

Model No.: FR0360M00-DD17
 360.00 MHz SAW Resonator

Rev. No.: 1

A. Feature:

1. One-port SAW Resonator

B. Maximum Ratings:

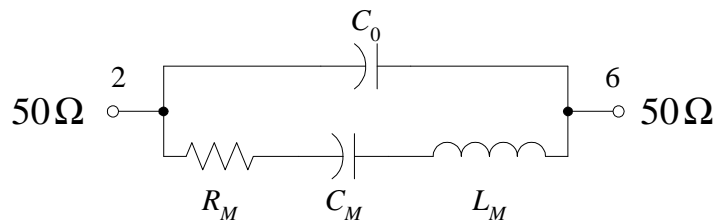
1. Input Power Level: 0dBm
2. DC Voltage: 10V
3. Storage Temperature: -40°C to +85°C
4. Operating Temperature Range: -40°C to +85°C

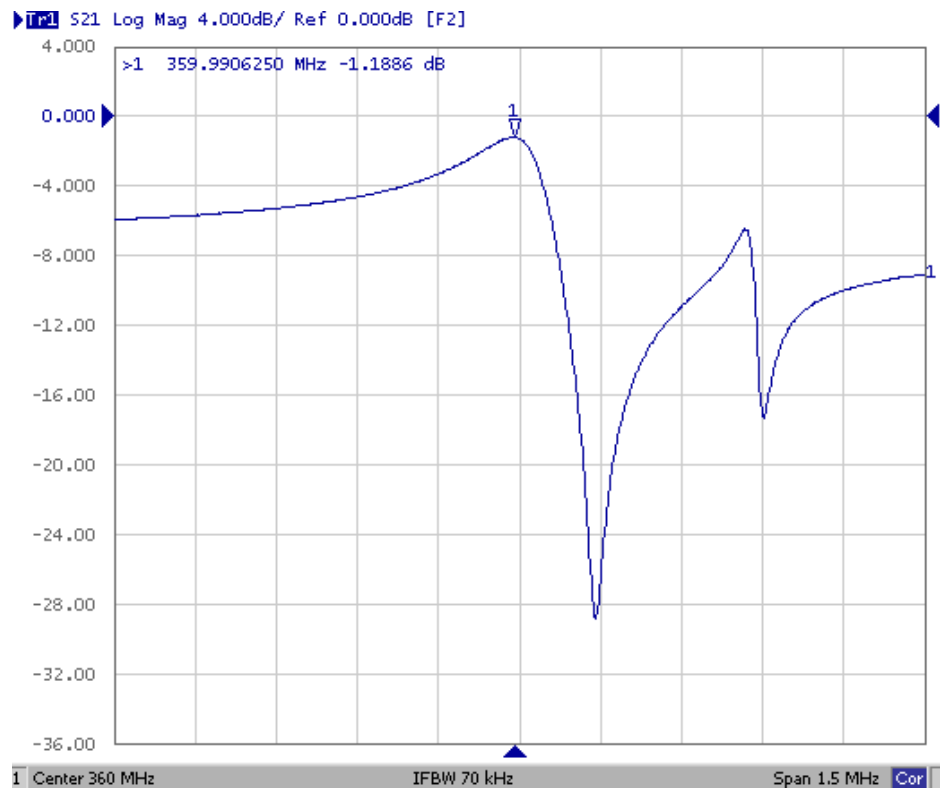
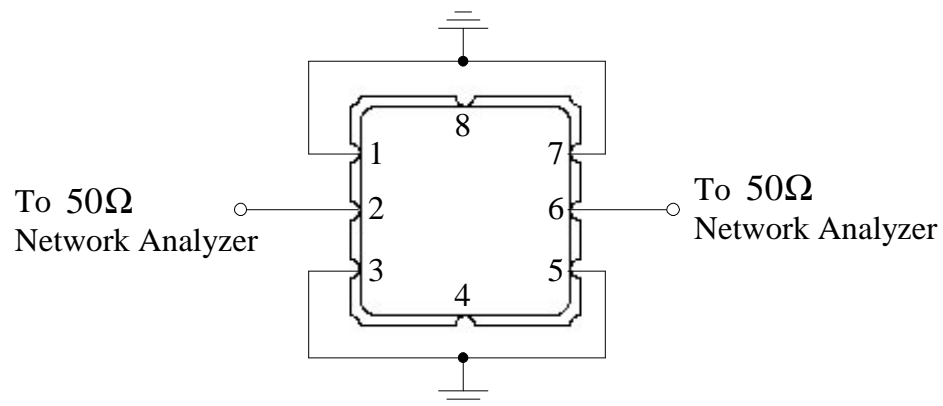
C. Electrical Specifications:

Ambient Temperature: 25°C

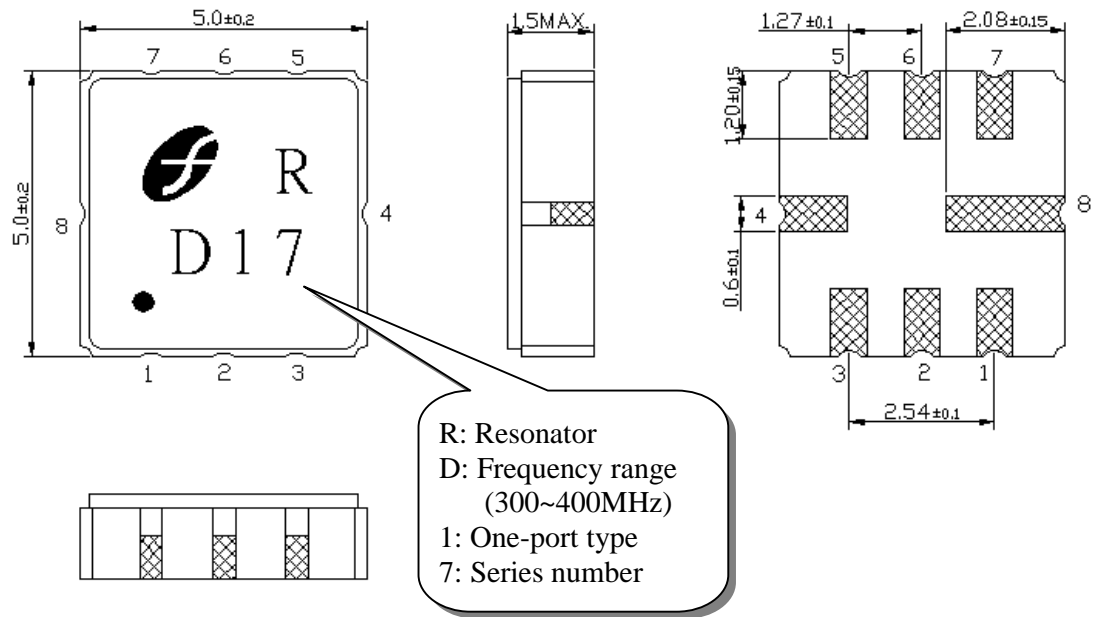
Item	Unit	Min.	Typ.	Max.
Center Frequency, f_r	MHz	359.925	360.00	360.075
Insertion Loss, IL	dB	-	1.3	2.0
Unloaded quality factor, Q_U		-	15500	-
Loaded quality factor, Q_L		-	2000	-
RF Equivalent RLC Model				
Motional Resistance, R_M	Ω	-	15	-
Motional Capacitance, C_M	fF	-	2.123	-
Motional Inductance, L_M	μH	-	92.05	-
Shunt Static Capacitance, C_0	pF	-	2.5	-
Turnover Temperature, T_0	°C	15	30	45
Frequency Temperature Coefficient, FTC	ppm/k ²	-	0.032	-

D. RF Equivalent Model:



E. Characteristics:**F. Test Circuit:**

G. Package and pin configuration:



(Unit: mm)

