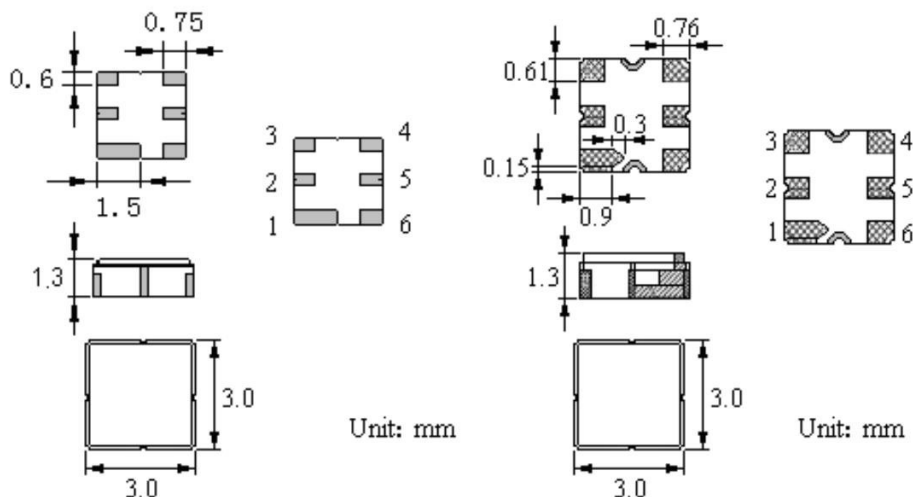


Features

- RF filter for base station
- Usable pass band 225MHz
- 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
 "9534": 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
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
2019	a	b	c	d	e	f	g	h	i	j	k	m

Maximum Ratings

Rating		Value	Unit
Input Power Level	P	12.5dBm CW, $T_a=115^{\circ}\text{C}$, pass band top frequency, test 100000 hours continuously ,electrical characters meet demand;	
		13.5dBm CW, $T_a=105^{\circ}\text{C}$, pass band top frequency, test 100000 hours continuously ,electrical characters meet demand;	
		19dBm CW, $T_a=115^{\circ}\text{C}$, pass band top frequency, test 1000 hours continuously ,electrical characters meet demand;	
		20dBm CW, $T_a=105^{\circ}\text{C}$, pass band top frequency, test 1000 hours continuously ,electrical characters meet demand;	
		22dBm CW, $T_a=115^{\circ}\text{C}$, pass band top frequency, test 2 hours continuously ,electrical characters meet demand;	
		23dBm CW, $T_a=105^{\circ}\text{C}$, pass band top frequency, test 2 hours continuously ,electrical characters meet demand;	
DC Voltage	V_{DC}	12	V
Operating Temperature Range	T_A	-40 ~ +115	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	-40 ~ +125	$^{\circ}\text{C}$
ESD-HBM,for all pin	V	150	V

Electrical Characteristics

Parameter		Unit	Minimum	Typical	Maximum
Center frequency		MHz		3587.5	
Insertion Loss (3475~3700MHz)		dB		4.5*)	5.0*)
				4.8**)	5.2**)
Pass band Ripple (3475~3700MHz)		dB		2.0	3.5
Group Delay (3475~3700MHz)		ns		5	30
Group Delay Ripple (3475~3700MHz)		ns		3	15
Absolute Attenuation	DC~2700MHz	dB	20	27	
	2700~3100MHz	dB	20	28	
	3100~3200MHz	dB	20	30	
	3200~3350MHz	dB	7*)	15*)	
			5**)	11**)	
	3350~3405MHz	dB	4*)	8*)	
			3**)	6**)	
	3850~4000MHz	dB	25	30	
	4000~4200MHz	dB	20	30	
Input/ Output VSWR (3475~3700MHz)				1.7	2.7
Input/Output Impedance		ohm		50	

