

**SAW Resonator 1090.0MHz**  
**Part No: MA08070**

**Model: TD0116A**  
**REV. NO.: 3**

**A. FEATURES:**

1. 2-Port Resonator.

**B. MAXIMUM RATING:**

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

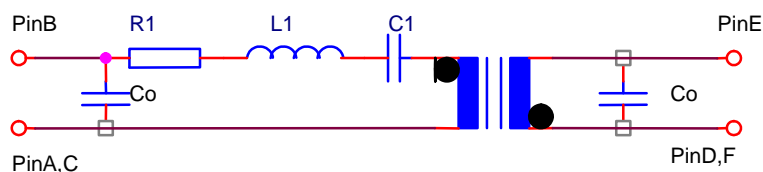
**C. ELECTRICAL CHARACTERISTICS:**

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

Characteristic	Units	Minimum	Typical	Maximum
Center frequency $F_r$	MHz	1089.800	1090	1090.200
Insertion Loss IL	dB	-	10	12.5
Unloaded Quality factor		-	4700	-
Ageing of $F_c$	ppm	-	-	10/year
Equivalent Elements				
Motional capacitance $C_1$	fF	-	0.18	-
Motional inductance $L_1$	$\mu\text{H}$	-	114	-
Motional resistance $R_1$	Ohm	-	178	-
Parallel capacitance $C_o$	pF	-	1.5	-
Temp.coeff.	ppm/c*2	-	0.032	-
Turnover $T_o$	deg.C	-	25	-
Package size		SMD 3.8X3.8X1.4mm		

**D. EQUIVALENT CIRCUIT:**

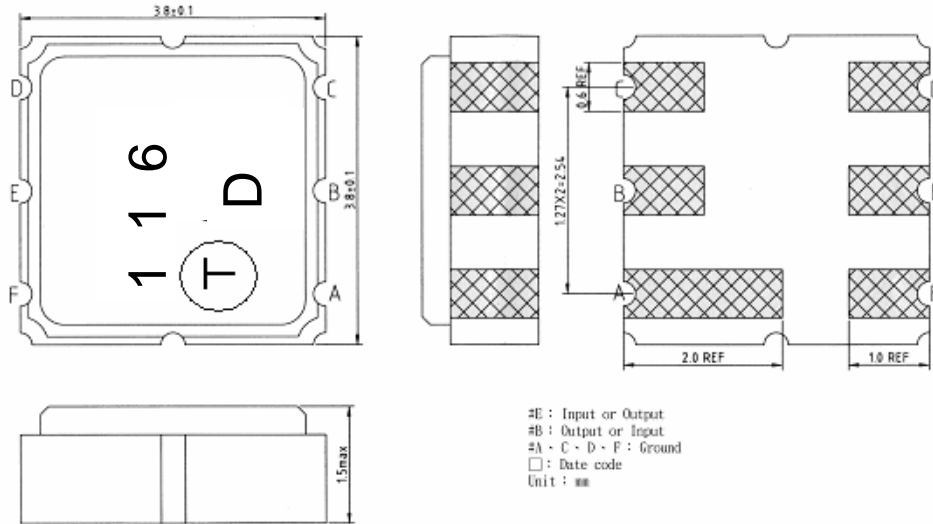
Two-Port Resonator:



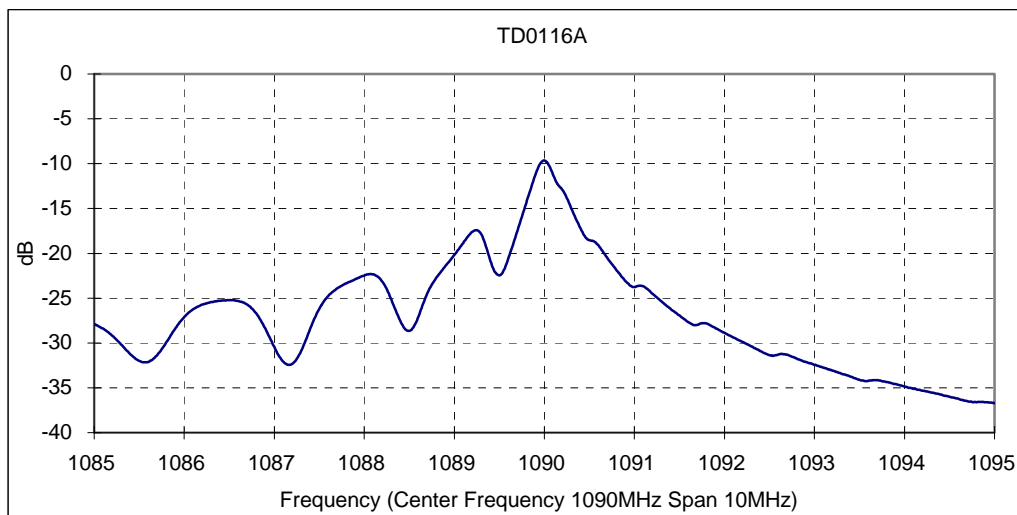
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**E. OUTLINE DRAWING:**



