



SAW BANDPASS FILTER

ACT PART NO.: ACTFG001-1575SA-1411

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

Maximum Ratings

Rating		Value	Unit
DC Voltage (between any Terminals)	V_{DC}	10	V
RF Power (in <i>BW</i>)	P	10	dBm
Operating Temperature Range	T_A	-30 ~ +85	°C
Storage Temperature Range	T_{stg}	-40 ~ +85	°C

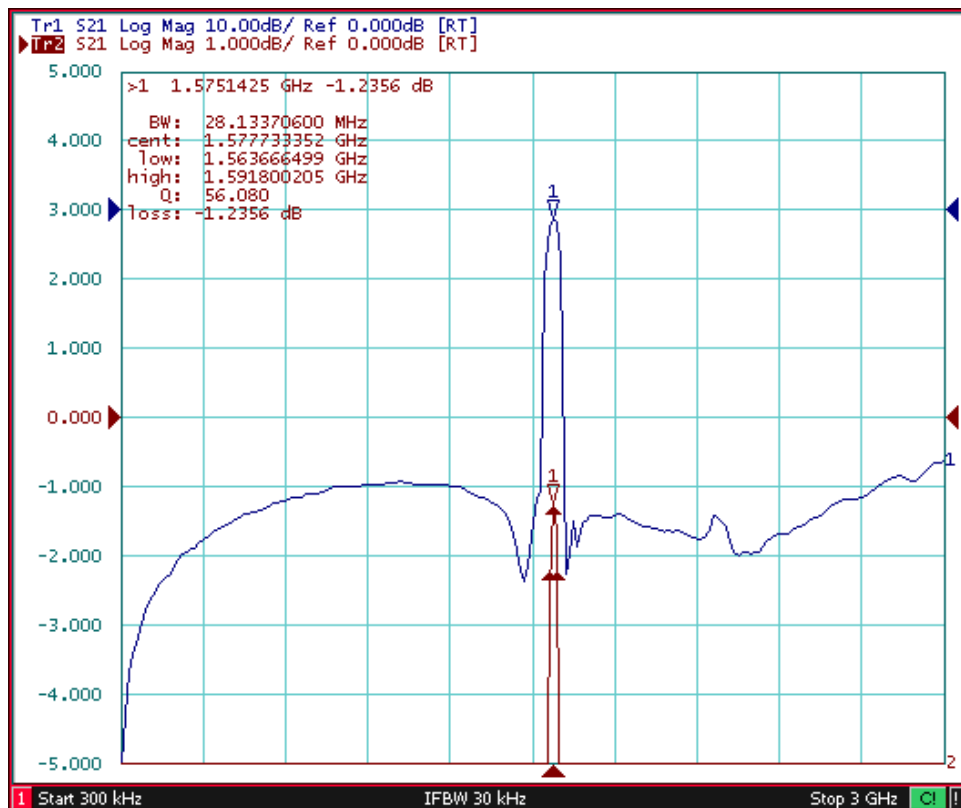
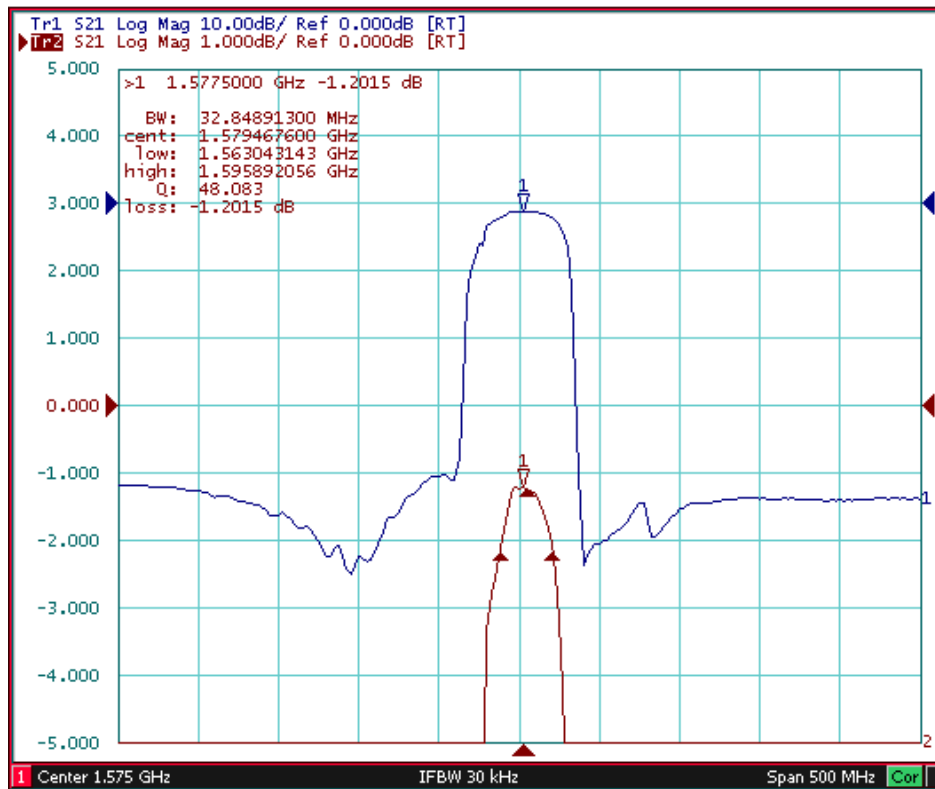
Electrical Characteristics:

Item		Minimum	Typical	Maximum	Unit
Center Frequency	fC	-	1575.42	-	MHz
Maximum Insertion Loss in 1574.42–1576.42MHz	IL	-	1.2	1.5	dB
Amplitude Variation in 1574.42–1576.42MHz			0.1	0.5	dB
Absolute Attenuation	α				
0.30 ... 1450.0MHz		35	39	-	dB
1450.0 ... 1525.0 MHz		38	45	-	dB
1620.0 ... 1640.0 MHz		45	48	-	dB
1640.0 ... 1805.0MHz		38	40		dB
1805.0 ... 1910.0 MHz		38	40	--	dB
1910.0 ... 2000.0 MHz		38	43	--	dB
2000.0 ... 4000.0 MHz		30	45	--	dB
4000.0 ... 6000.0 MHz		20	22	--	dB
VSWR in 1574.42–1576.42MHz		-	1.15	1.5	

 **RoHS Compliant**

 **Electrostatic Sensitive Device**

Typical Frequency Response





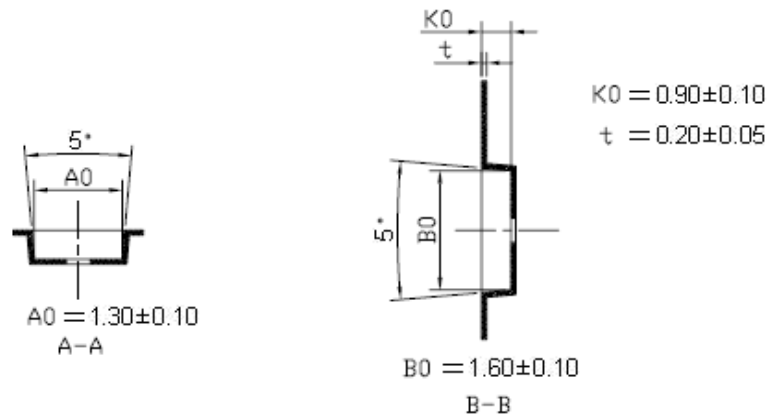
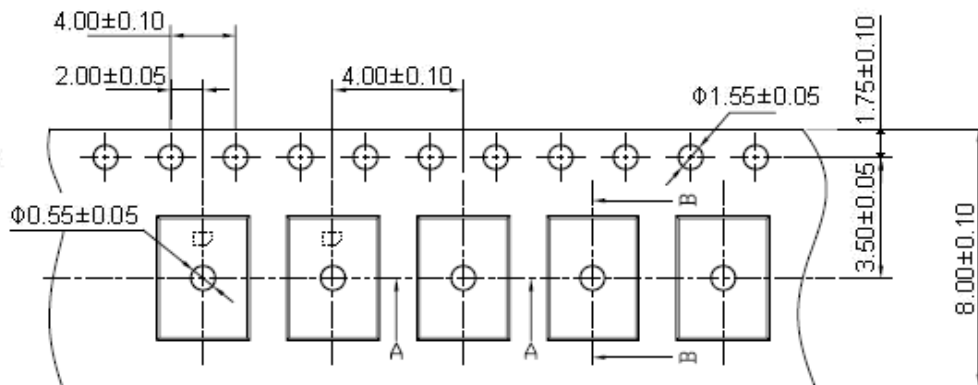
Stability Characteristics

Item No.	Test Item	STD Reference	Test Conditions	per lot
	Preconditioning	JESD22-A113	1) Temperature Cycling, 5 cycles -40°C to 85°C; 2) Bake, 24 hrs @85±5°C; 3)Moisture Soak, Soak time and conditions per IPC/JEDEC J-STD-020 based on device MSL level; 4) Reflow, 3 reflow cycles; 5) Drying, Room ambient temperature.	All behind
1	Temperature Cycling	JESD22-A104	-40°C / +85°C,5°C/min,15min dwell,<1 min transfer time,500cycles	3*25 pcs
2	High Temperature Storage	JESD22-A103	Temperature=85°C, 1000 hours.	3*25 pcs
3	Temperature Humidity no bias	JEDEC Std A101-B	85°C 85%RH 240 hours	3*25 pcs
4	Human Body Mode ESD	JESD22-A114	Ta=25°C, ≥100V	3 pcs
5	Charge Device Mode ESD	JESD22-C101	Ta=25°C, ≥100V	3 pcs
6	Solderability	JESD22-B102	Wetting: 245°C, 5s.	22 pcs
7	Drop Test	JESD22-B111	1500 Gs, 0.5 millisecond duration, half-sine pulse.	20 pcs
8	Mechanical Shock	JESD-47	Shock pulse of 1500g with pulse duration of 0.5+/-0.1msec (X ,Y & Z); 5 shocks per axis.	3*25 pcs

