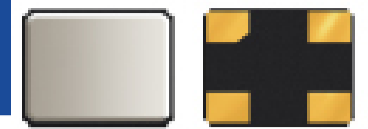


AUTOMOTIVE & INDUSTRIAL GRADE CERAMIC SMD ULTRA MINIATURE CRYSTAL



AAH-438-28.63636MHz-T3

3.2 x 2.5 x 0.8mm

 **RoHS/RoHS II Compliant**
MSL = N/A: NOT APPLICABLE

FEATURES

- PPAP ready and supported
- TS16949 certified production lines
- Miniature size and low profile package: 3.2 x 2.5 x 0.8mm
- AEC-Q200 qualified
- Low ESR with < 25Ω
- Hermetically sealed ceramic package assures high precision and reliability
- Extended operating temperature range: -40°C to +125°C
- RoHS compliant and Pb free

APPLICATIONS

- Navigation
- Comfort control
- Car entertainment system
- Instrument panel
- COTS Military
- Telematics
- Test equipment
- Industrial automation
- Industrial control
- Medical Electronics (non-life dependent)

STANDARD SPECIFICATIONS

| Parameters | Minimum | Typical | Maximum | Units | Notes |
|--|---------------------|---------|---------|-------|----------------------|
| Frequency Range | 28.63636 | | | MHz | |
| Operation Mode | Fundamental, AT-cut | | | | |
| Operating Temperature | -40 | | +125 | °C | |
| Storage Temperature | -40 | | +125 | °C | |
| Frequency Tolerance @+25°C | -20 | | +20 | ppm | |
| Frequency Stability over the Operating Temperature (ref. to +25°C) | -50 | | +50 | ppm | |
| Equivalent series resistance (R1) | | | 25 | Ω | |
| Shunt capacitance (C0) | | | 7 | pF | |
| Load capacitance (CL) | 12 | | | pF | |
| Drive Level | | 10 | 100 | μW | |
| Aging | -3 | | +3 | ppm | @25°C±3°C First year |
| Insulation Resistance | 500 | | | MΩ | @ 100Vdc ± 15V |

OPTIONS AND PART IDENTIFICATION (LEFT BLANK IF STANDARD)

AAH-438-28.63636MHz -

| PACKAGING |
|----------------|
| Blank: Bulk |
| T3: 3kpcs/reel |

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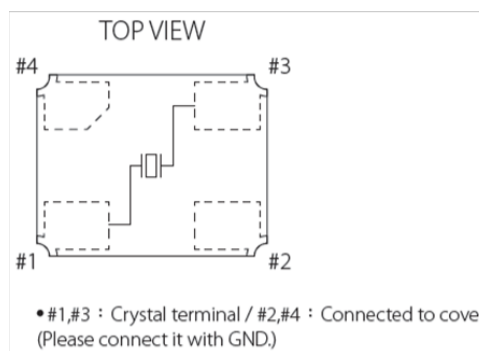
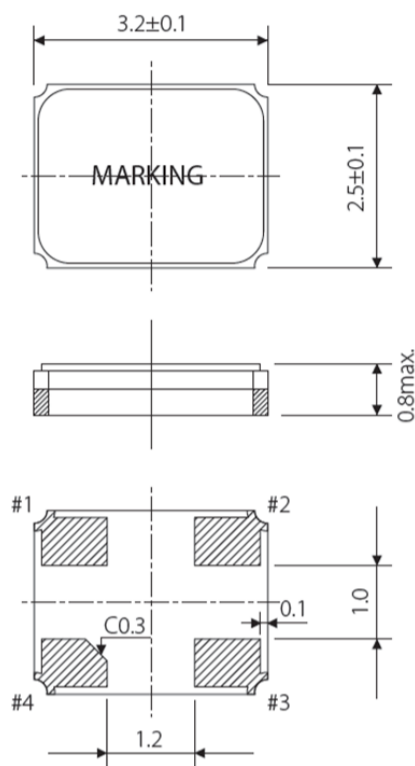
3.2 x 2.5 x 0.8mm



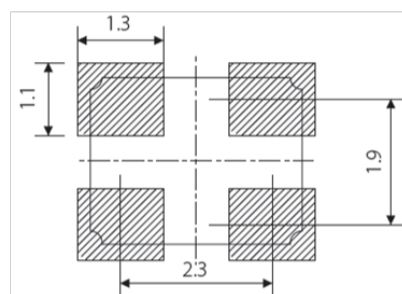
RoHS/RoHS II Compliant

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OUTLINE DRAWING

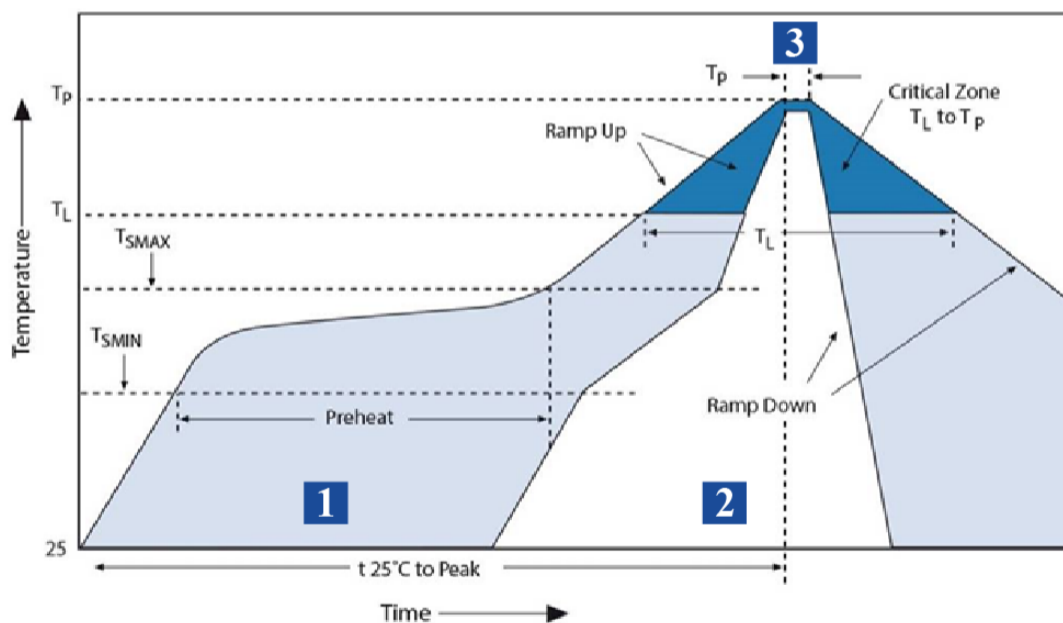


RECOMMENDED LANDING PATTERN



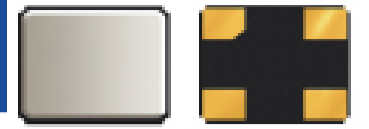
DIMENSIONS: mm

REFLOW PROFILE



| Zone | Description | Temperature | Time |
|------|-------------|---|---------------|
| 1 | Preheat | $T_{SMIN} \sim T_{SMAX}$ 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. |

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AAH-438-28.63636MHz-T3

3.2 x 2.5 x 0.8mm



RoHS/RoHS II Compliant

MSL = N/A: NOT APPLICABLE

TAPE AND REEL

PACKAGING: T3: 3000PCS/REEL

