

**SAW Resonator 433.920MHz**  
**Part No: MP01670**

**Model: TC0269A**  
**Rev No: 3**

**A. FEATURES:**

1. One - Port Resonator

**B. MAXIMUM RATING:**

1. Input Power Level: 0dBm
2. DC voltage: 12V
3. Operating Temperature: -40°C to +85°C
4. Storage Temperature: -40°C to +85°C

**C. ELECTRICAL CHARACTERISTICS:**

Reference Temperature  $T_A = 25^\circ\text{C}$

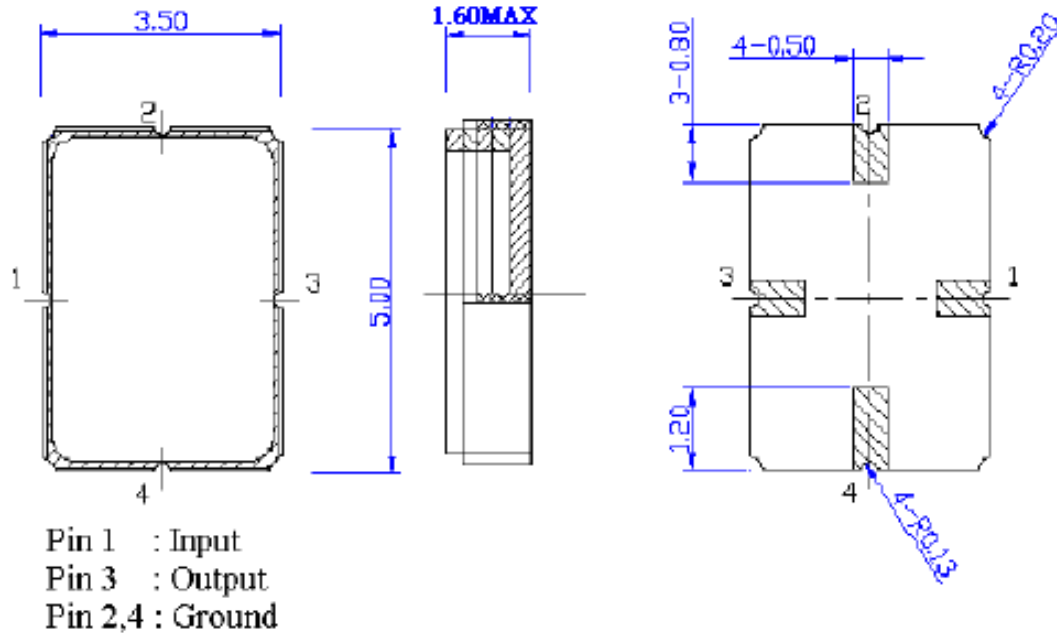
Characteristic	Units	Min.	Typ.	Max.
Center frequency $F_c$	MHz	433.845	433.920	433.995
Insertion Loss IL	dB	-	1.2	1.7
Ageing of $F_c$	ppm/yr	-	-	$\pm 10$
Equivalent Circuit Model				
Motional capacitance C1	fF	-	1.79	-
Motional inductance L1	$\mu\text{H}$	-	75.72	-
Motional resistance R1	Ohm	-	14.3	23
Parallel capacitance $C_o$	pF	-	3.2	-
Frequency Temperature coefficient (TCf)	ppm/c <sup>2</sup>	-	0.032	-
Turnover $T_o$	deg. C	5	15	25

Temperature dependence of  $F_c$ :  $F_c(T_A) = F_c(T_O) (1 + TC_f(T_A - T_O)^2)$