**F. FREQUENCY CHARACTERISTICS:**

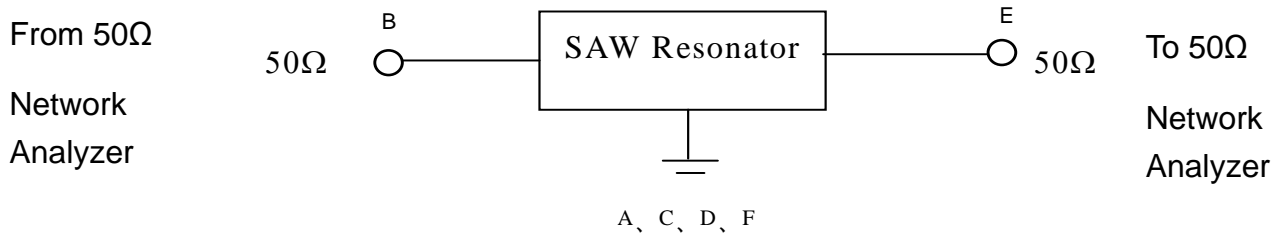


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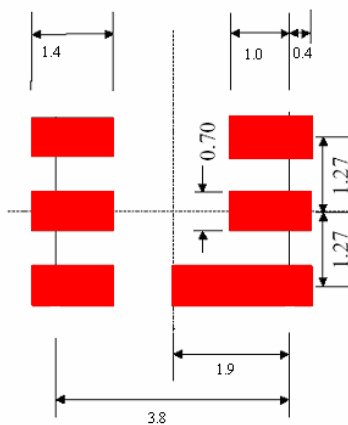
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**G. TEST CIRCUIT:**

Network analyzer



**H. PCB FOOTPRINT**

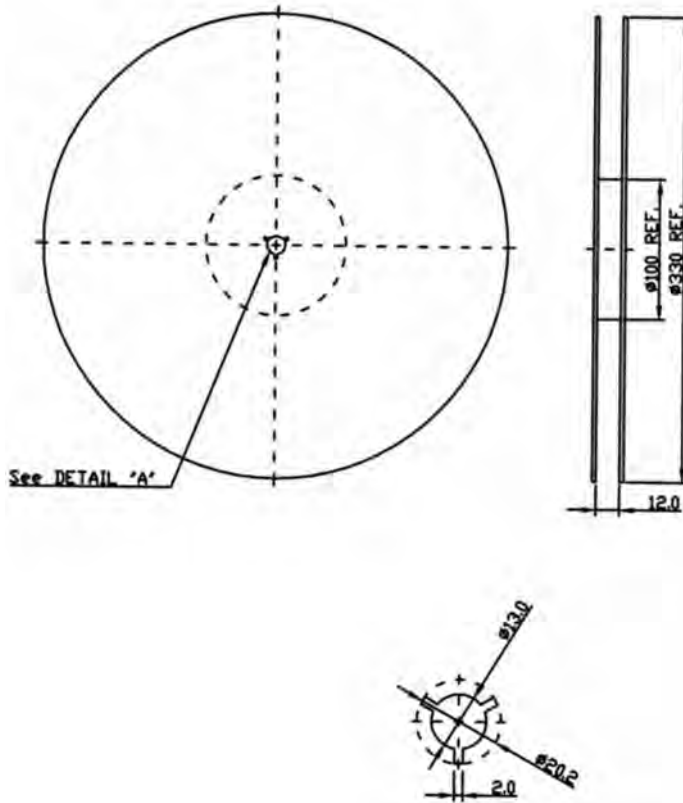


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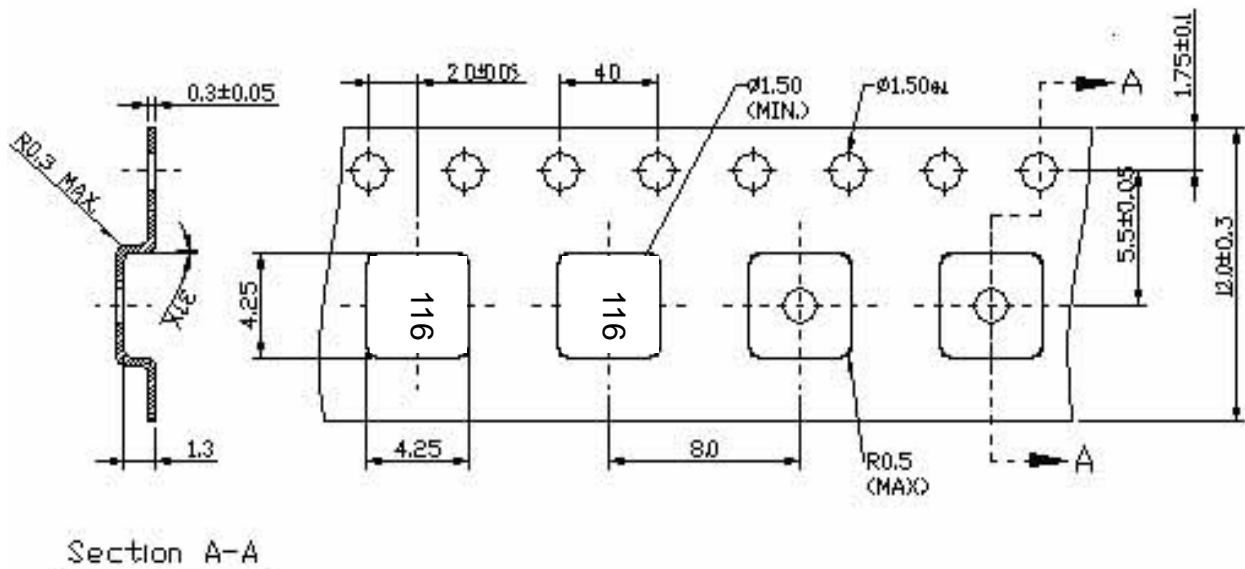
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**I. PACKING:**

1. REEL DIMENSION



2. TAPE DIMENSION



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**J. REFLOW PROFILE**

