

Model No.: FR0304M25-DD16  
 304.25 MHz SAW Resonator

Rev. No.: 1

**A. Feature:**

1. One-port SAW Resonator

**B. Maximum Ratings:**

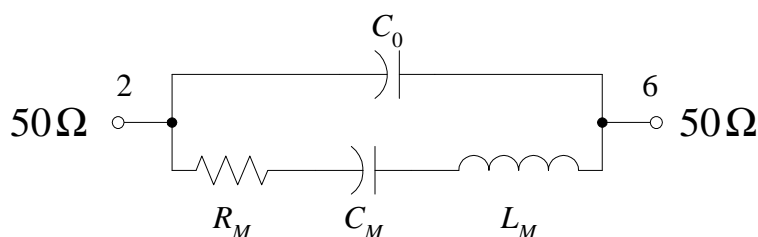
1. Input Power Level: 0dBm
2. DC Voltage: 10V
3. Storage Temperature: -40°C to +85°C
4. Operating Temperature Range: -40°C to +85°C

**C. Electrical Specifications:**

Ambient Temperature: 25°C

Item	Unit	Min.	Typ.	Max.
Center Frequency, $f_r$	MHz	304.175	304.25	304.325
Insertion Loss, IL	dB	-	1.3	2.5
Unloaded quality factor, $Q_U$		-	11000	-
Loaded quality factor, $Q_L$		-	2000	-
<b>RF Equivalent RLC Model</b>				
Motional Resistance, $R_M$	$\Omega$	-	22	-
Motional Capacitance, $C_M$	fF	-	2.09	-
Motional Inductance, $L_M$	$\mu$ H	-	130.6	-
Shunt Static Capacitance, $C_0$	pF	-	3.2	-
Turnover Temperature, $T_0$	°C	10	25	40
Frequency Temperature Coefficient, $FTC$	ppm/k <sup>2</sup>	-	0.032	-

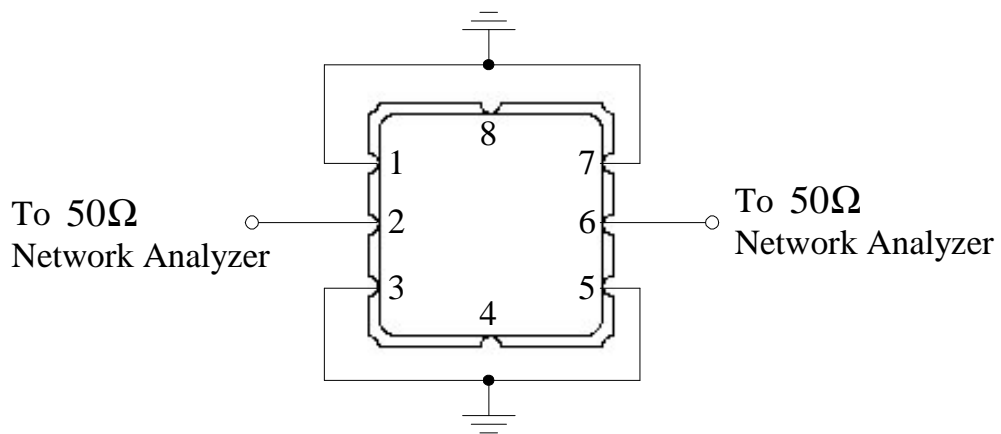
**D. RF Equivalent Model:**



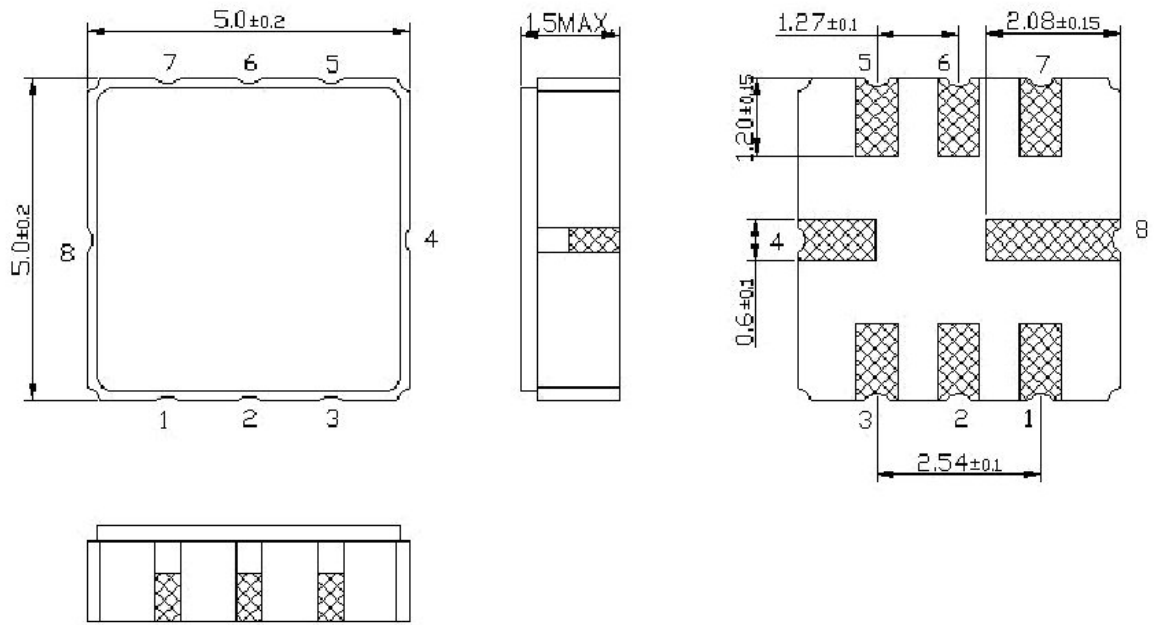
E. Characteristics:



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 |