



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# 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

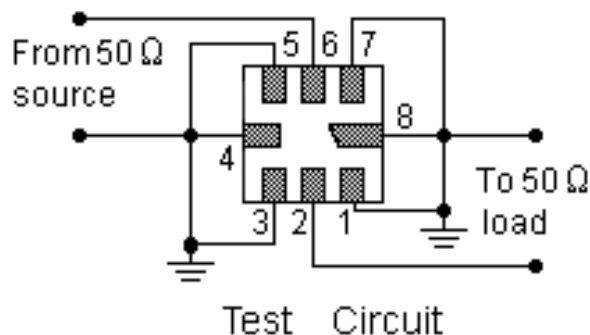
Parameters	Minimum	Typical	Maximum	Units	Notes
DC Voltage between any terminals	-30		+30	V <sub>DC</sub>	
Operation Temperature	-40		+85	°C	
Storage Temperature	-40		+85	°C	
RF Power Dissipation			0	dBm	

### 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	

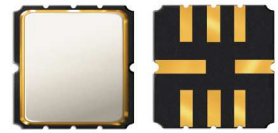
## TEST CIRCUIT



# One-Port SMD SAW Resonator

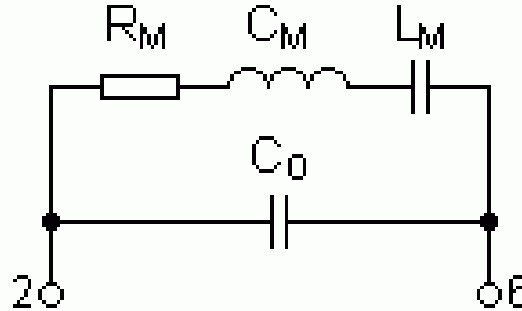
ASR868.35E

 RoHS/RoHS II Compliant

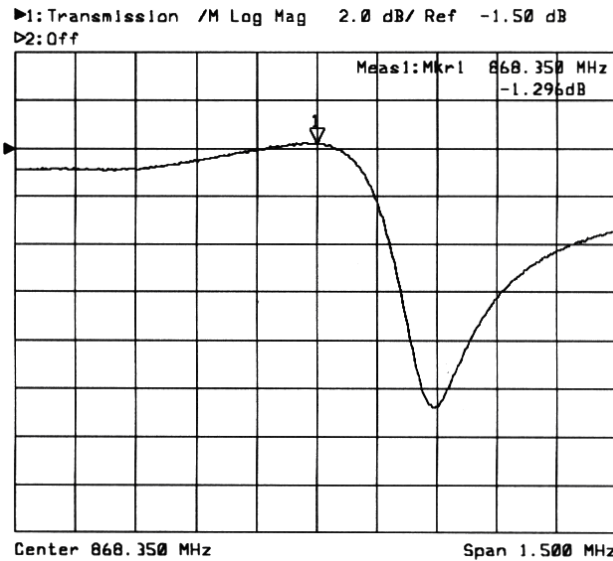


5.0 x 5.0 x 1.35mm

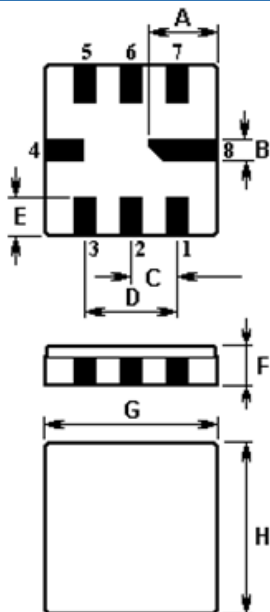
## EQUIVALENT MODEL:



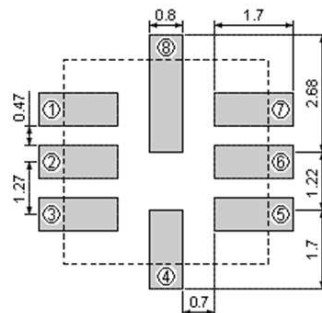
## TYPICAL FREQUENCY RESPONSE:



## 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

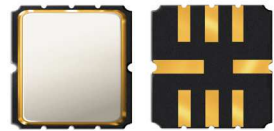
Pin #	Function
2	Terminal 1
6	Terminal 2
4,8	Case Ground
1,3,5,7	NC

Dimensions: mm

# One-Port SMD SAW Resonator

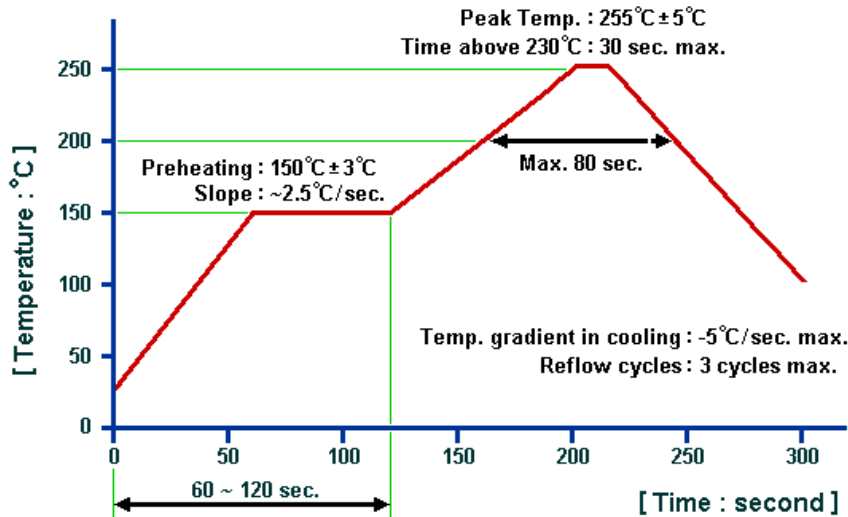
ASR868.35E

 RoHS/RoHS II Compliant



5.0 x 5.0 x 1.35mm

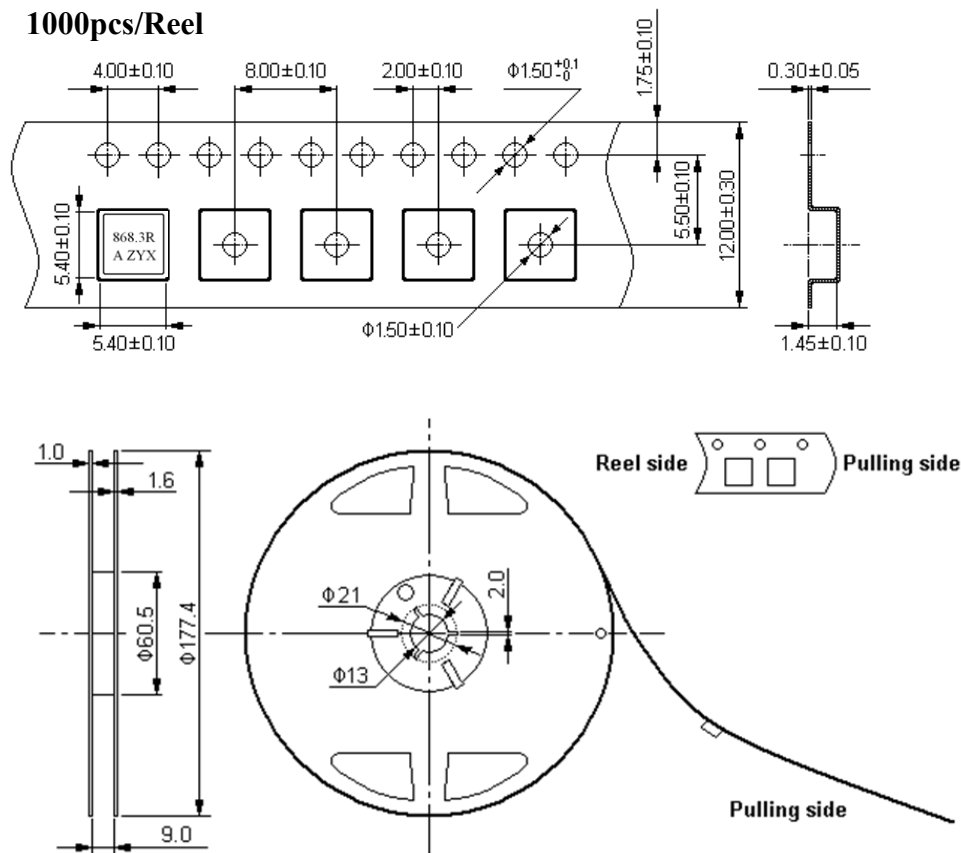
## REFLOW PROFILE:



## TAPE & REEL:

Packaging:

1000pcs/Reel



Dimensions: mm

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