



APPROVAL SHEET

MANUFACTURER:	CUSTOMER:
PART NO.: NDF8010	CUSTOMER PART NO.:
VER. CTRL.:	ISSUED DATE:

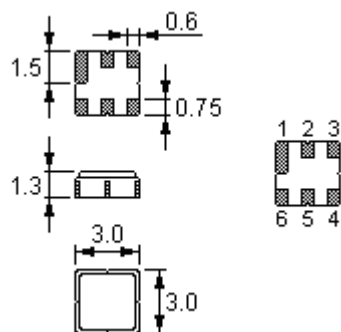
PLEASE SIGN AND STAMP YOUR COMPANY CHOP HERE TO SIGNIFY THE ACCEPTANCE OF THE ATTACHED SPECIFICATION SHEETS

PREPARED BY	CHECKED BY	APPROVED BY

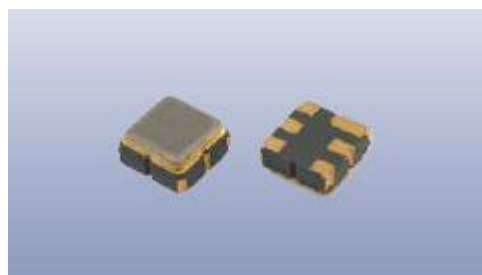
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The **NDF8010** is a low-loss, compact, and economical surface-acoustic-wave (**SAW**) filter in a surface-mount ceramic **DCC6C** case for AMPS, CDMA and TDMA applications.

1. Package Dimension (DCC6C)



Unit: mm



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

2. Marking

- The logo “ND” indicates our product’s mark
- The character “F” indicates the type of SAW component
Including: F (filter), R (resonator) etc.
- The “8010” indicates the model name of SAW component
- The character “*” indicates the month code in a year

	1	2	3	4	5	6	7	8	9	10	11	12
2009	A	B	C	D	E	F	G	H	J	K	L	M
2010	N	P	Q	R	S	T	U	V	W	X	Y	Z
2011	a	b	c	d	e	f	g	h	j	k	l	m
2012	n	p	q	r	s	t	u	v	w	x	y	z

- The characters “001” indicate the lot number of mounting
Including: 001~999



3. Maximum Ratings

Rating	Value	Unit
Input Power Level	10	dBm
DC Voltage	12	V
Storage Temperature Range	-40 to +85	°C
Operating Temperature Range	-40 to +65	°C

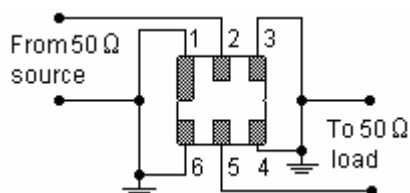
4. Electrical Characteristics

Parameter		Minimum	Typical	Maximum	Unit
Center Frequency	f_c	--	836.500	--	MHz
3dB Bandwidth	BW_3	--	± 17.4	--	MHz
Usable Bandwidth	BW_{UES}	--	± 12.5	--	MHz
Insertion Loss	IL	--	2.6	3.0	dB
824.00 MHz 849.00 MHz					
Amplitude Variation (p-p)	$\Delta \alpha$	--	0.85	1.5	dB
824.00 MHz 849.00 MHz					
Absolute Attenuation	α				dB
DC 800.00 MHz		40	50	--	dB
869.00 MHz 894.00 MHz		25	30	--	dB
925.00 MHz 2000.0 MHz		40	45	--	dB
Input / Output Impedance		50			Ω

ⓘ CAUTION: Electrostatic Sensitive Device. Observe precautions for handling!

