

SAW Resonator 868.35 MHz

MODEL NO.: TD0110A

REV. NO.:2

A. FEATURES:

1. 2-Port Resonator.

B. MAXIMUM RATING:

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

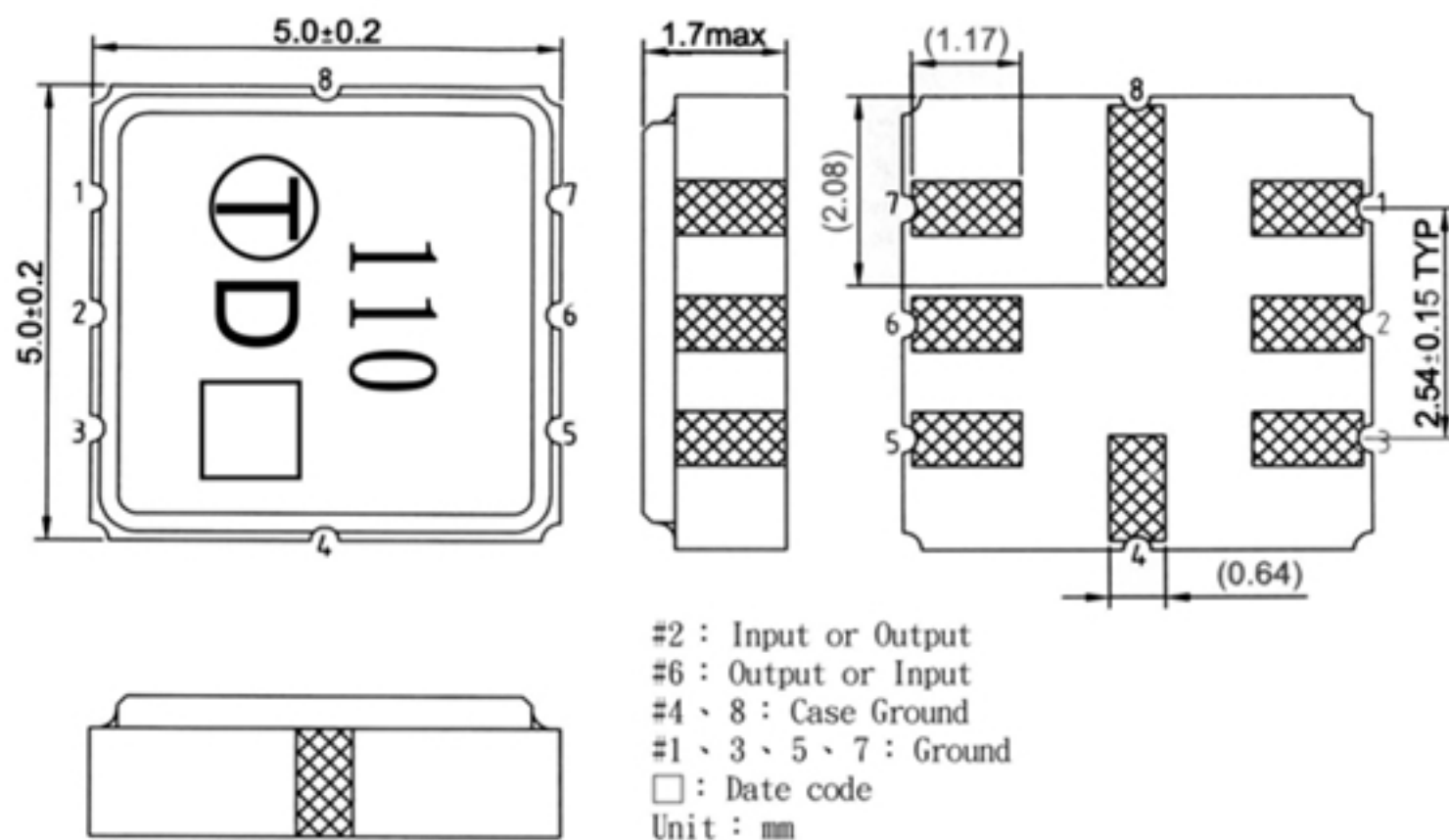
C. ELECTRICAL CHARACTERISTICS:

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

Characteristic	Units	Minimum	Typical	Maximum
Center frequency Fc	MHz	868.250	868.350	868.450
Insertion Loss IL	dB	-	6.7	9
Unload quality factor Q_U		4000	4900	-
Ageing of fc	ppm/yr	-	-	±10
Motional capacitance C1	fF	-	0.334	-
Motional inductance L1	μH	-	101.1	-
Motional resistance R1	Ohm	-	112.4	-
Parallel capacitance C₀	pF	-	1.6	-
Frequency Temperature coefficient (TC _f)	ppm/c*2	-	0.032	-
Turnover To	deg.C	10	25	40
Package size		SMD5X5		

