



NIHON DEMPA KOGYO CO., LTD

SAW FILTER SPECIFICATION



Date: February 28,2008

THIS SPECIFICATION SHEET IS PROVIDED TO:

For specifying specifications of following product:

(NDK Part Number)  
350096-868.350MHZ

(Your Part Number)

Prepared By:

CONFIRMED BY:

Checked By:

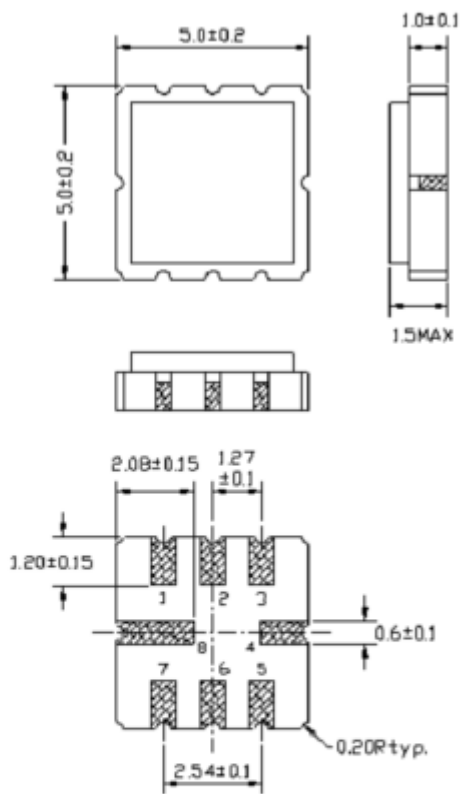
For future reference, we thank you to confirm the specifications and send one copy back to us.

● ELECTRICAL PARAMETERS

Parameter	Symbol	Condition	Specification	Unit
1. Center Frequency	Fo	Center frequency between 3dB points	868.350	MHz
2. Minimum Insertion Attenuation	868.00MHz ~ 868.60MHz		4.2 max.	dB
3. Pass Band	868.10MHz ~ 868.50MHz 868.00MHz ~ 868.60MHz		2.0 max. 2.5 max.	dB
4. Relative Attenuation	10.00MHz ~ 850.00MHz 850.00MHz ~ 858.00MHz 858.00MHz ~ 865.50MHz 871.00MHz ~ 880.00MHz 880.00MHz ~ 890.00MHz 890.00MHz ~ 1000.00MHz		50.0 min. 45.0 min. 25.0 min. 16.0 min. 35.0 min. 50.0 min.	dB
5. Input/Output Impedance			50	Ohms
6. External Impedance Match	Series Inductance	L	100	nH
	Shunt Capacitance	C	4.5	pF
7. Operating Temp. Range	Topr		-40 to +80	°C
8. Storage Temp. Range	Tstg		-40 to +85	°C
9. DC Permission Voltage			10 max.	VDC
10. Input Power			0	dBm

