



ABM3BAIG



5.0 x 3.2 x 0.9 mm
RoHS/RoHS II Compliant
 MSL = N/A: Not Applicable

Features

- AEC-Q200 Qualified
- Automotive Grade 1: -40°C to +125°C
- Automotive Grade 0: -40°C to +150°C (Available Upon Request)
- 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	8.000		54.000	MHz	
Operation Mode	Fundamental				
Operating Temperature ^[Note 1]	-40		+125	°C	Option "blank"; See options
	-40		+150		Option "V"; See options
Storage Temperature ^[Note 1]	-40		+125	°C	Option "blank, J, D, N"
	-40		+150		Option "V"
Frequency Tolerance @ +25°C	-50		+50	ppm	Option "blank"; See options
Frequency Stability over the Operating Temperature (ref. to +25°C)	-100		+100	ppm	Option "blank"; See options
	-150		+150		Option "R"; See options
Equivalent series resistance (R1)			150	Ω	8.000 – 9.999 MHz
			80		10.000 – 11.999 MHz
			70		12.000 – 15.999 MHz
			50		16.000 – 19.999 MHz
			40		20.000 – 23.999 MHz
			30		24.000 – 54.000 MHz
Shunt capacitance (C0)			3.0	pF	
Load capacitance (CL)	18			pF	Option "blank"; See options
Drive Level		10	100	μW	
Aging	-2		+2	ppm	@25°C± 3°C First year
Insulation Resistance	500			MΩ	@100 Vdc ± 15V

Note 1: Operating temperature range option -40°C to +150°C only available in select frequencies and electrical performance options. Please contact Abracon for availability.

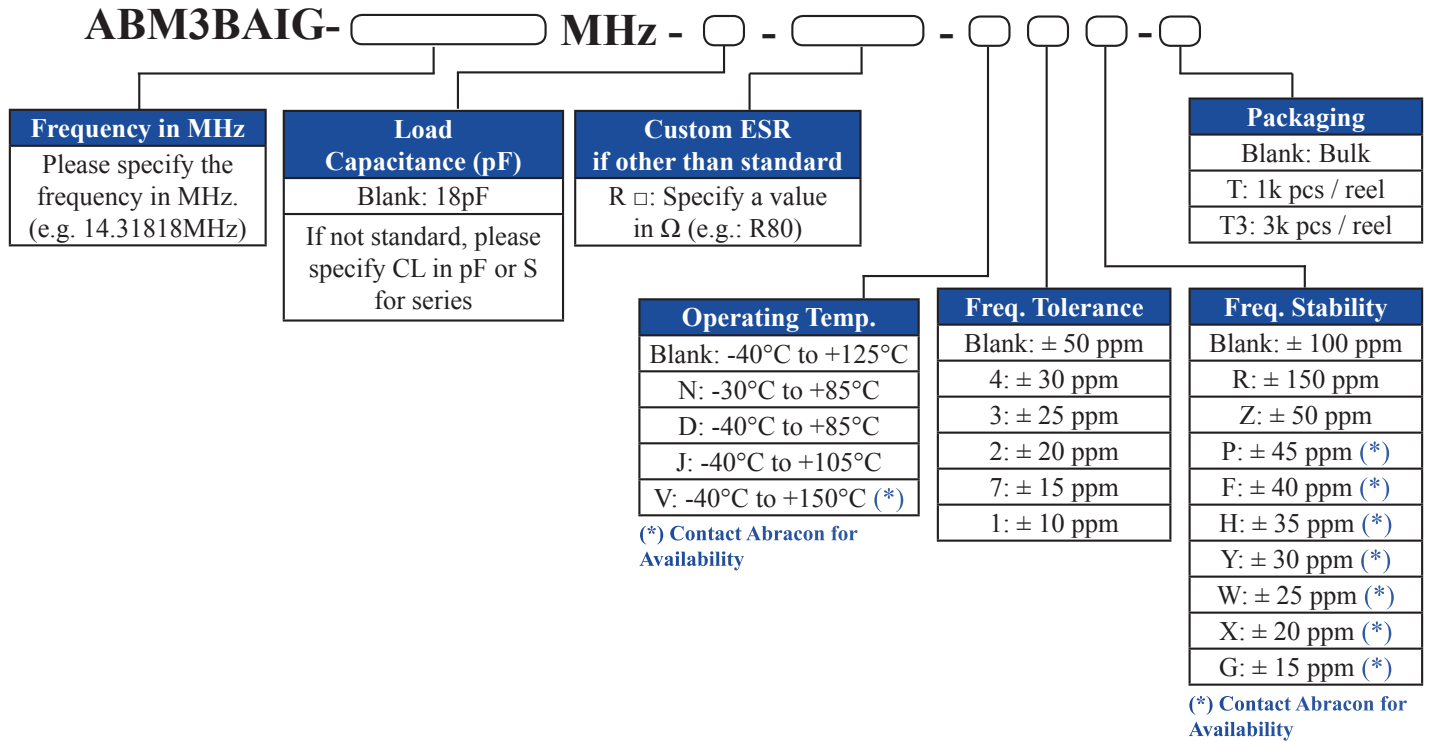


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Options and Part Identification (left blank if standard)



