



ABM10AIG



2.5 x 2.0 x 0.55 mm  
**RoHS/RoHS II Compliant**  
 MSL = N/A: Not Applicable

## Features

- AEC-Q200 Qualified
- Automotive Grade 1: -40°C to +125°C
- TS16949 Production Line Certified
- PPAP Available Upon Request
- Hermetically Seam-sealed Ceramic Package
- RoHS/RoHS II Compliant and Pb free

## Applications

- Infotainment Systems
- Keyless Entry & Startup
- GPS & Navigation
- Comfort control
- ADAS (Advanced Driver Assistance Systems)
- Vehicle to Vehicle Communication
- LiDAR (Light Detection and Ranging)
- In-vehicle Networking
- Powertrain & Drive Control
- Power Control & Conversion
- Industrial Control & Automation

## Electrical Specifications

Parameters	Min.	Typ.	Max.	Units	Notes
Frequency Range	12.000		62.500	MHz	
Operation Mode	Fundamental				
Operating Temperature	-40		+125	°C	See options
Storage Temperature	-55		+125	°C	
Frequency Tolerance @ +25°C	-50		+50	ppm	See options
Frequency Stability over the Operating Temperature ( ref. to +25°C)	-100		+100	ppm	See options
Equivalent series resistance (R1)			150	Ω	12.000-15.999 MHz
			80		16.000-19.999 MHz
			60		20.000-29.999 MHz
			50		30.000-34.999 MHz
			40		35.000-62.500 MHz
Shunt capacitance (C0)			2.0	pF	
Load capacitance (CL)	10			pF	Standard (See options if other than STD)
Drive Level		10	100	μW	
Aging	-2		+2	ppm	@25°C± 3°C First year
Insulation Resistance	500			MΩ	@100 Vdc ± 15V

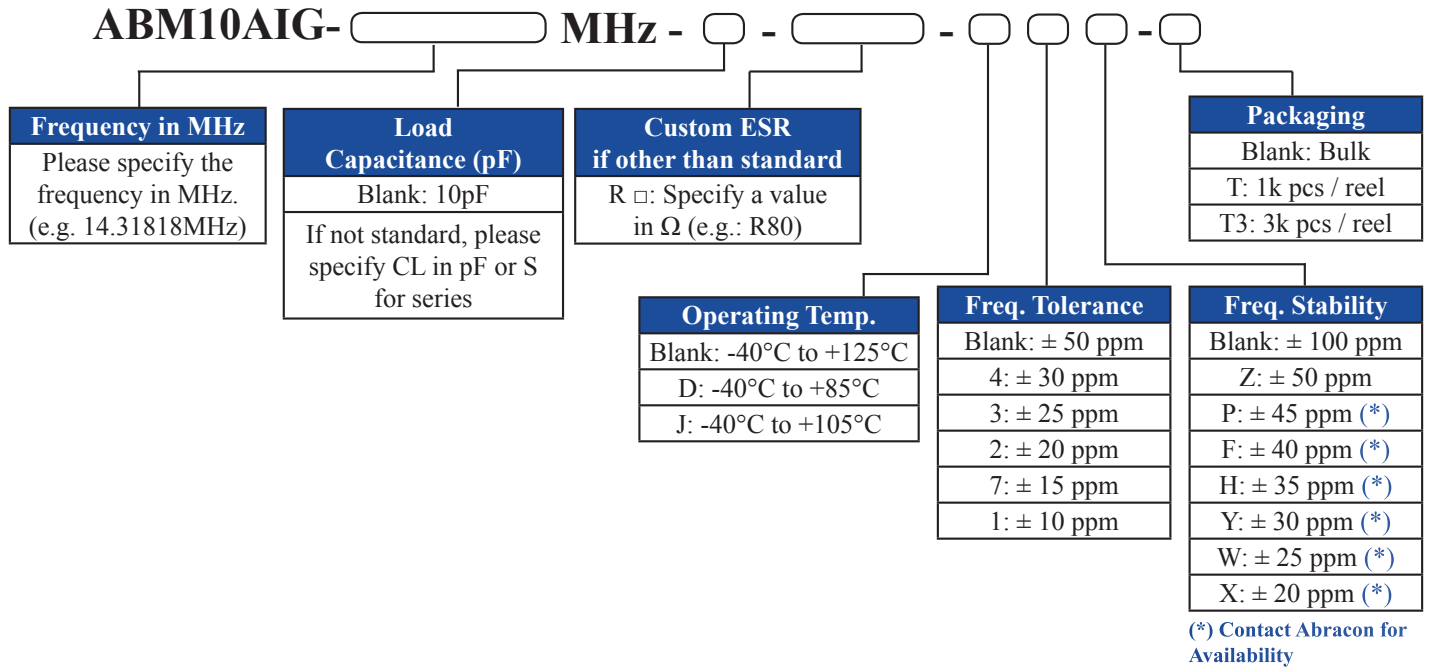


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**Options and Part Identification (left blank if standard)**