Temperature dependence of fc: $f_c(T_A) = f_c(T_0)(1 + TC_f(T_A - T_0)^2)$

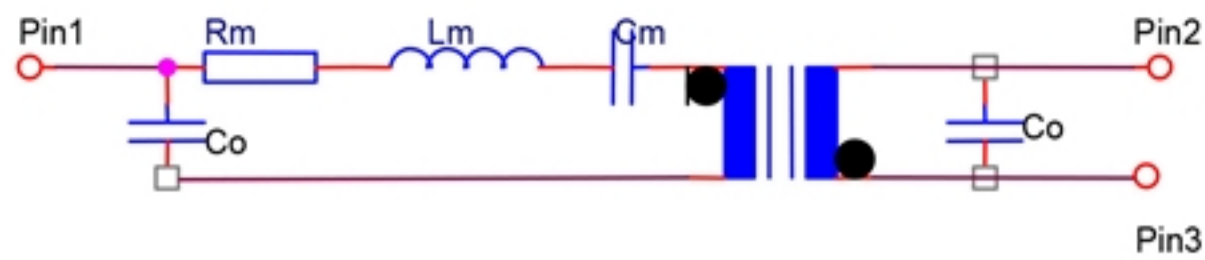
D. OUTLINE DRAWING:



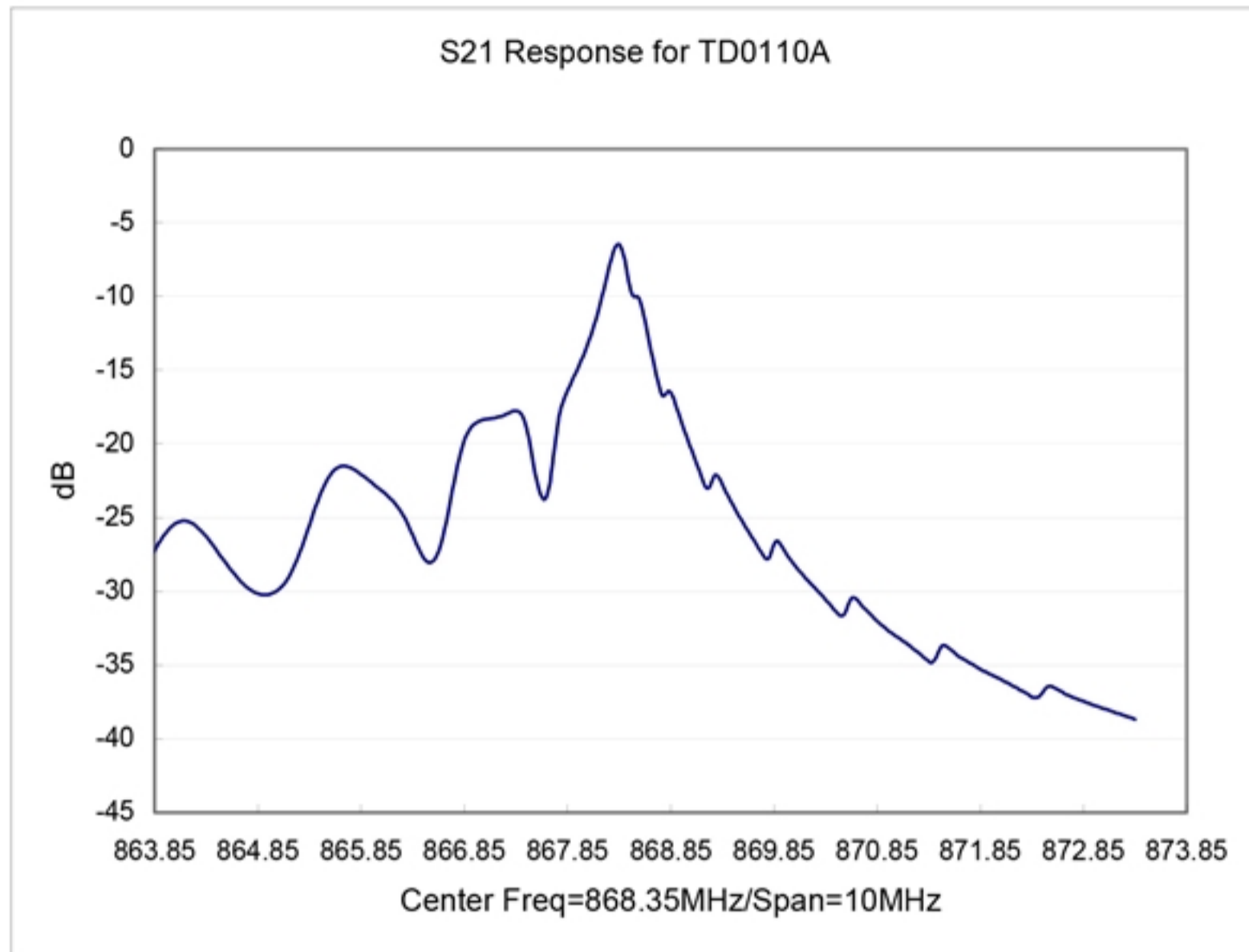
RoHS Compliant
Lead free
Lead-free soldering

