

### Description

- Ceramic package with a hermetically seam sealed metal lid suitable for automotive applications. Qualified to AEC-Q200 and with TS16949 release.
- 4 pad
- Model 12SMX AUTO
- Model Issue number 3

### Frequency Parameters

- Frequency 20.0MHz
- Frequency Tolerance  $\pm 50.00\text{ppm}$
- Tolerance Condition @ 25°C
- Frequency Stability  $\pm 100.00\text{ppm}$
- Operating Temperature Range -40.00 to 125.00°C
- Overtone Order Fundamental
- Ageing  $\pm 5\text{ppm max per year @ 25°C}$

### Electrical Parameters

- Load Capacitance (CL) 8.00pF
- Shunt Capacitance (C0) 7pF max
- Drive Level 50μW typical
- ESR 30.00Ω max

### Environmental Parameters

- Storage Temperature Range: -45°C to Max Operating Temperature+5°C
- Qualified to AEC-Q200

### Manufacturing Details

- Maximum Process Temperature: 260°C (10secs max)

### Compliance

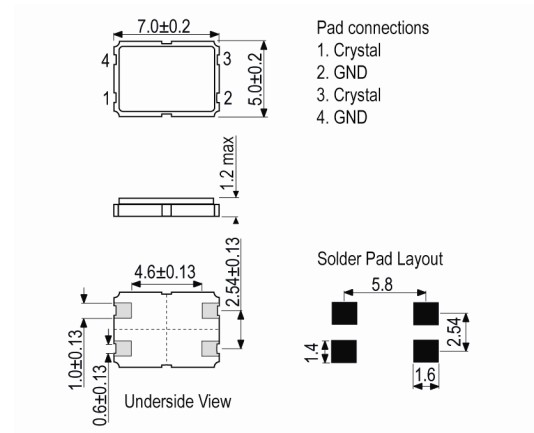
- RoHS Status (2011/65/EU) Compliant
- REACH Status Compliant
- MSL Rating (JDEC-STD-033): Not Applicable

### Packaging Details

- Pack Style: Reel Tape & reel in accordance with EIA-481-D  
Pack Size: 1,000
- *Alternative packing option available*



### Outline (mm)



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