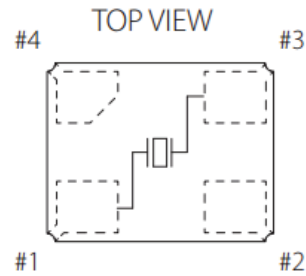
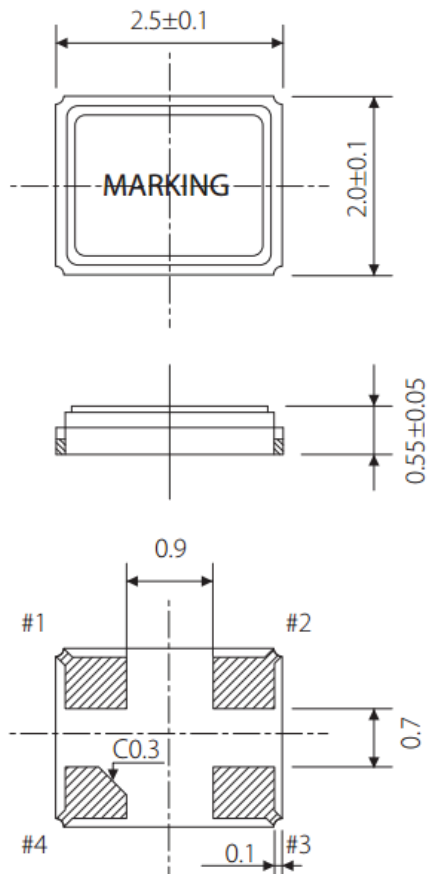


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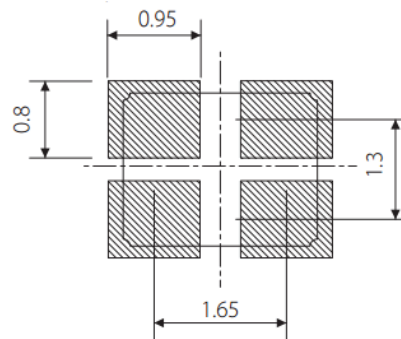
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## Mechanical Dimensions



• #1,#3 : Crystal terminal / #2,#4 : Connected to cover  
 (Please connect it with GND.)

### Recommended Land Pattern



**Note:** Due to availability of raw materials, this part may be manufactured with the chamfer on pin 1 or pin 4. Be advised that this does not affect the electrical characteristics of the crystal in any way.

Dimensions: mm

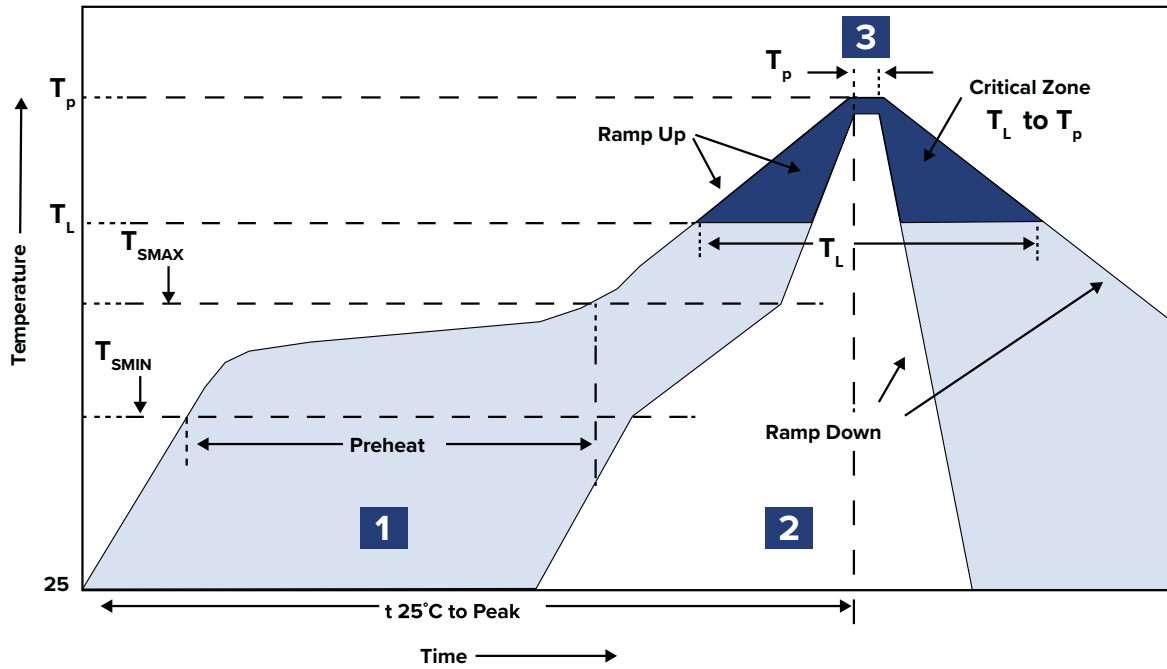


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## Reflow Profile



Zone	Description	Temperature	Time
1	Preheat / Soak	$T_{SMIN} \sim T_{SMAX}$ 150°C ~ 180°C	60 ~ 120 sec.
2	Reflow	$T_L$ 230°C	30 ~ 40 sec.
3	Peak heat	$T_P$ 260°C±5°C	10 sec. MAX



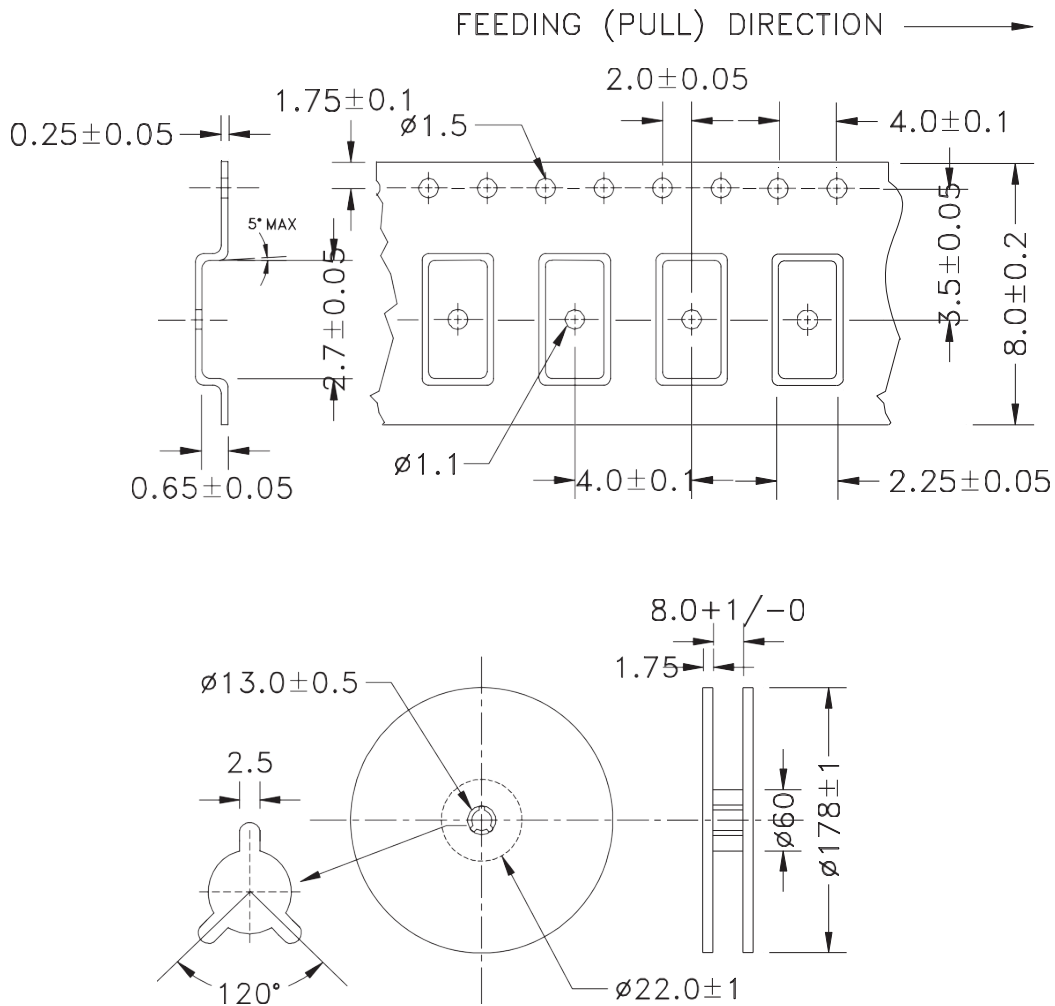
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## Packaging

Tape and Reel:  
 T: 1,000pcs/reel  
 T3: 3,000pcs/reel



**Dimensions: mm**

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