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Golledge Electronics Ltd
Eaglewood Park, ILMINSTER
Somerset, TA19 9DQ, UK

SAW Resonator: 315.0MHz — Model: TC0274A
Part No: MP06999 — Rev No: 2

A. FEATURES:

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°C

Characteristic	Unit	Min.	Typ.	Max.
Center frequency Fc	MHz	314.925	315.00	315.075
Insertion Loss IL	dB	-	1.5	2.5
Unload quality factor QU		-	8000	-
Ageing of Fc	ppm/yr	-	-	±10
Motional capacitance C1	fF	-	2.89	-
Motional inductance L1	μH	-	87.5	-
Motional resistance R1	Ohm	-	20.2	-
Parallel capacitance Co	pF	-	4.14	-
Frequency Temperature coefficient (TCf)	ppm/c*2	-	0.032	-
Turnover To	deg. C	-	25	-
Package size	SMD 3 X 3 X 1.1mm			

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

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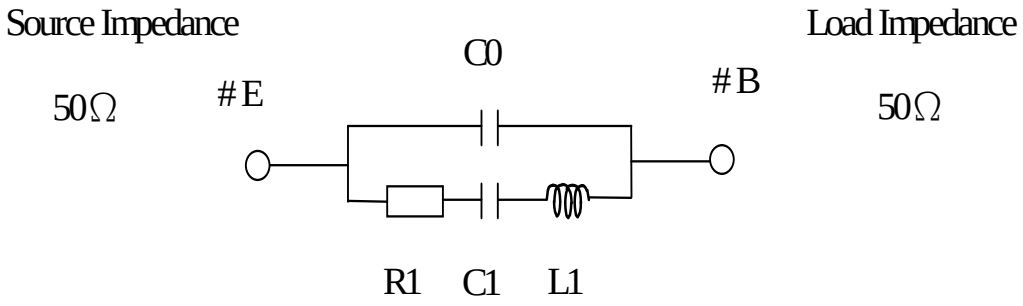
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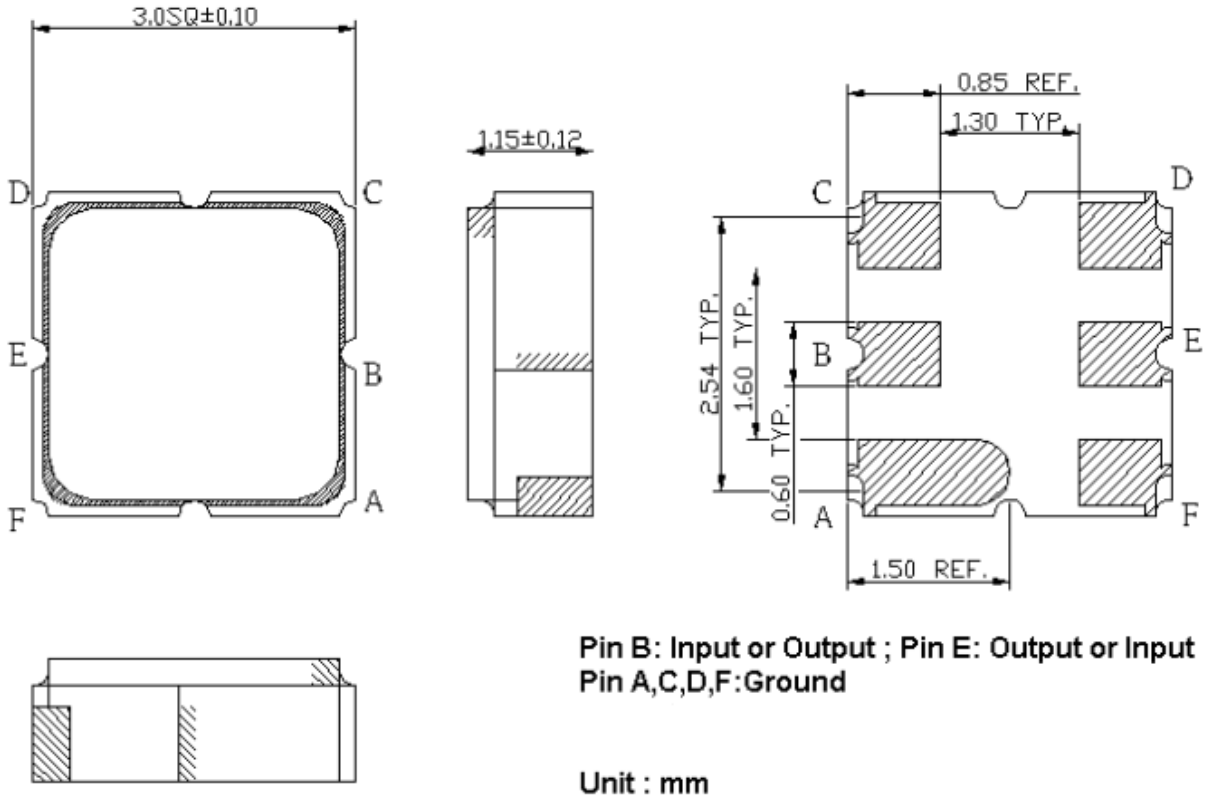
Part No: MP06999 **Rev No: 2**

