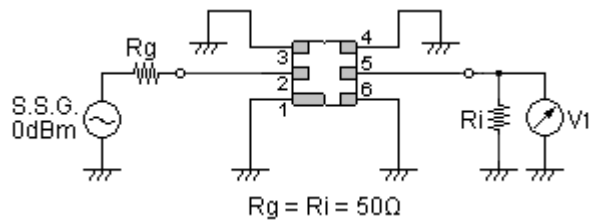
Far side



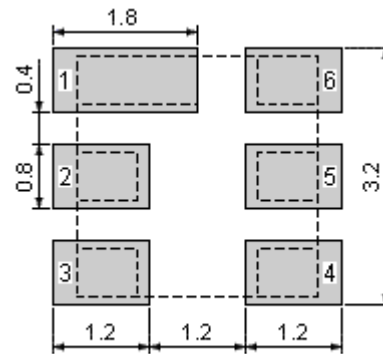
Remarks

- 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

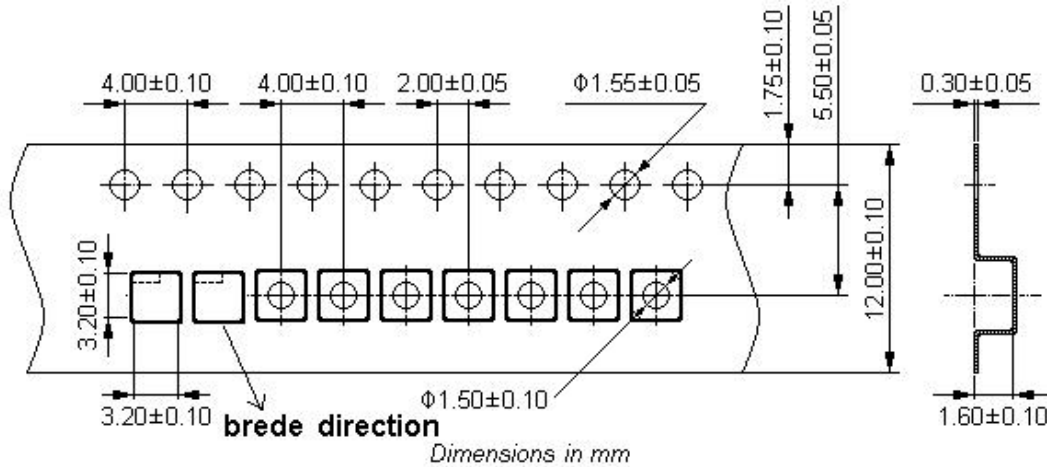


Recommended Land Pattern

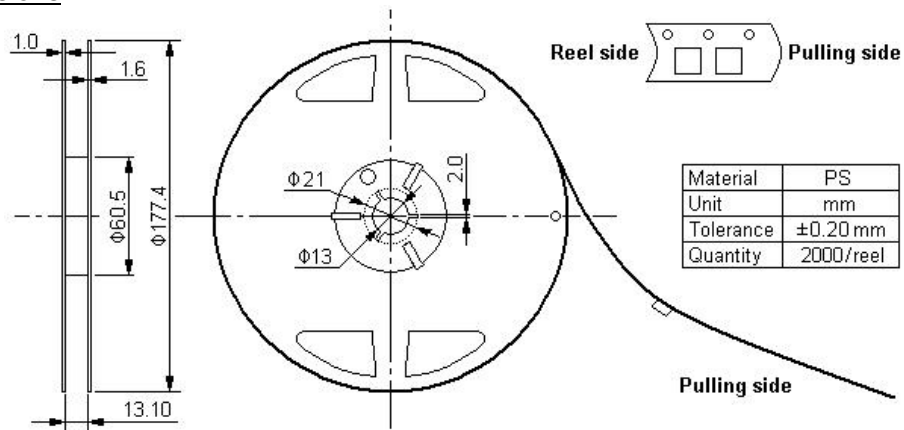


Packing Information

Carrier Tape



Reel Dimensions



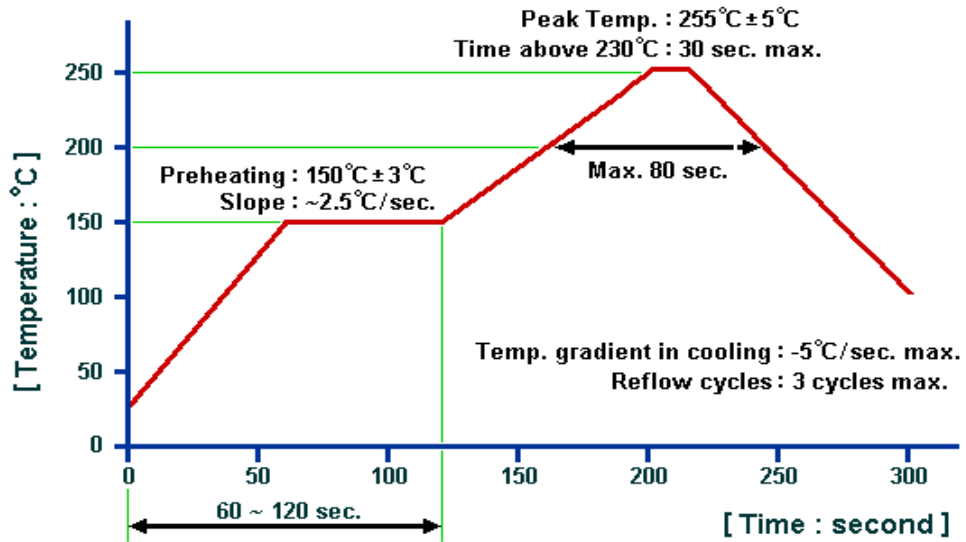
Outer Packing

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

Unit: mm

Unit: kg

Recommended Soldering Profile



© ACT 2014. All Rights Reserved.

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.