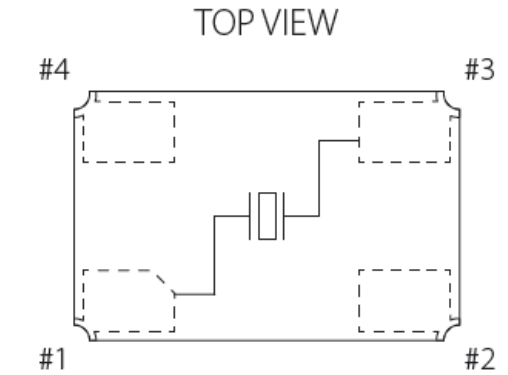
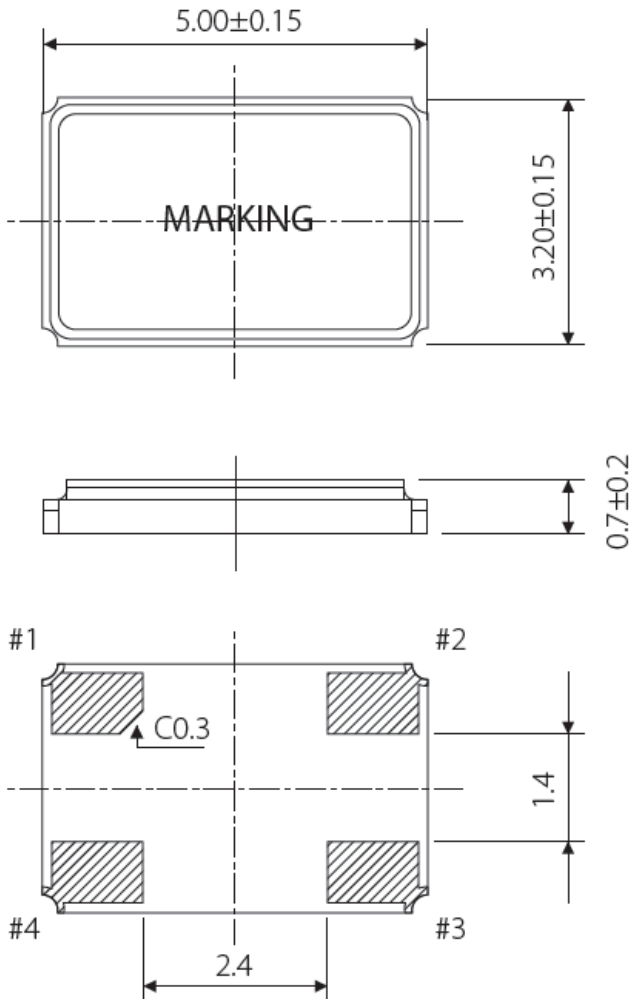


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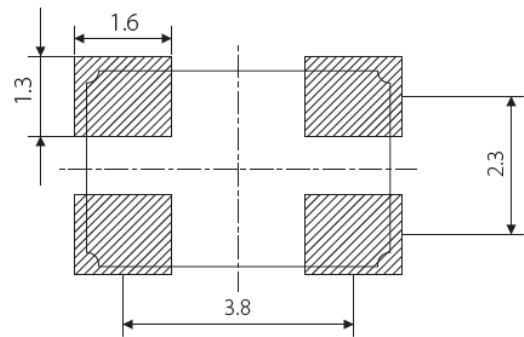
Mechanical Dimensions