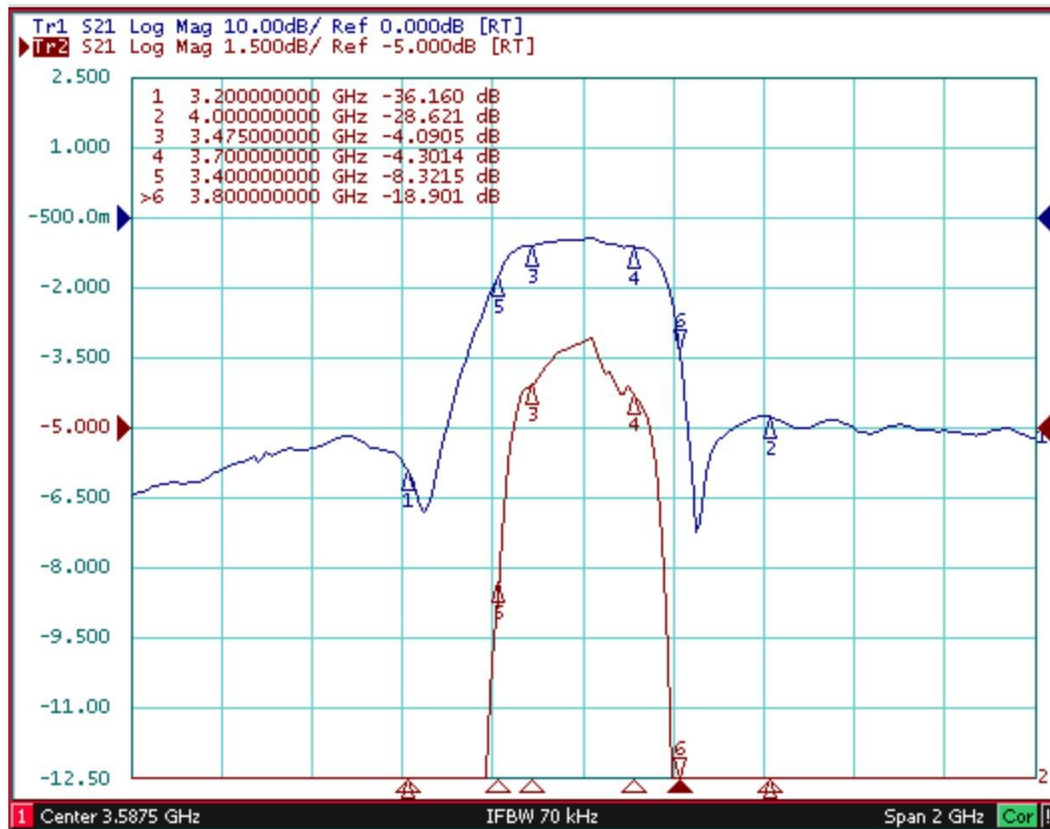
 **RoHS Compliant**
 **Electrostatic Sensitive Device**

