

Model No.: FR0360M00-DD17  
 360.00 MHz SAW Resonator

Rev. No.: 1

**A. Feature:**

1. One-port SAW Resonator

**B. Maximum Ratings:**

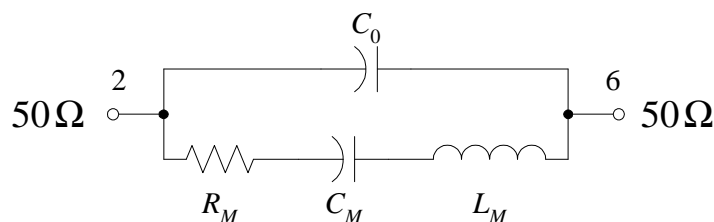
1. Input Power Level: 0dBm
2. DC Voltage: 10V
3. Storage Temperature: -40°C to +85°C
4. Operating Temperature Range: -40°C to +85°C

**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, $R_M$	$\Omega$	-	15	-
Motional Capacitance, $C_M$	fF	-	2.123	-
Motional Inductance, $L_M$	$\mu$ H	-	92.05	-
Shunt Static Capacitance, $C_0$	pF	-	2.5	-
Turnover Temperature, $T_0$	°C	15	30	45
Frequency Temperature Coefficient, $FTC$	ppm/k <sup>2</sup>	-	0.032	-

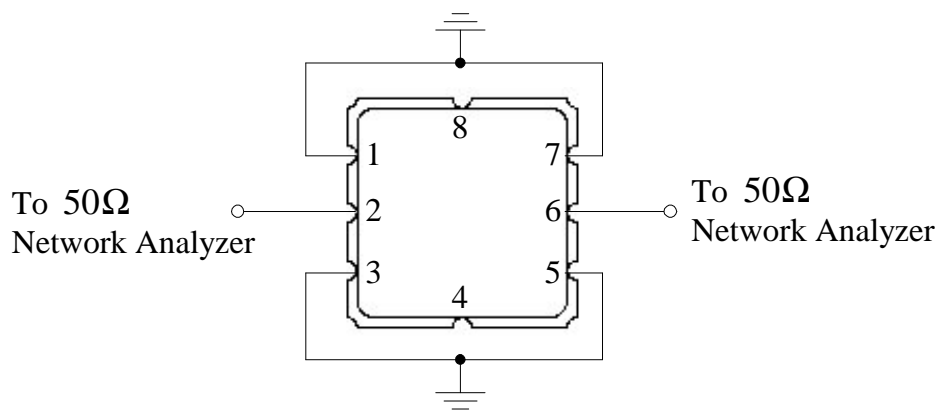
**D. RF Equivalent Model:**



E. Characteristics:



F. Test Circuit:





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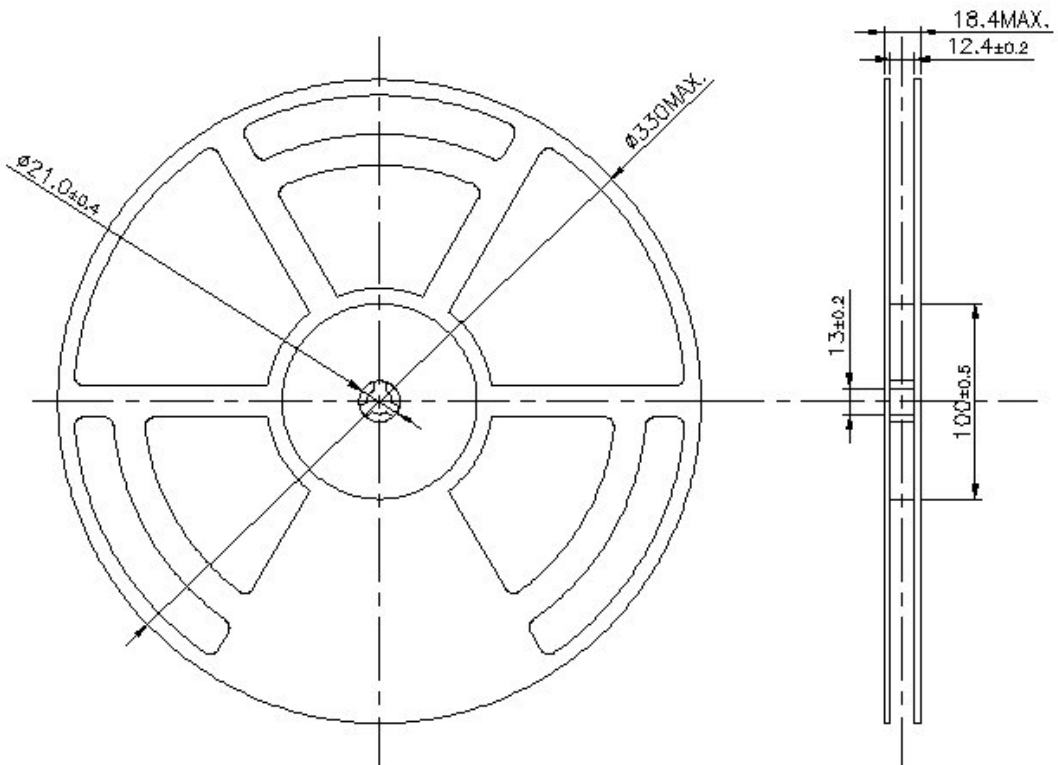
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**H. Reliability Test Conditions**

<b>Item</b>	<b>Test Item</b>	<b>Test Condition</b>	<b>Reference</b>
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