E. EQUIVALENT CIRCUIT:

Two-Port Resonator:



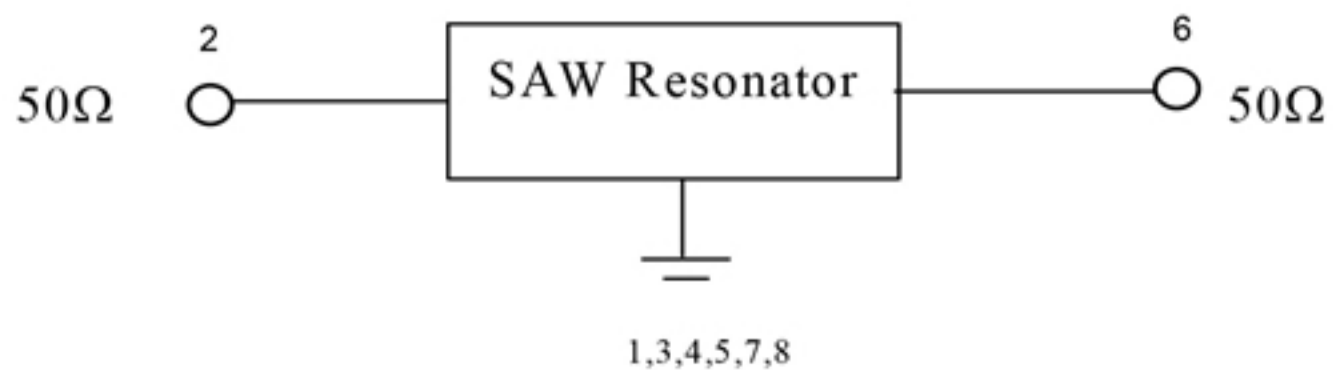
F. FREQUENCY CHARACTERISTICS:



G. TEST CIRCUIT:

Network analyzer

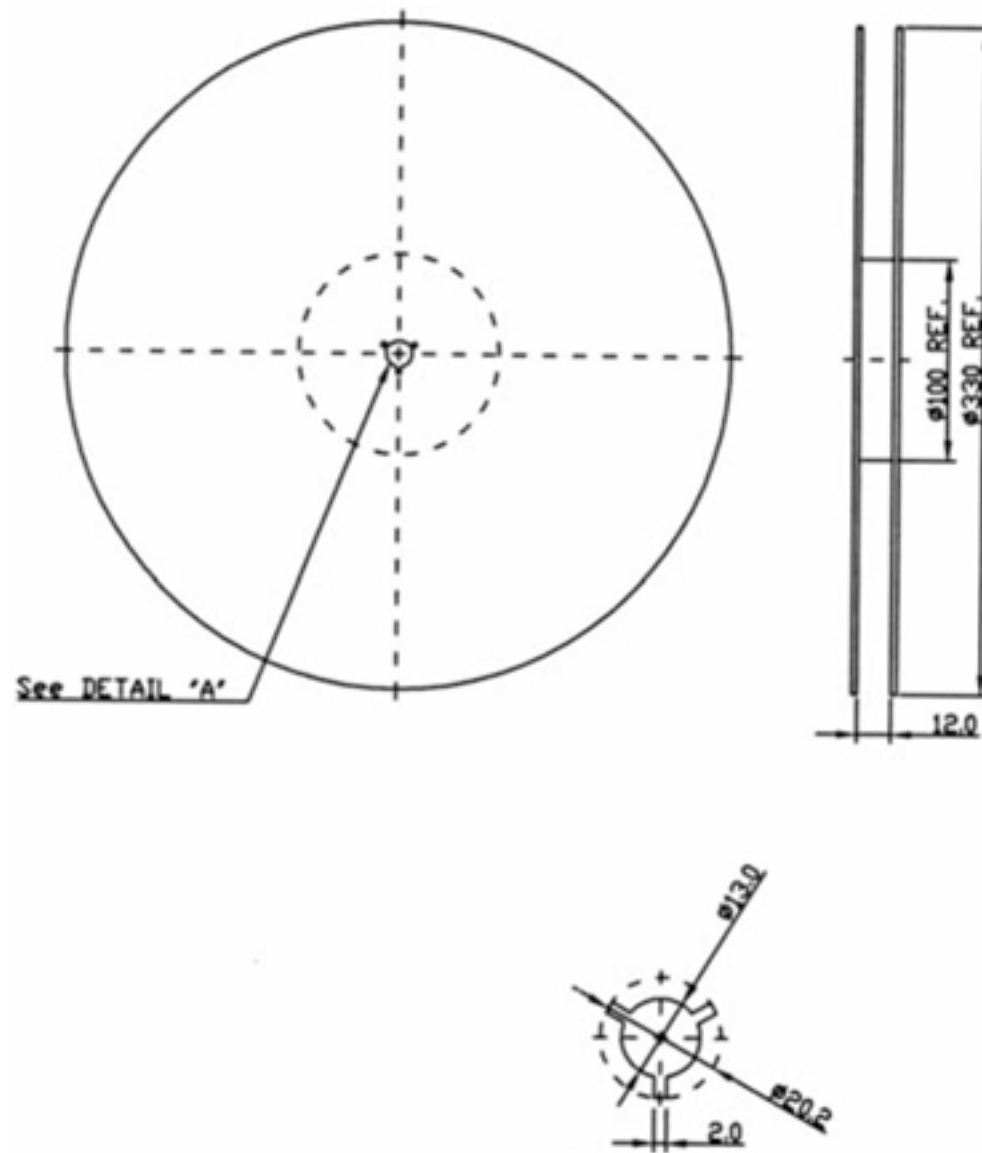
From 50Ω
Network
Analyzer



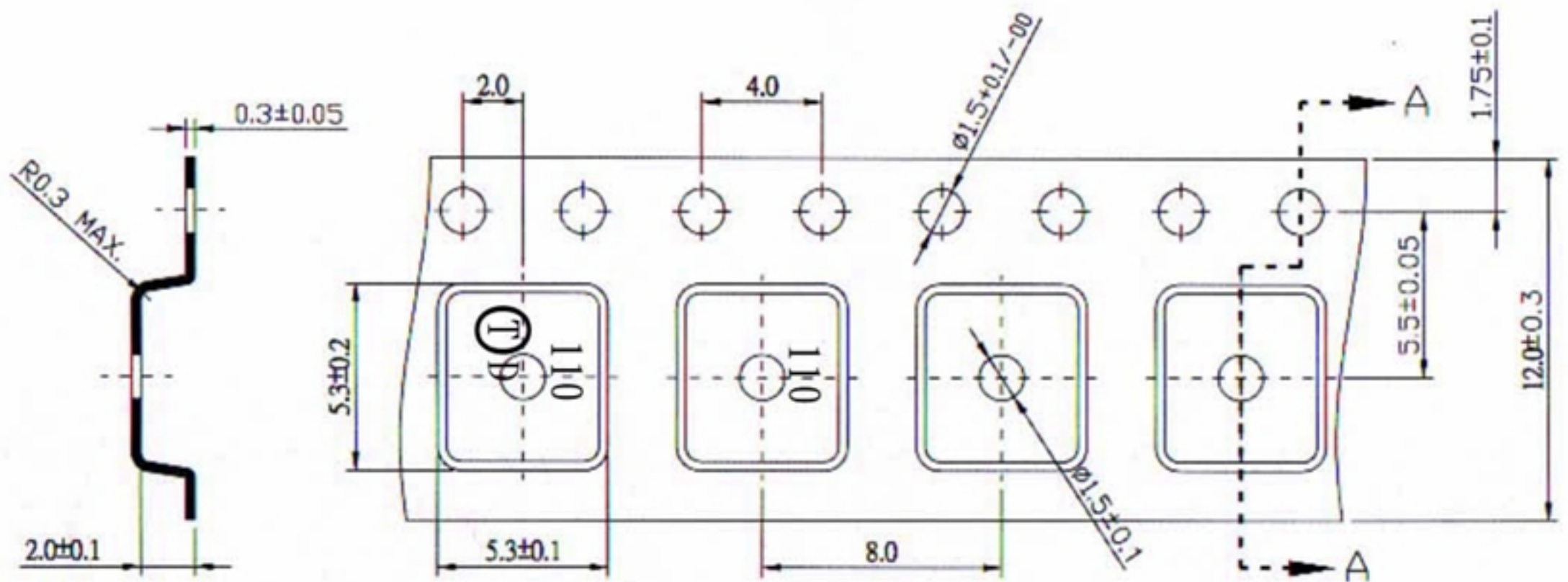
To 50Ω
Network
Analyzer

H. PACKING:

1. REEL DIMENSION



2. TAPE DIMENSION



Section A-A