 *) @ -40 $^{\circ}\text{C}$ ~95 $^{\circ}\text{C}$

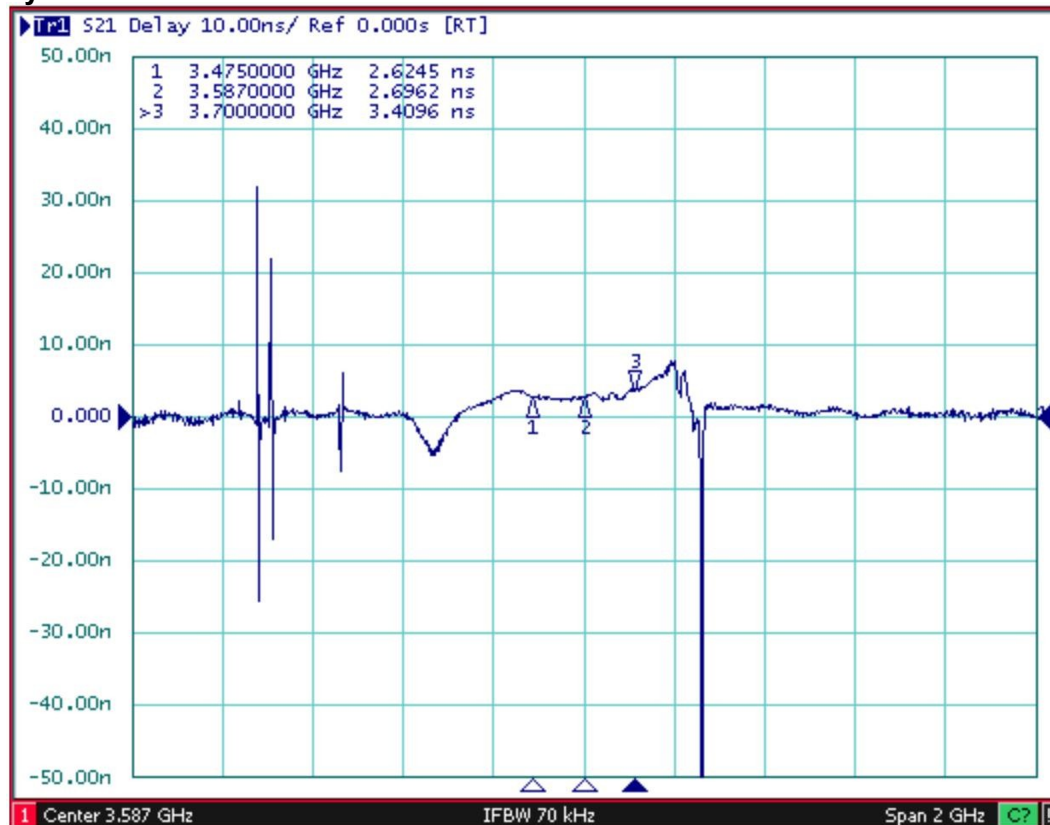
 **) @ 95 $^{\circ}\text{C}$ ~115 $^{\circ}\text{C}$

