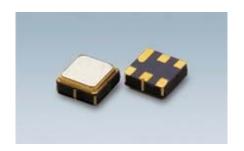


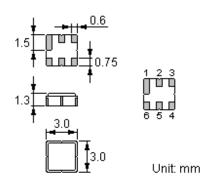
#### **Features**

- Low-loss RF filter for digital video
- Impedance transformation from 200 Ohm to 50 ohm
- Ceramic package for Surface Mounted Technology (SMT)
- Usable passband 60.0 MHz
- Lead-free production and RoHS compliant



# **Package Dimensions**

Ceramic Package: DCC6C



# **Pin Configuration**

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

## Marking



## Top View, Laser Marking

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

"9324": 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
2012	n	р	q	r	S	t	u	٧	W	Х	у	Z
2013	Α	В	С	D	Е	F	G	Н	J	K	L	М
2014	N	Р	Q	R	S	Т	U	V	W	Х	Υ	Z
2015	а	b	С	d	е	f	g	h	i	j	k	m

# **Maximum Ratings**

Rating		Value	Unit	
Input Power Level	P	0 max	dBm	
DC Voltage	$V_{ m DC}$	0	V	
Operating Temperature Range	T <sub>A</sub>	-40 ~ +85	°C	
Storage Temperature Range	T <sub>stg</sub>	-40 ~ +85	°C	



## **Electrical Characteristics**

Temperature range for specification: T = -40 °C to +85 °C

Terminating source impedance:  $ZS = 200\Omega$  (balanced) and matching network

Terminating load impedance:  $ZL = 50\Omega$ 

Item		Minimum	Typical	Maximum	Unit
Center Frequency	f <sub>C</sub>		1210		MHz
Insertion Loss	IL				
1180.0 1240.0 MHz			3.0	4.0	dB
Amplitude ripple in any 30MHz band (p-p)			1.0	2.2	dB
Absolute Attenuation	α				
50.0 900.0 MHz		42	45		dB
1390.0 1450.0 MHz		29	32		dB
1450.0 2070.0 MHz		28	31		dB
2070.0 5000.0 MHz		20	25		dB
Group delay ripple 1180.0 1240.0 MHz			18	30	ns
Input Return Loss					
1180.0 1240.0 MHz		6.0	8.5		dB
Output Return Loss					
1180.0 1240.0 MHz		6.0	8.5		dB

® RoHS Compliant

i Electrostatic Sensitive Device

Typical Frequency Response





# **Wide Band 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	` '	for 24 hours, 90~95% R.H. 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 mi (b) Wait 4 hours before measurement	nutes repeated 3 times		

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

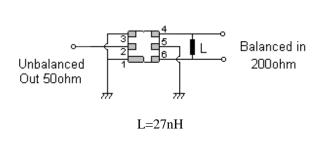


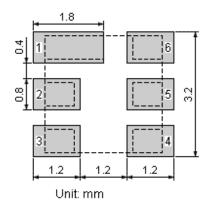
#### Remarks

- 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**

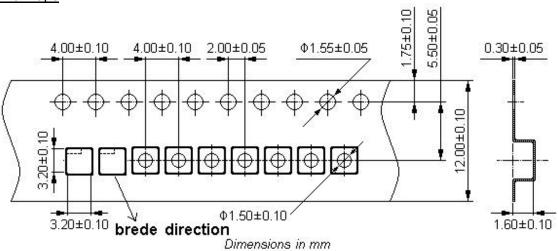




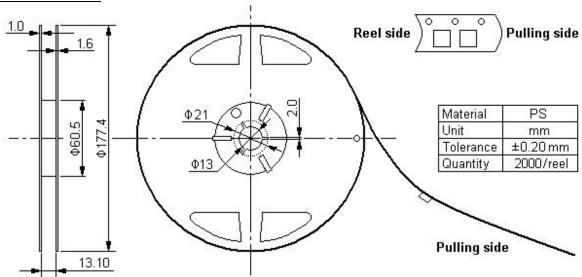


# **Packing Information**

# Carrier Tape



# **Reel Dimensions**



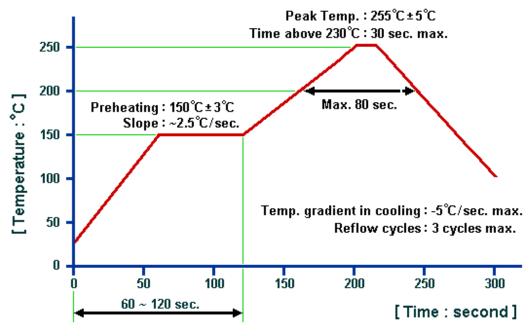
# **Outer Packing**

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



## **Recommended Soldering Profile**



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- 1. The specifications of this device are subject to change or obsolescence without notice.
- 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