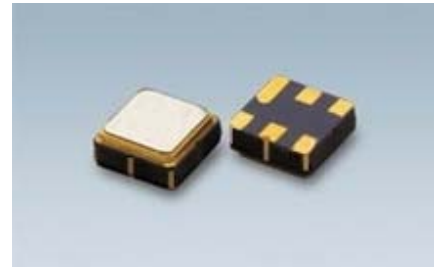


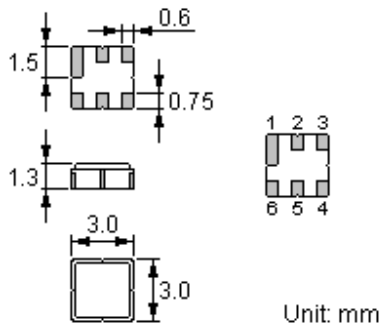
**Features**

- Low-loss RF filter for EGSM Rx etc.
- Usable passband: 30 MHz
- 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
- "9104": 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
2005	A	B	C	D	E	F	G	H	J	K	L	M
2006	N	P	Q	R	S	T	U	V	W	X	Y	Z
2007	a	b	c	d	e	f	g	h	i	j	k	m
2008	n	p	q	r	s	t	u	v	w	x	y	z

**Maximum Ratings**

Rating	Value	Unit
Input Power Level	$P$	20 dBm
DC Voltage	$V_{DC}$	12 V
Operating Temperature Range	$T_A$	-10 ~ +65 °C
Storage Temperature Range	$T_{stg}$	-40 ~ +85 °C

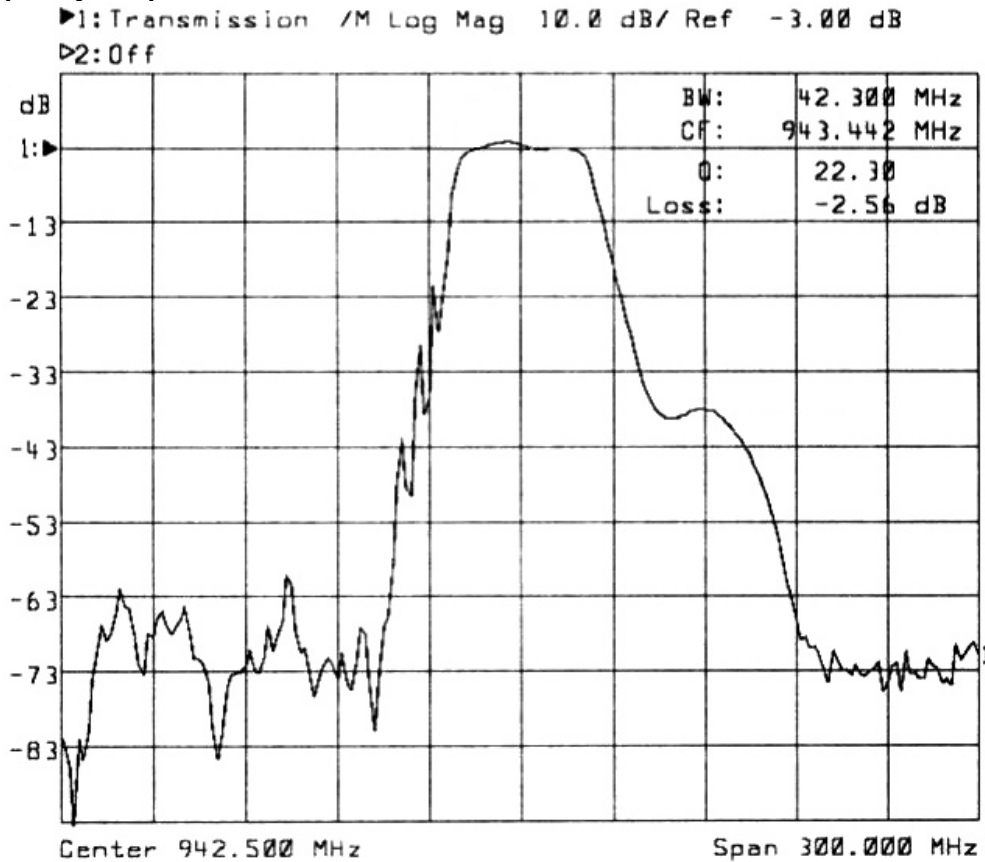
Electrical Characteristics

Item		Minimum	Typical	Maximum	Unit
Center Frequency	$f_c$		942.50		MHz
3dB Bandwidth	$BW_3$		42		MHz
Usable Bandwidth	$BW$		$\pm 15$		MHz
Insertion Loss	$IL$				
	927.50 .... 957.50 MHz	--	3.0	4.0	dB
Absolute Attenuation	$\alpha$				
	DC .... 882.50 MHz	48	56		dB
	882.50 .... 912.50 MHz	20	25		dB
	990.00 .... 1035.0 MHz	28	35		dB
	1035.0 .... 2000.0 MHz	48	58		dB
Amplitude Ripple (p-p)	$\Delta\alpha$				
	927.50 .... 957.50 MHz		1.0	1.8	dB
Input / Output Impedance (Nominal)			50		$\Omega$

RoHS Compliant

Electrostatic Sensitive Device

Typical Frequency Response



**Stability Characteristics**

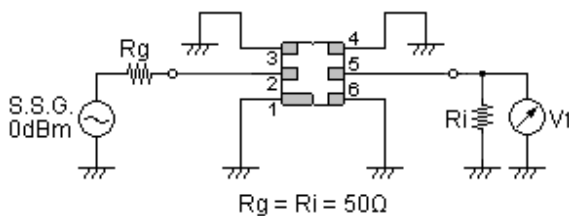
	Test item	Condition of test
1	Mechanical shock	(a) Drops: 3 times on concrete floor (b) Height: 1.0 m
2	Vibration resistance	(a) Frequency of vibration: 10~55Hz (c) Directions: X,Y and Z (b) Amplitude: 1.5 mm (d) Duration: 2 hours
3	Moisture resistance	(a) Condition: 40°C, 90~95% R.H. (c) Wait 4 hours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

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

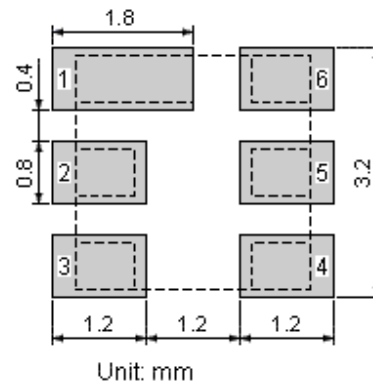
**Remarks**

- 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**

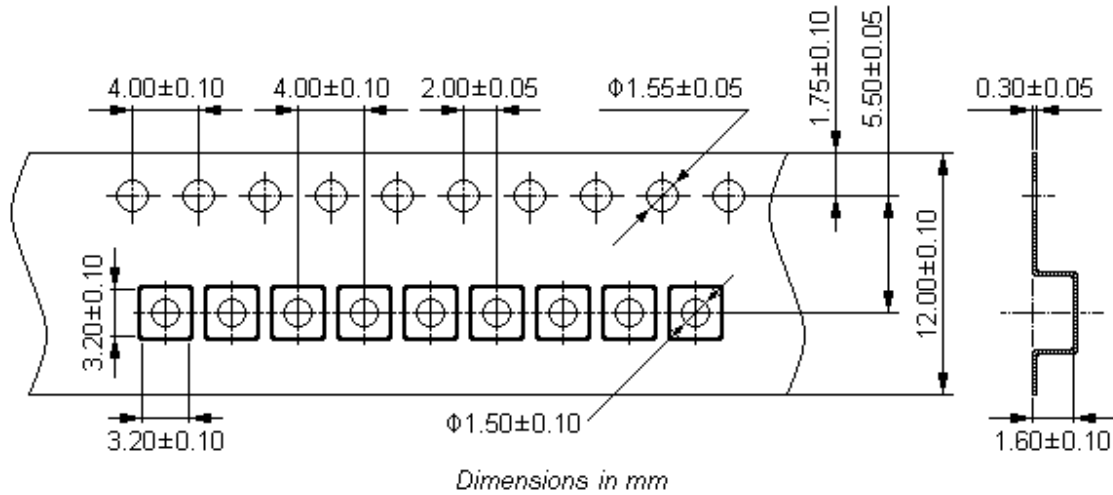


**Recommended Land Pattern**

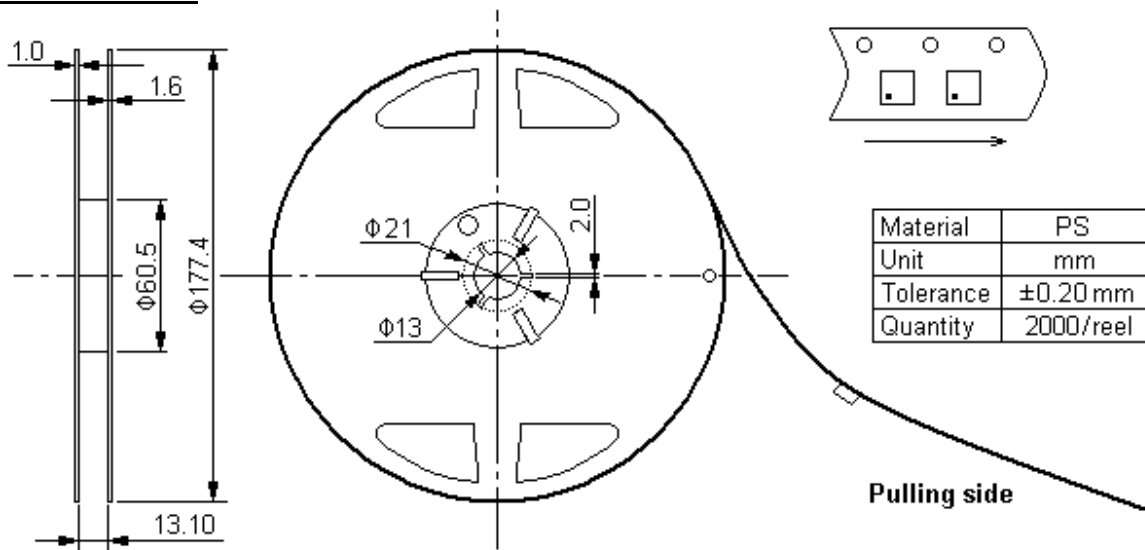


**Packing Information**

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