Typical Frequency Response

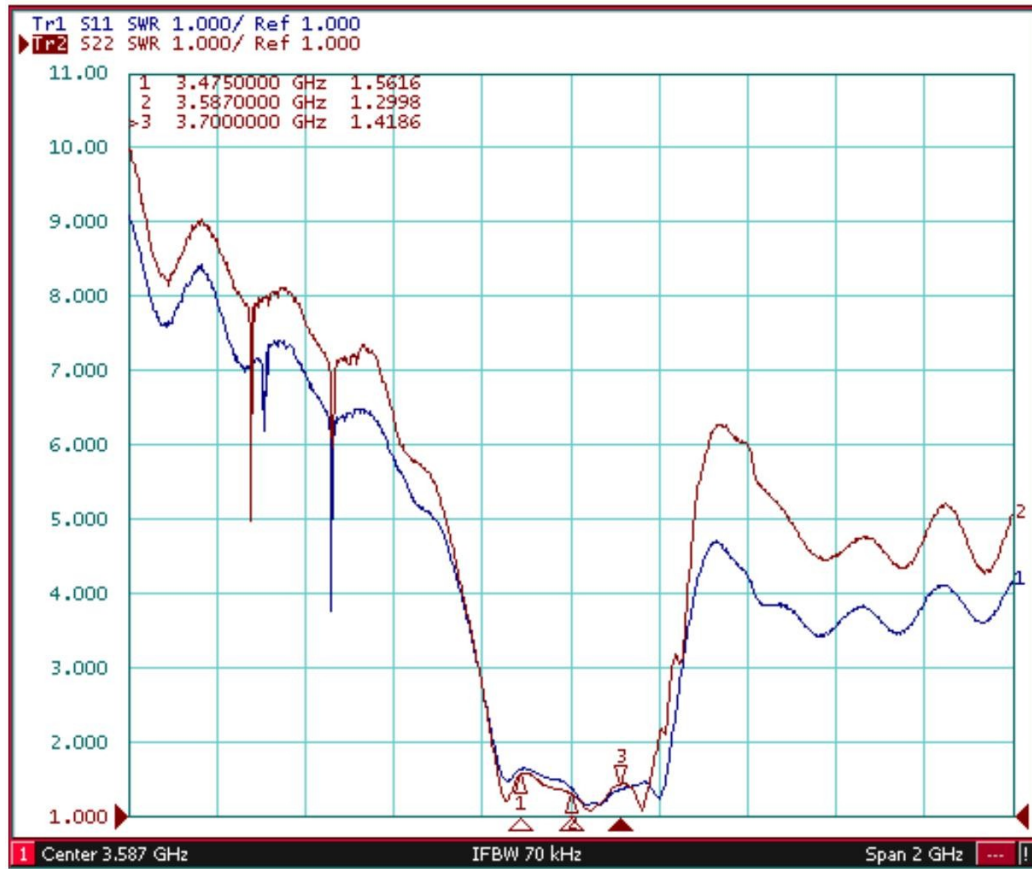
Narrow Band S21



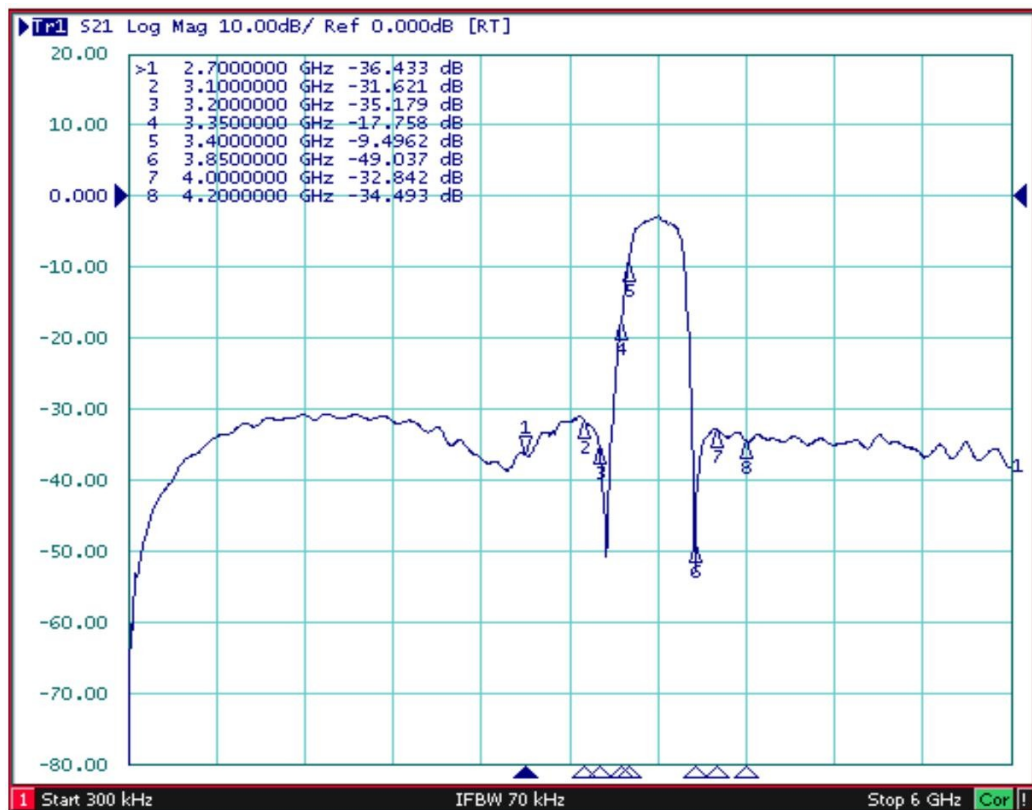
Group Delay



S11 S22



Far Side



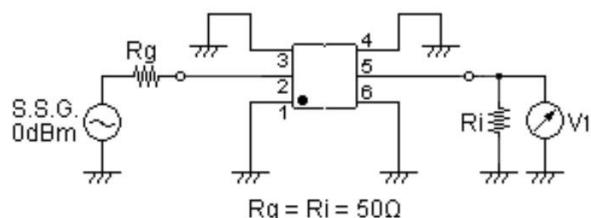
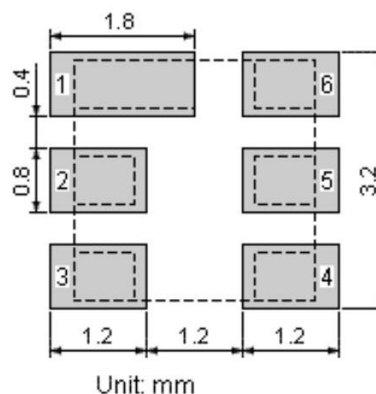
Stability Characteristics

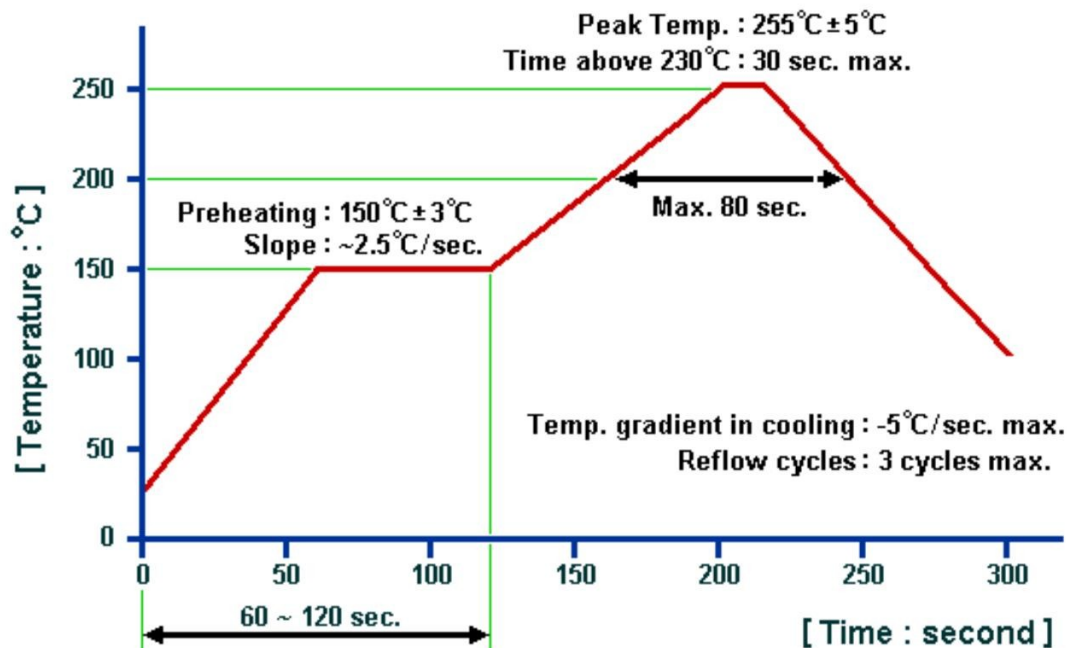
	Test item	Condition of test
1	Mechanical shock	Y1 plane only, 5 pulses, 0.5 ms duration, 1500 g peak acceleration
2	Temperature Humid No Bias	85°C , 85%RH, 1000hours
3	Thermal Shock	-55°C /+125°C,5 min dwell,<1 min transfer time, 1000cycles
4	High Temperature Storage Life	150°C +Preconditioning if Required,1000hrs
5	Human Body Mode ESD	per EIA/JESD22-A114
6	Power Testing	(Maximum Input Power at High Frequency Side of Filter. Ta ≥ Maximum Working Temperature; ≥2Hrs

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 Land Pattern


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.
4. For questions on technology, prices and delivery, please contact our sales offices or e-mail winnsky@winnsky.com.