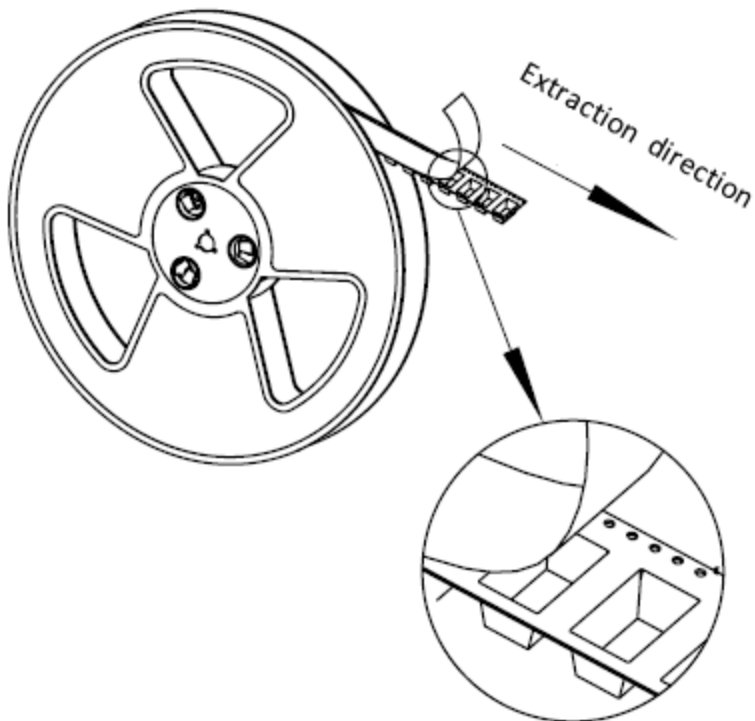
Requirements: The SAW filer shall remain within the electrical specifications after tests.

Packing Information

Carrier Tape



Reel Dimensions



Material	PS
Unit	mm
Tolerance	± 0.20 mm
Quantity	4000/reel

Outer Packing

Type	Quantity	Dimension	Description	Weight
Carton Box I	40000	240×210×285	anti-static plastic bag & carton box 1 reel / bag 10bags / box (40000 pcs) 30 bags / box (120000pcs)	1.86
Carton Box II	120000	470×310×285		5.64

Unit: mm

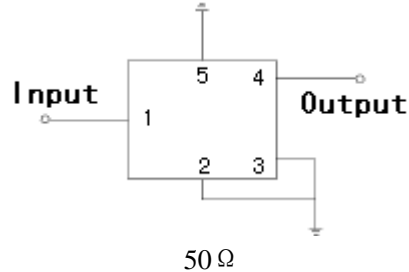
Unit: kg

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

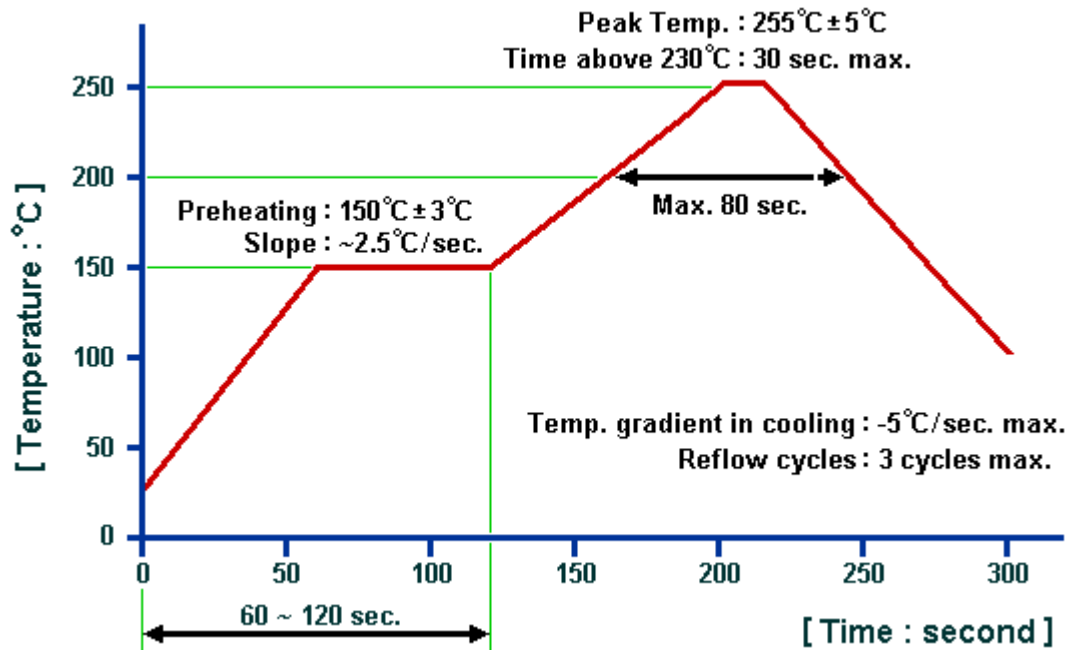
Remarks

- 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 Soldering Profile



© ACT 2018. 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.