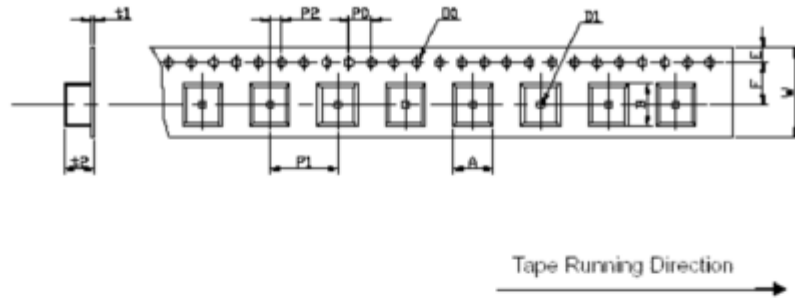
● PACKAGE

*Tape Dimensions(unit : mm)*



Pin No.	Function
2.	Input
6.	Output
Other	Ground

Unit: mm

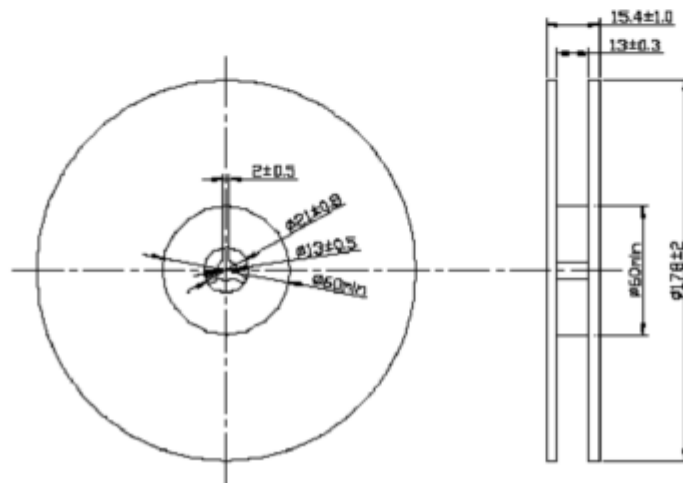


[Unit: mm]

W	F	E	P0	P1	P2	D0	D1	t1	t2	A	B
12.0	5.5	1.75	4.0	8.0	2.0	φ1.5	φ1.5	0.31	1.95	5.5	5.5
±0.3	±0.1	±0.1	±0.2	±0.1	±0.2	±0.1	±0.25	max.	max.	max.	max.

1,000 pcs/reel

[Unit: mm]



1. Resistance to Soldering Heat:

The components shall remain within the electrical specifications after it soldered on 1mm-thickness PCB board and dipped in the solder at  $260 \pm 5^{\circ}\text{C}$  for  $10 \pm 1$  seconds. The components shall remain within the electrical specifications after it soldered by electric iron, solder  $350 \pm 10^{\circ}\text{C}$  for 3 to 4 seconds, recovery time:  $2\text{h} \pm 0.5\text{h}$ .

2. Thermal Shock

The components shall remain within the electrical specifications after being kept at the condition of heat cycle conditions: TA:  $-40 \pm 3^{\circ}\text{C}$ , TB:  $85 \pm 2^{\circ}\text{C}$ ,  $t_1 = t_2 = 30\text{min}$ , switch time  $\leq 3\text{min}$  & cycle time: 100times, recovery time:  $2\text{h} \pm 0.5\text{h}$ .

3. The Temperature Storage

High Temperature Storage: The components shall remain within the electrical specifications after being kept at the  $85 \pm 2^{\circ}\text{C}$  for 500 hours, recovery time:  $2\text{h} \pm 0.5\text{h}$ .

Low Temperature Storage: The components shall remain within the electrical specifications after being kept at the  $-40 \pm 3^{\circ}\text{C}$  for 500 hours, recovery time:  $2\text{h} \pm 0.5\text{h}$ .

4. Humidity Test

The components shall remain within the electrical specifications after being kept at the condition of ambient temperature  $60 \pm 2^{\circ}\text{C}$ , and 90~95% RH for 500 hours.

5. Drop test

The components shall remain within the electrical specifications after random free drop 10 times from height of 1.0 meter onto concrete floor, and the specifications shall meet the electrical specification, external visual inspection.

6. Solderability Test

At condition of temperature  $245 \pm 5^{\circ}\text{C}$ , depth; DIP 2/3, SMD 1/5, time: 3.0s – 5.0s, 80% or more of the immersed surface should be covered with solder and well-proportioned

7. Vibration Fatigue

The components shall remain within the electrical specifications after loaded vibration at 10~55Hz, amplitude 1.5mm, X, Y, Z, direction, for 2 hours.

8. Terminal Strength

The force  $10 \pm 1$  seconds of 19.6N is applied to each terminal and  $45^{\circ}$  in the same direction 2times with 2N bending force. (Exception: SMD)

9. Mechanical Shock

The components shall remain within the electrical specification after 1000 shocks, acceleration  $392\text{m/s}^2$ , duration 6ms.