**SAW Resonator 433.920MHz**  
**Part No: MP01670**

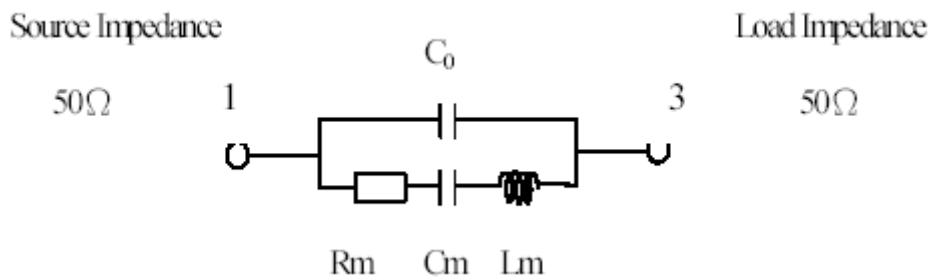
**Model: TC0269A**  
**Rev No: 3**

**D. OUTLINE DRAWING:**



**E. EQUIVRENT CIRCUIT:**

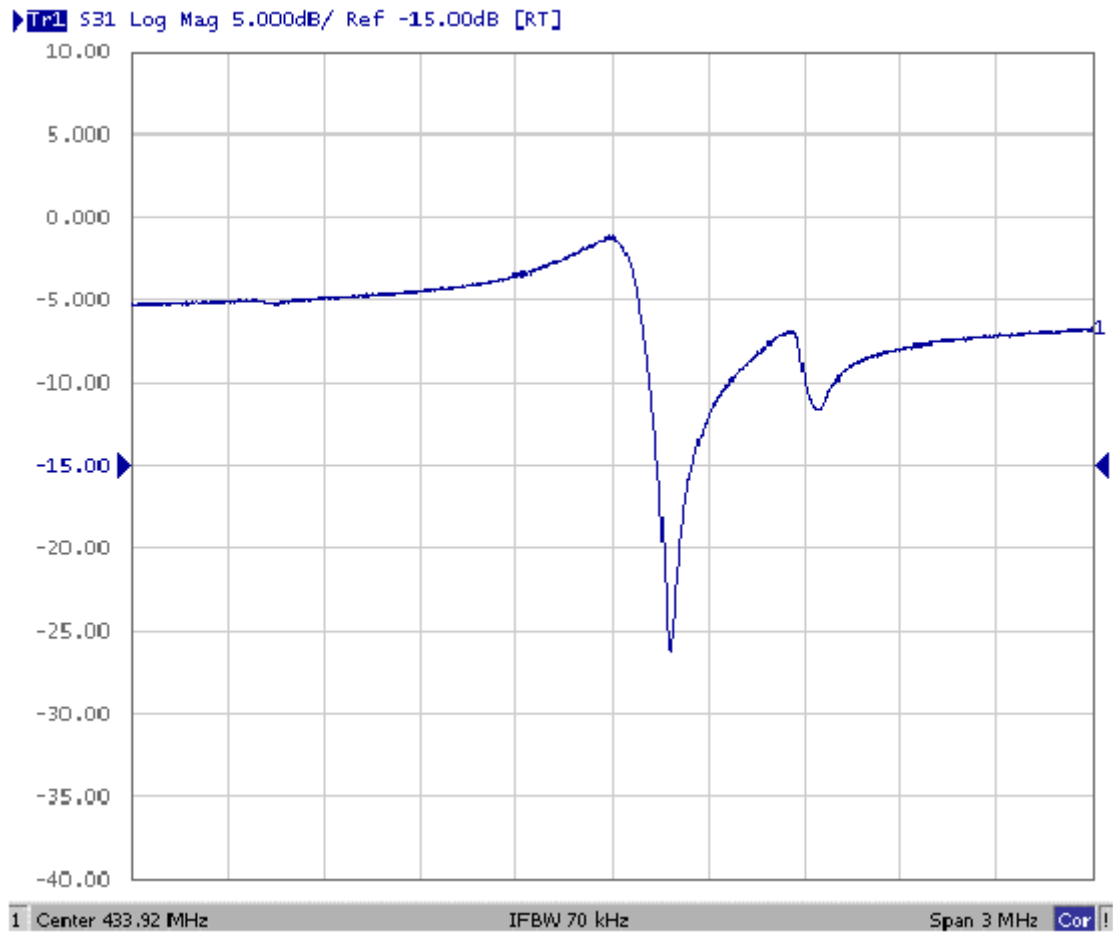
One - Port Resonator



**SAW Resonator 433.920MHz**  
**Part No: MP01670**

**Model: TC0269A**  
**Rev No: 3**

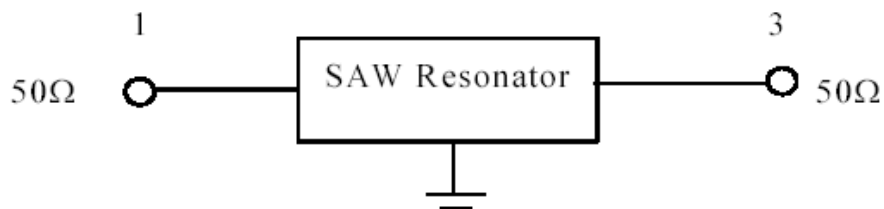
**F. FREQUENCY CHARACTERISTICS:**



**G. TEST CIRCUIT:**

Network analyzer

From 50Ω  
 Network  
 Analyzer



To 50Ω  
 Network  
 Analyzer

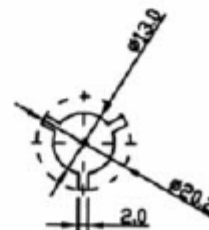
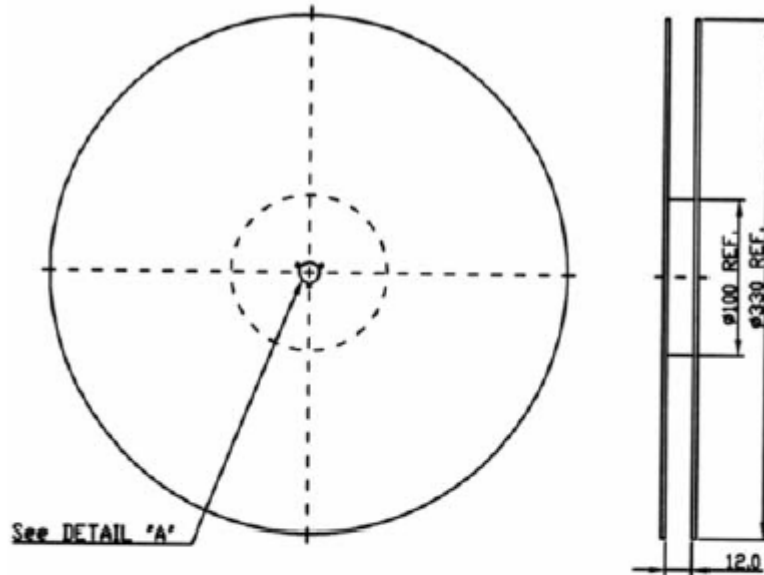
1, 3, 4, 5, 7, 8

**SAW Resonator 433.920MHz**  
**Part No: MP01670**

**Model: TC0269A**  
**Rev No: 3**

**H. PACKING:**

1. Reel Dimension



2. Tape Dimension

