

# One-Port SMD SAW Resonator

ASR868.35E



5.0 x 5.0 x 1.35mm

Moisture Sensitivity Level (MSL) – This product is Hermetically Sealed and not Moisture Sensitive - MSL = N/A: Not Applicable

## FEATURES:

- One port resonator
- SMD ceramic package: 5.0 x 5.0 x 1.35mm
- Provides reliable, fundamental mode, quartz frequency stabilization

## APPLICATIONS:

- Remote control
- Wireless security

## STANDARD SPECIFICATIONS:

### Maximum Rating

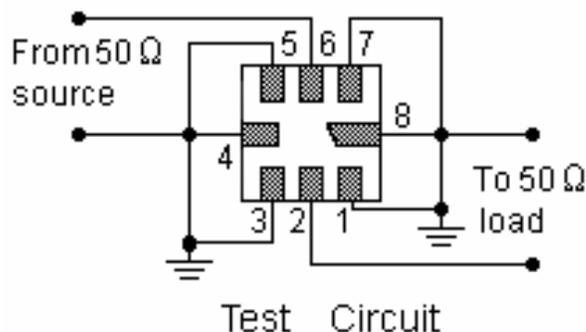
Parameters	Minimum	Typical	Maximum	Units	Notes
DC Voltage between any terminals	-30		+30	V <sub>DC</sub>	
Operation Temperature	-40		+85	°C	
Storage Temperature	-40		+85	°C	
RF Power Dissipation			0	dBm	

### Key Electrical Specifications

Test temperature: +25°C±2°C; Terminating source impedance: 50Ω; Terminating load impedance: 50Ω

Parameters	Minimum	Typical	Maximum	Units	Notes
Center Frequency (f <sub>0</sub> )	868.200	868.350	868.500	MHz	
Insertion Loss		1.6	2.2	dB	
Quality Factor	Unloaded Q	9000			
	50Ω Loaded Q		1500		
Temperature Stability	Turnover Temperature	25		55	°C
	Frequency Temperature Coefficient		0.032		ppm/°C <sup>2</sup>
RF Equivalent RLC Model	Motional Resistance R <sub>1</sub>		20	29	Ω
	Motional Inductance L <sub>1</sub>		33.0079		μH
	Motional Inductance C <sub>1</sub>		1.0188		fF
	Shunt Static Capacitance C <sub>0</sub>	2.25	2.55	2.85	pF
Frequency Aging (first year)		≤10		ppm/yr	
DC Insulation Resistance	1.0			MΩ	

## TEST CIRCUIT



# One-Port SMD SAW Resonator

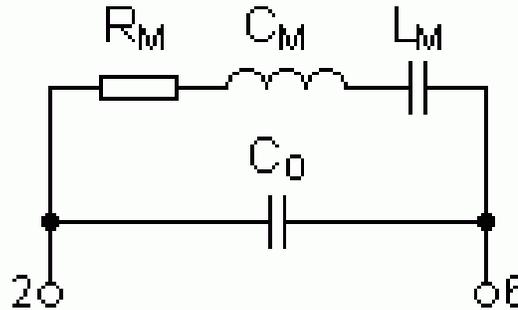
ASR868.35E

 RoHS/RoHS II Compliant

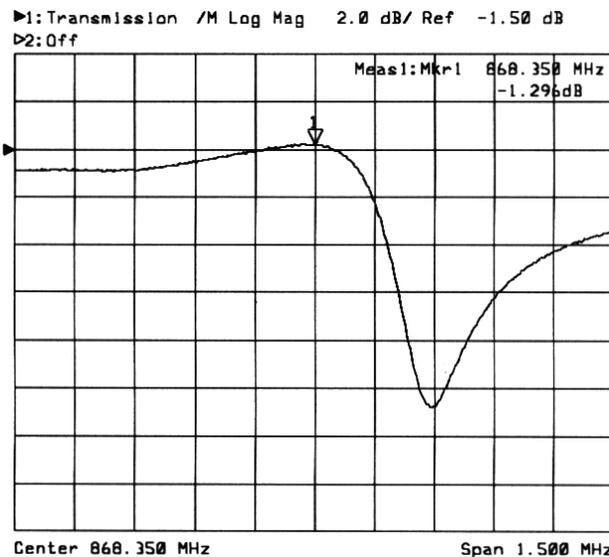


5.0 x 5.0 x 1.35mm

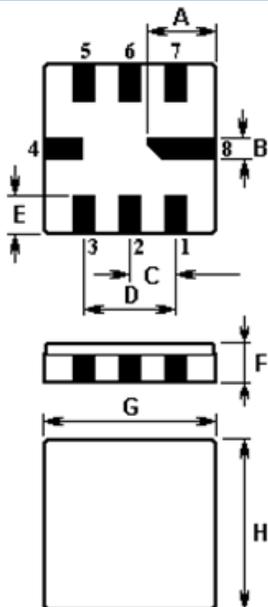
## EQUIVALENT MODEL:



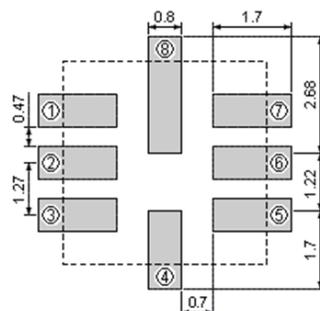
## TYPICAL FREQUENCY RESPONSE:



## OUTLINE DRAWING:



Recommended Land Pattern



Item	Dimension (mm)
A	2.08
B	0.6
C	1.27
D	2.54
E	1.2
F	1.35
G	5.0
H	5.0

Pin #	Function
2	Terminal 1
6	Terminal 2
4,8	Case Ground
1,3,5,7	NC

Dimensions: mm

# One-Port SMD SAW Resonator

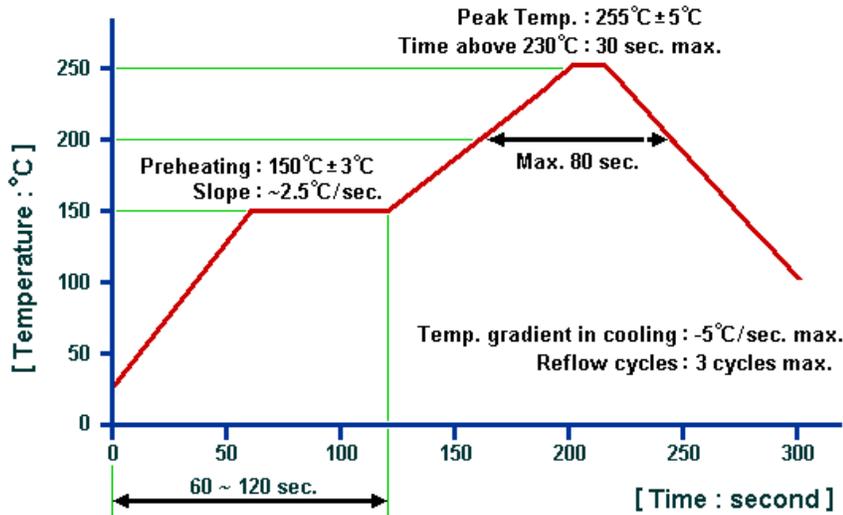
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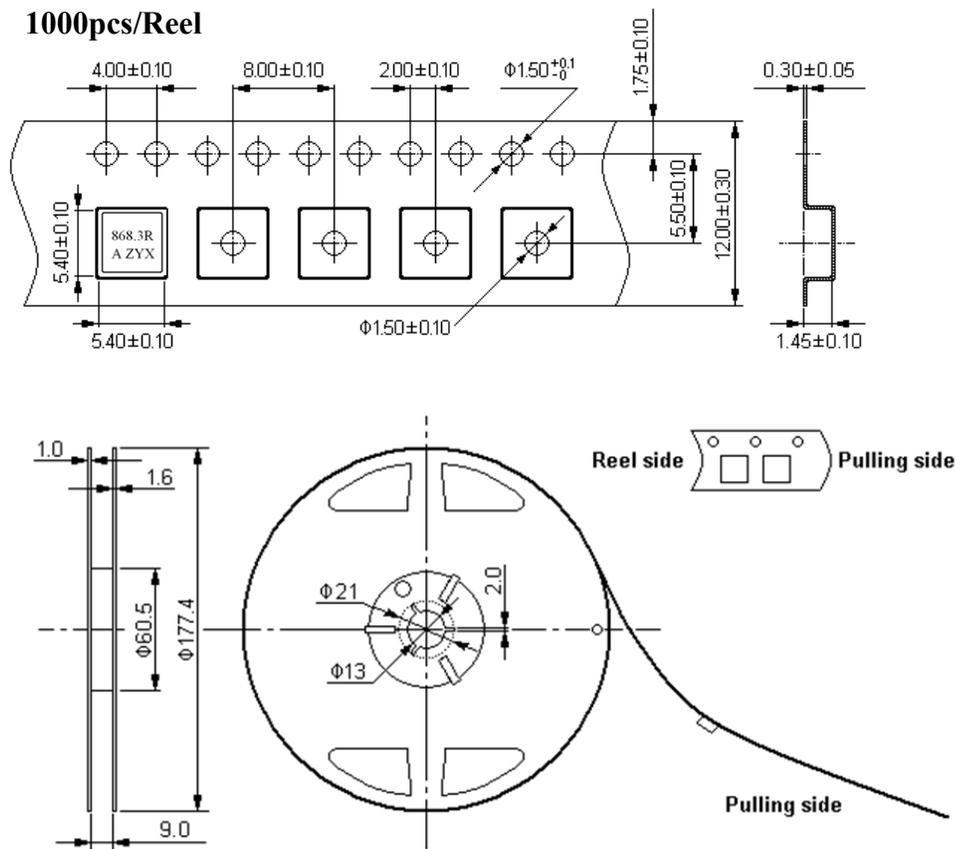
## REFLOW PROFILE:



## TAPE & REEL:

Packaging:

1000pcs/Reel



Dimensions: mm

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