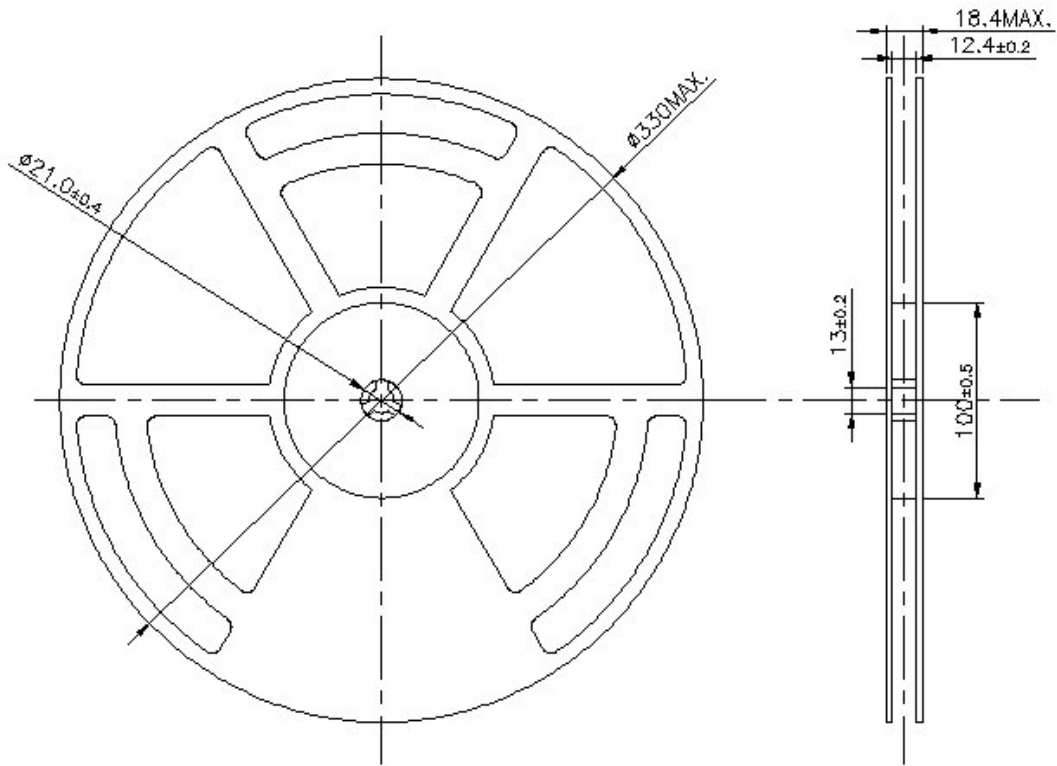
- | | |
|-----------------------|-----------------------|
| Pin 1: Ground | Pin 5: Ground |
| Pin 2: Input | Pin 6: Output |
| Pin 3: Ground | Pin 7: Ground |
| Pin 4: Package Ground | Pin 8: Package Ground |

H. Reliability Test Conditions

Item	Test Item	Test Condition	Reference
1	Temperature Characteristic	-40°C, 25°C, 85°C 4 hrs dwell (1.5,1, 1.5)	MIL-STD-883E
2	Thermal Shock	-40°C, 85°C 30 min dwell 20 sec Transition. 32 cycles	MIL-STD-883E 1010.7
3	Static Humidity	85°C,85% RH 240 hrs	IEC-68-2-3
4	Vibration	Frequency: 20-80-2000Hz Displacement: 0.06" Acceleration: 20 G Cycle time & frequency: 4 minutes/time, 4 times, 3 axis (X, Y, Z)	MIL-STD883E 2007.1
5	Mechanical shock test	3000g's 0.3 ms half sine wave pulse 3 impacts per axis	IEC-68-2-27
6	Operation Life test	+125°C for 168 hours no load	JESD22-A108-B
7	Solder Heat Resistance	Solder pot: 260°C 10 seconds	IEC-68-2-20
8	Solder-ability Test	Steam aging 8 hours Solder dip 245±5°C 5 seconds	MIL-STD-883E
9	Gross Leak Test	+85°C Water no bubbles	MIL-STD-883E

I. Packing

1. Reel Dimension (3,000 pcs)



2. Tape Dimension