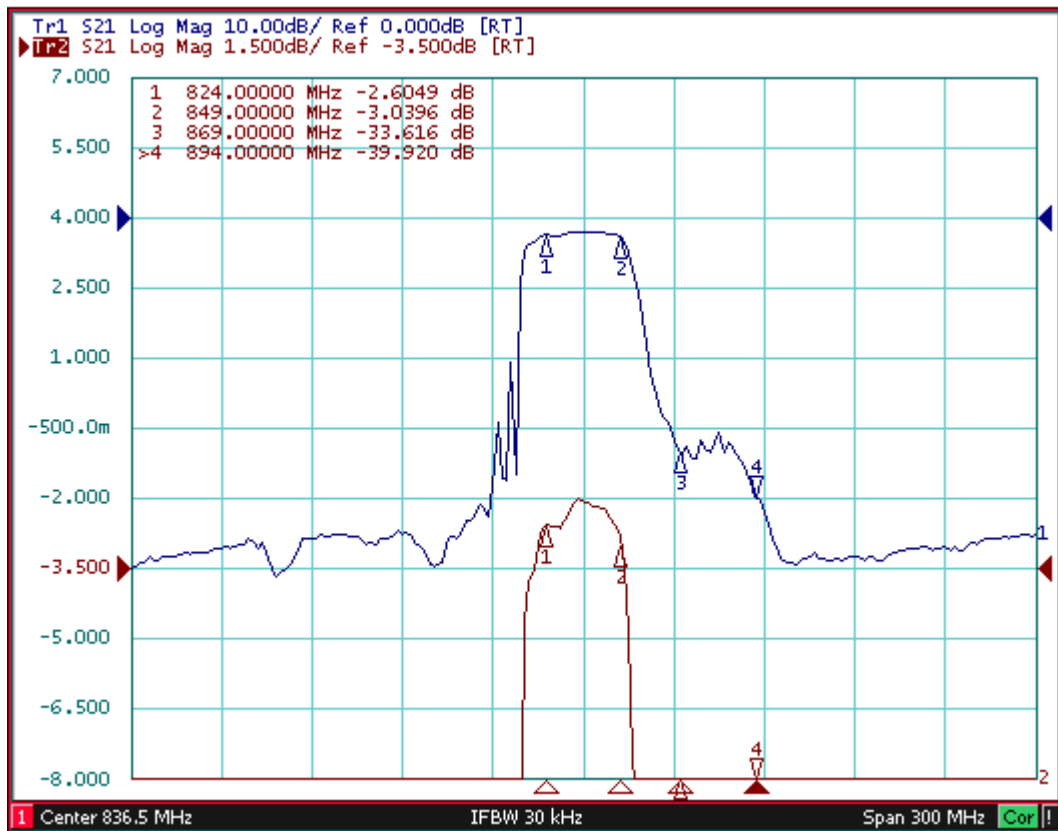
1. The frequency f_c is defined as the midpoint between the 3dB frequencies.
2. Unless noted otherwise, all measurements are made with the filter installed in the specified test fixture that is connected to a 50 Ω test system with VSWR $\leq 1.2:1$. The test fixture L and C are adjusted for minimum insertion loss at the filter center frequency, f_c . Note that insertion loss, bandwidth, and passband shape are dependent on the impedance matching component values and quality.
3. Unless noted otherwise, specifications apply over the entire specified operating temperature range.
4. The specifications of this device are based on the test circuit shown below and subject to change or obsolescence without notice.
5. All equipment designs utilizing this product must be approved by the appropriate government agency prior to manufacture or sale.

5. Test Circuit



No impedance matching required for operation at 50 Ω .

6. Performance



7. Environmental Characteristics

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

8. Remarks

8-1 Static voltage

Static voltage between signal load & ground may cause deterioration & destruction of the SAW filter. Please avoid static voltage.

8-2 Ultrasonic cleaning

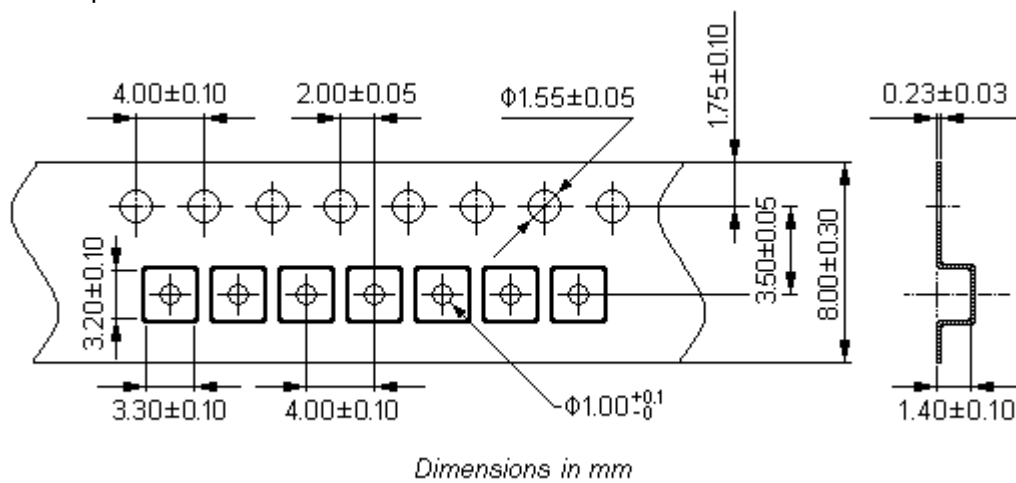
Ultrasonic vibration may cause deterioration & destruction of the SAW filter. Please avoid ultrasonic cleaning.

8-3 Soldering

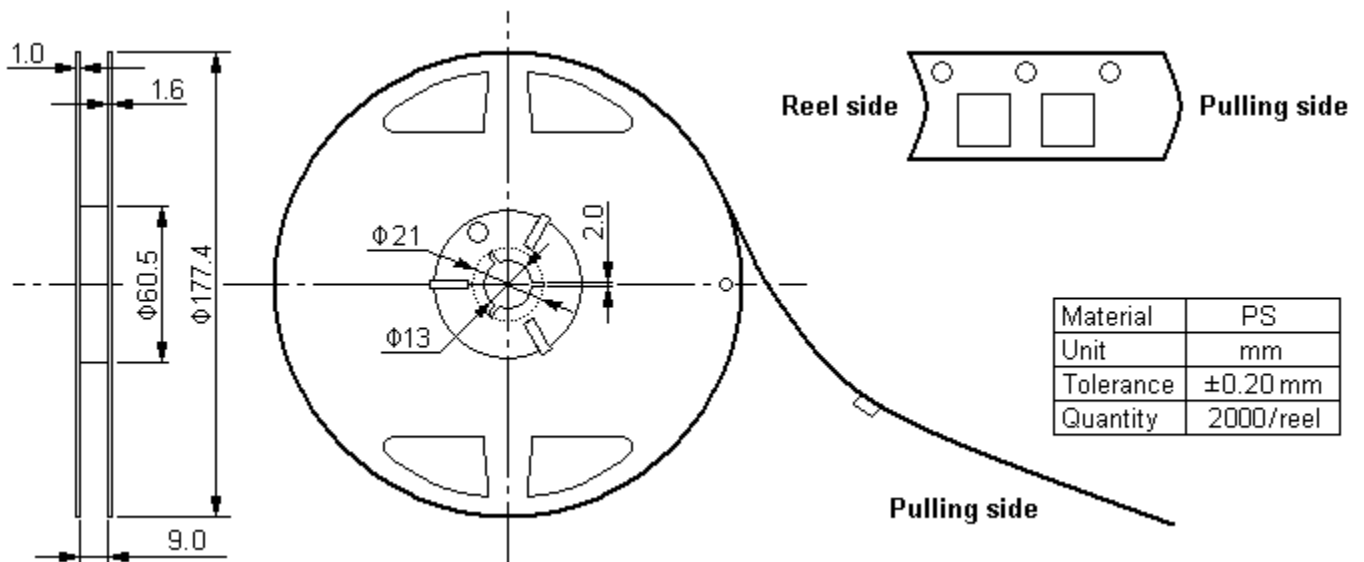
Only terminals of the SAW filter may be soldered. Please avoid soldering other parts of the SAW filter.

9. Packing

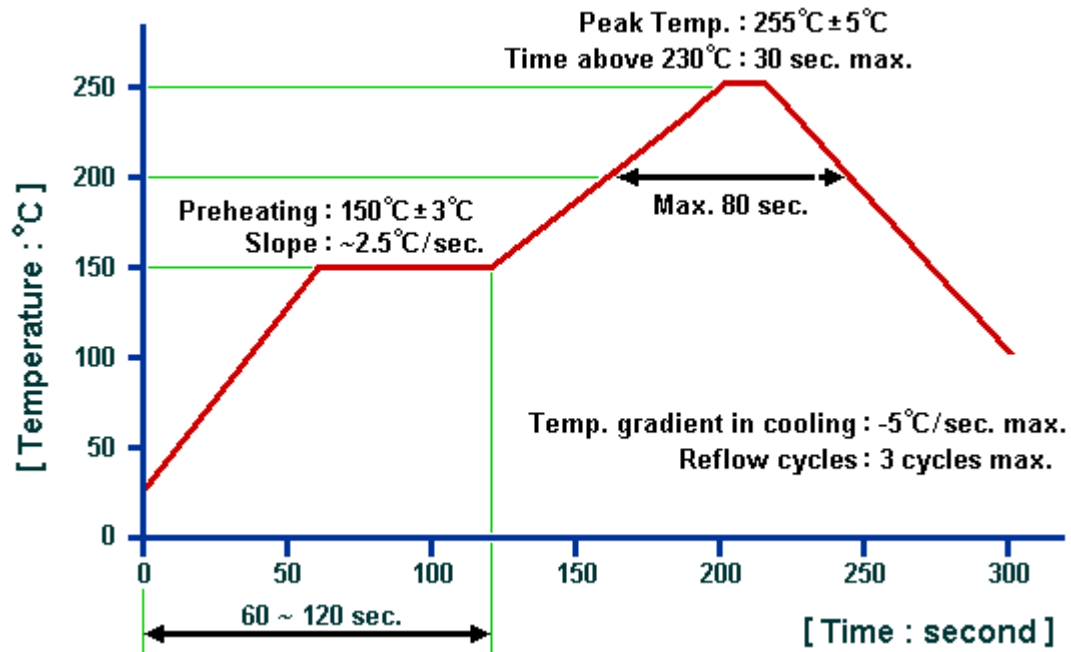
9-1. Carrier Tape



9-2. Reel Dimensions



10. Soldering Profile



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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.

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