Pin #1: Crystal
 Pin #3: Crystal

Pin #2: GND (*)
 Pin #4: GND (*)
 (*) Electrically connected to lid

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

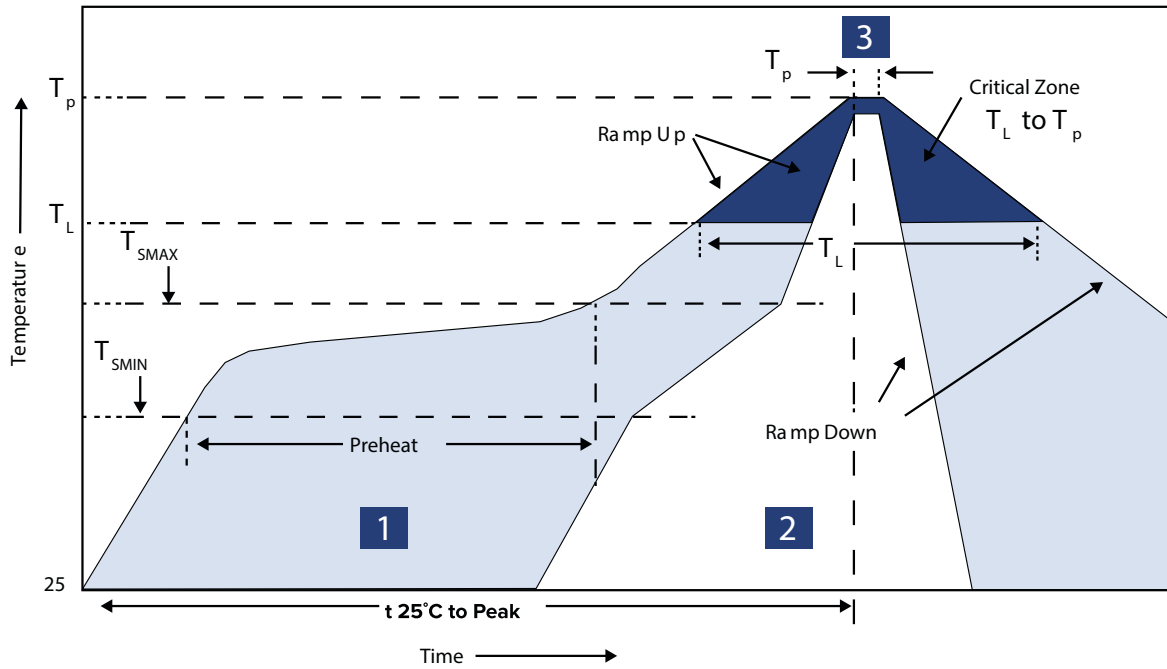


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Reflow Profile



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



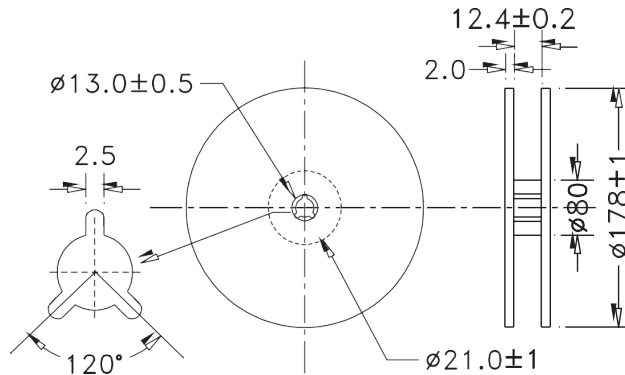
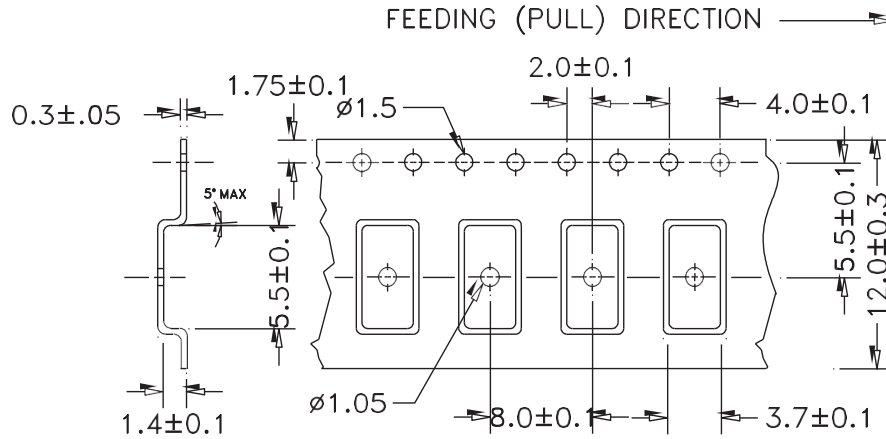
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Packaging

T: 1000 pcs/reel
 T3: 3000pcs/reel



Dimensions: mm

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5101 Hidden Creek Ln Spicewood TX 78669
 Phone: 512-371-6159 | Fax: 512-351-8858
 For terms and conditions of sales, please visit:
www.abracon.com

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