D. EQUIVILENT CIRCUIT:

One-Port Resonator:



E. OUTLINE DRAWING:



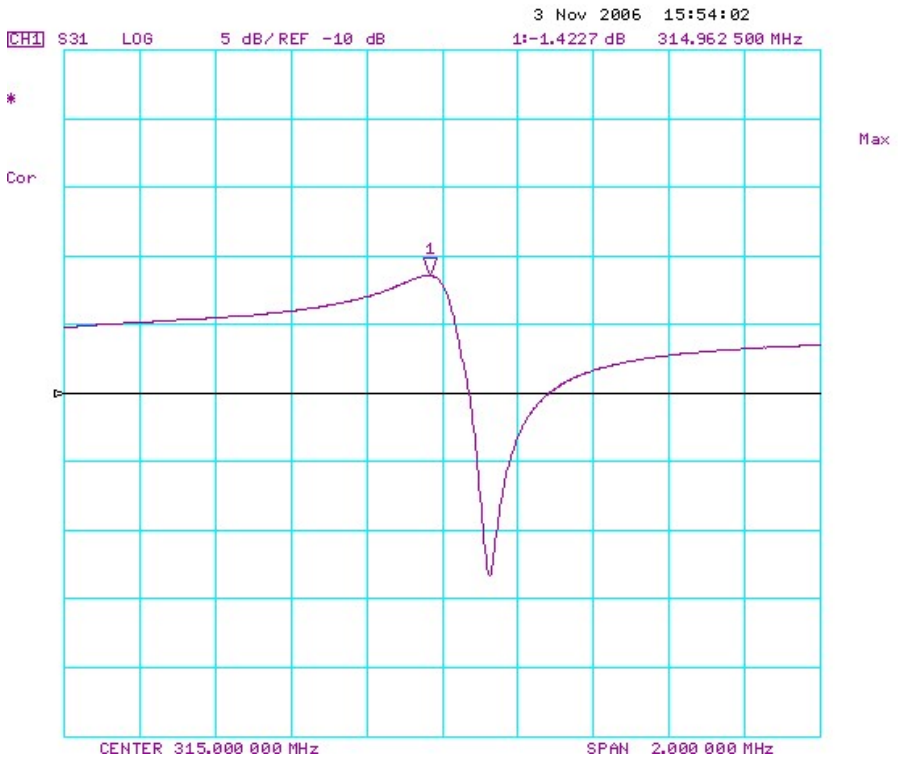
Pin B: Input or Output ; Pin E: Output or Input
Pin A,C,D,F:Ground

Unit : mm

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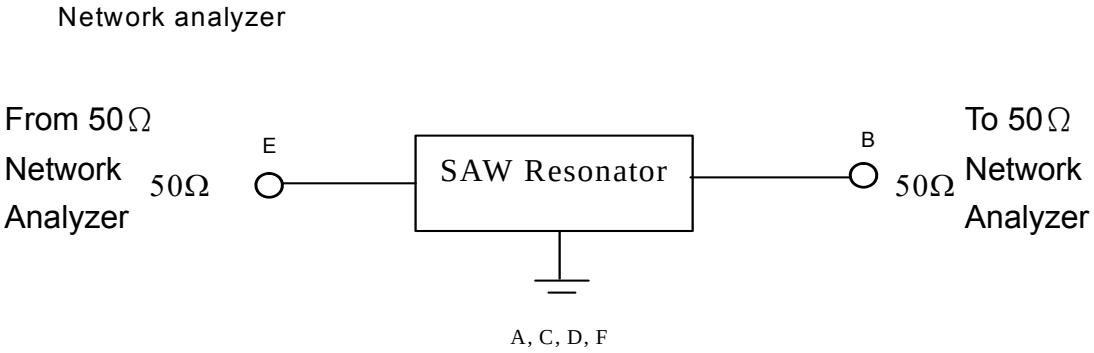
F. FREQUENCY CHARACTERISTICS:



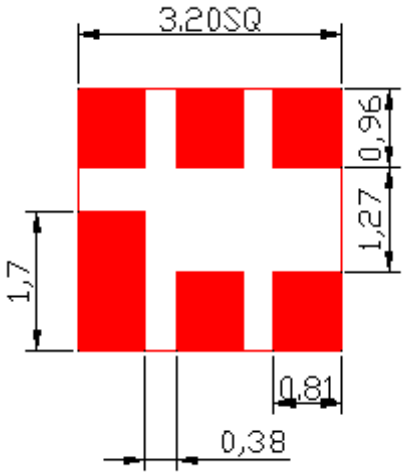
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G. TEST CIRCUIT:



H. PCB FOOT PRINT:



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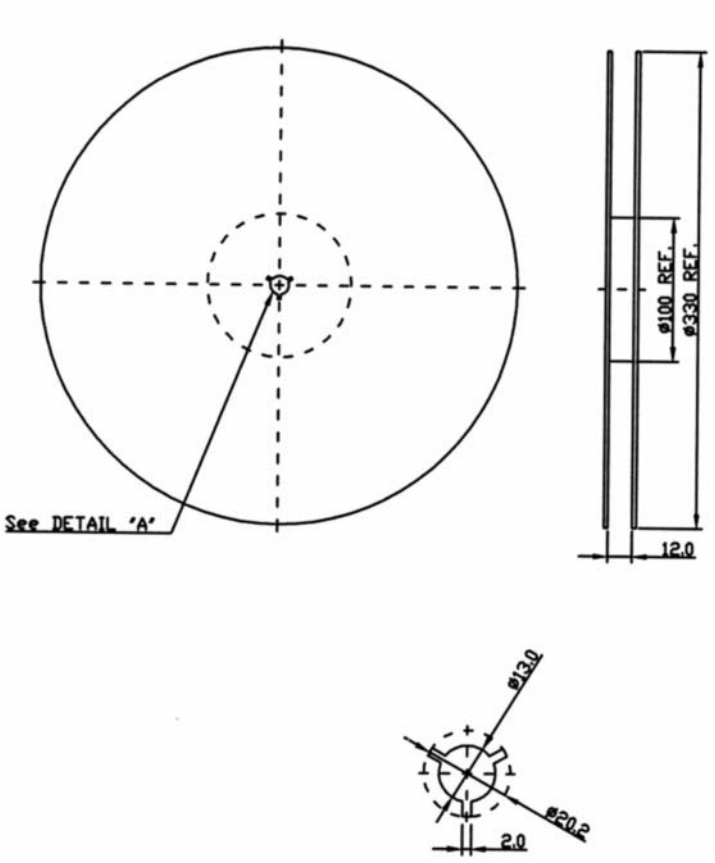
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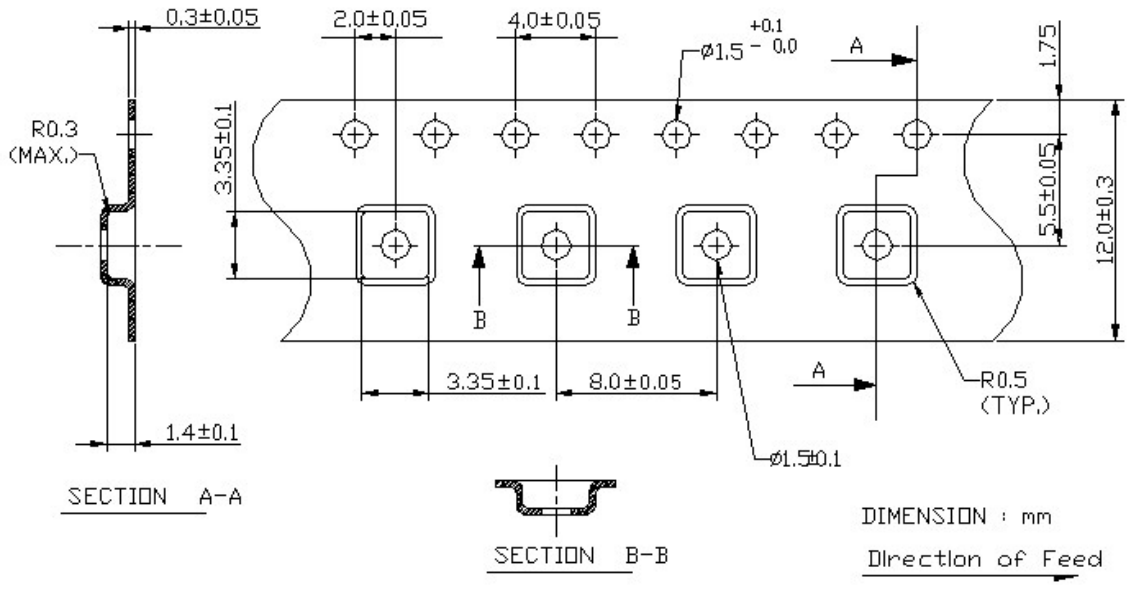
Part No: MP06999 **Rev No: 2**

I. PACKING:

1. Reel Dimension



2. Tape Dimension



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J. RECOMMENDED REFLOW PROFILE:

