

One-Port SMD SAW Resonator

ASR868.35E



ESD Sensitive



RoHS/RoHS II Compliant



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

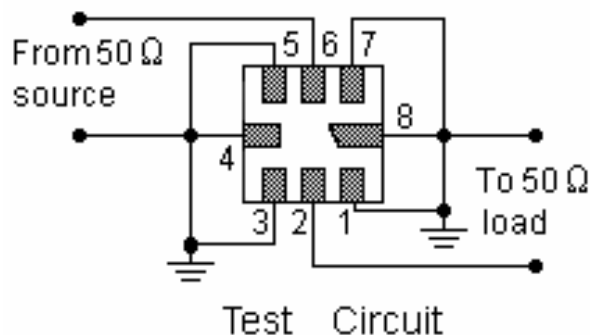
Parameters	Minimum	Typical	Maximum	Units	Notes
DC Voltage between any terminals	-30		+30	V _{DC}	
Operation Temperature	-40		+85	°C	
Storage Temperature	-40		+85	°C	
RF Power Dissipation			0	dBm	

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 ₀)		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 ²	
RF Equivalent RLC Model	Motional Resistance R ₁		20	29	Ω	
	Motional Inductance L ₁		33.0079		μH	
	Motional Inductance C ₁		1.0188		fF	
	Shunt Static Capacitance C ₀	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

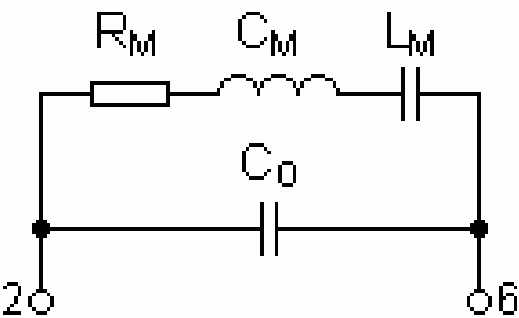


RoHS/RoHS II Compliant

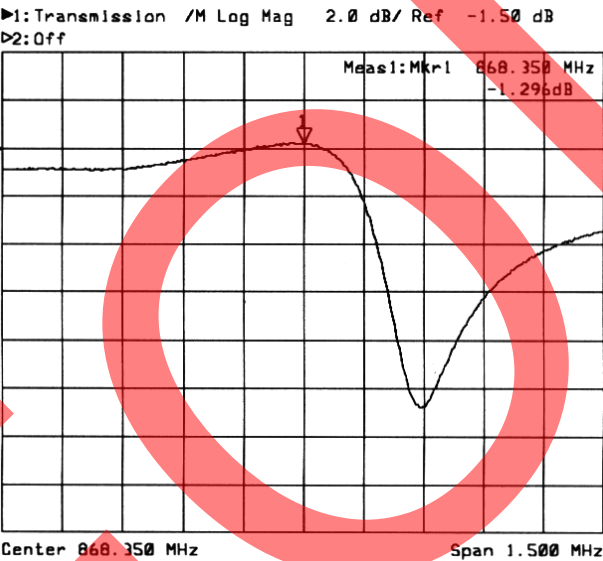


5.0 x 5.0 x 1.35mm

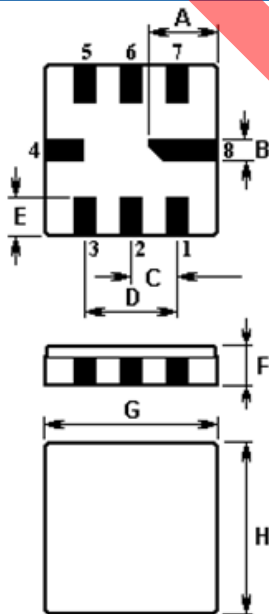
EQUIVALENT MODEL:



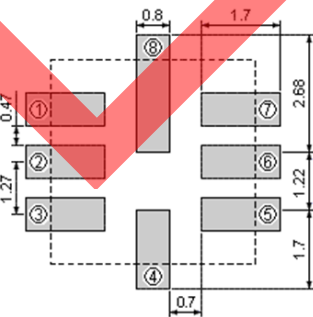
TYPICAL FREQUENCY RESPONSE:



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

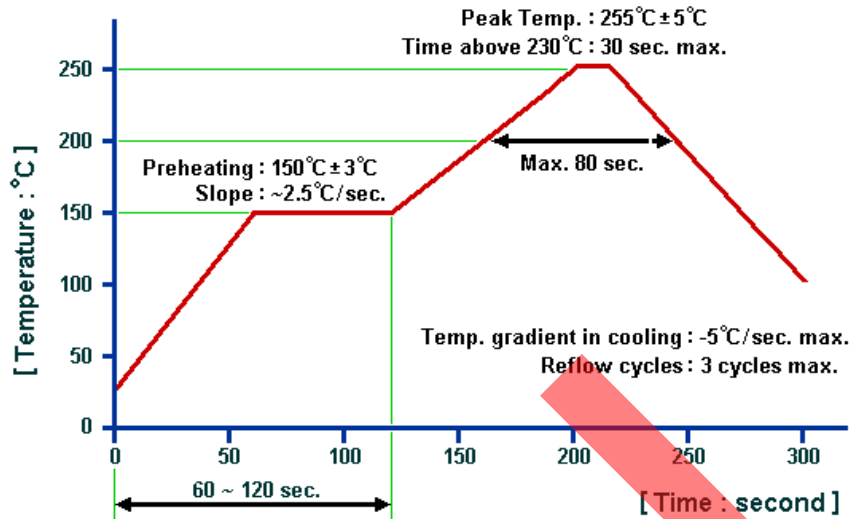


RoHS/RoHS II Compliant



5.0 x 5.0 x 1.35mm

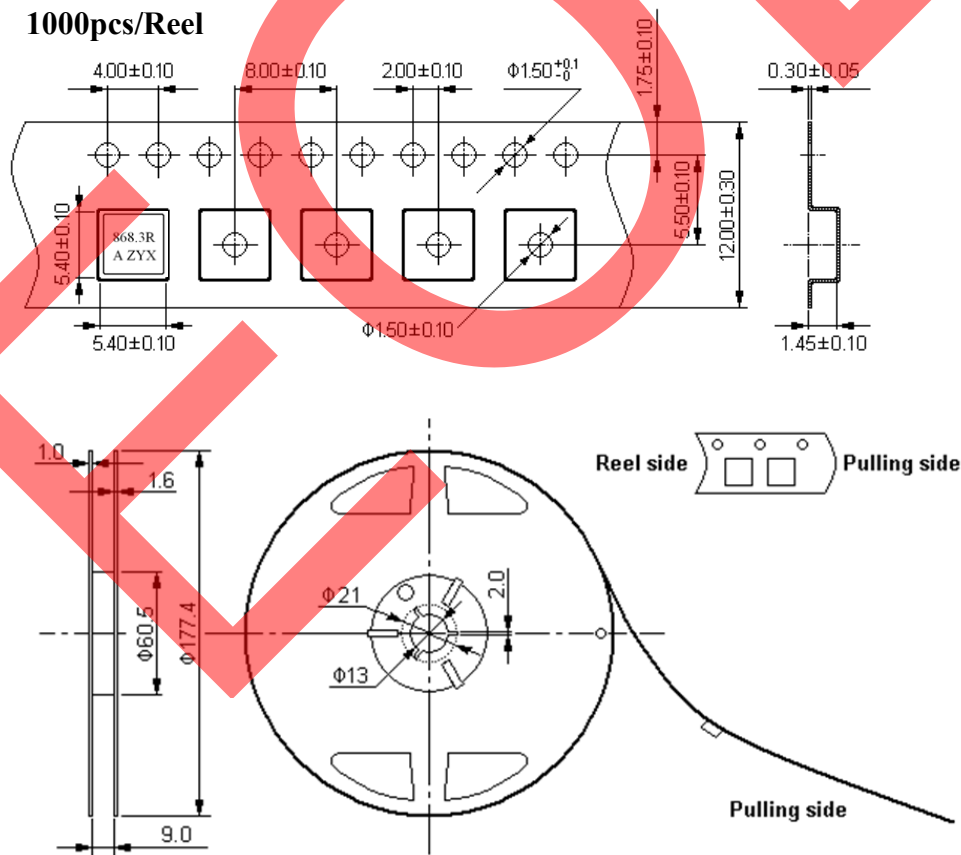
REFLOW PROFILE:



TAPE & REEL:

Packaging:

1000pcs/Reel



Dimensions: mm

ATTENTION: Abracon Corporation's products are COTS – Commercial-Off-The-Shelf products; suitable for Commercial, Industrial and, where designated, Automotive Applications. Abracon's products are not specifically designed for Military, Aviation, Aerospace, Life-dependant Medical applications or any application requiring high reliability where component failure could result in loss of life and/or property. For applications requiring high reliability and/or presenting an extreme operating environment, written consent and authorization from Abracon Corporation is required. Please contact Abracon Corporation for more information.

ABRACON IS
ISO9001:2008
CERTIFIED



ABRACON[®]
LLC

2 Faraday, Suite# B | Irvine | CA 92618 Revised: 09.22.15

Ph. 949.546.8000 | Fax. 949.546.8001

Visit www.abracon.com for Terms and Conditions of Sale