

ACT750SMX-2/4

The ACT750SMX-2/4 family is a low cost, 4 & 2 pad, high quality, low aging 7x5mm SMD Crystal in a ceramic base / metal lid package, seam sealed for good long term reliability. The 4 pad device has the lid grounded via the package to reduce EMI issues. The wide frequency range and specification options ensure suitability for many applications.

APPLICATIONS: Wireless/WLAN, ATM, Cordless phones, Pagers, PC & Notebook, Instrumentation, Audio visual, Micro clock, Process control, Consumer & Communications.

Compatible with Eu Directive
2002/EC - RoHS



Specification

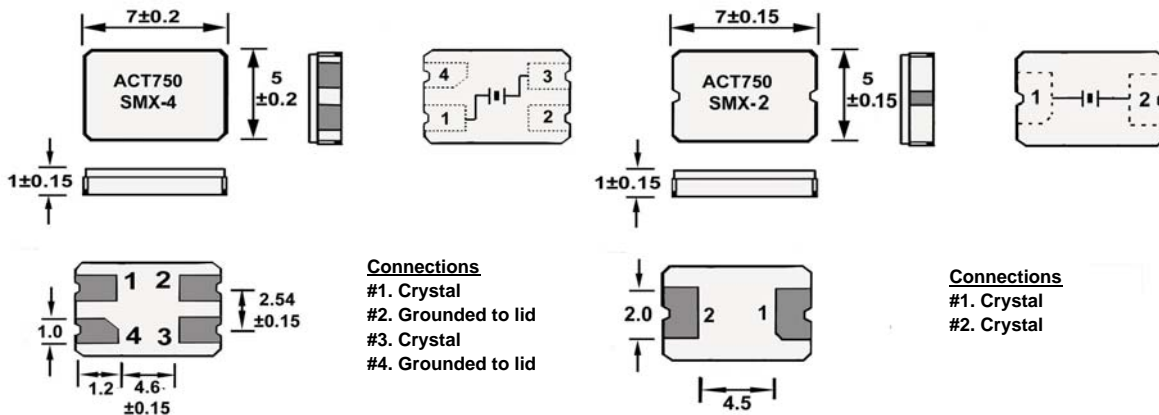
| Parameter | Symbol | Specification | Condition |
|------------------------------|----------------|---|-------------------------------------|
| Frequency Range | fo | 6.0 ~ 150.0MHz | Please specify |
| Frequency Tolerance (@25°C) | $\Delta f/f_0$ | $\pm 5, \pm 10, \pm 15, \pm 20, \pm 30$ & ± 50 ppm(Std) | Please specify |
| Stability over temp range | Tc | ± 5 ppm ~ 50ppm (See table 2) | Please specify |
| Temp Operating Range | Topr | 0~+50°C ~ -40~+85°C (See table 2) | Please specify |
| Temp Storage Range | Tstg | -40 ~ +85°C | |
| Equivalent Series Resistance | ESR | See table 1 | |
| Load Capacitance | CL | 10pF ~ 50pF & Series | (16,20 & 30pF Std. Please specify) |
| Shunt Capacitance | C0 | 5pF max | |
| Drive Level | DL | 100 μ W typical (500 μ W max) | (Custom available - Please enquire) |
| Insulation Resistance | IR | 500M Ω min | @100V DC |
| Aging | Fa | ± 3 ppm p/yea* | (First year max @ 25°C) |

Table 1

| Freq. Range (MHz) | ESR (Ω) max | Mode / Cut |
|-------------------|----------------------|-------------------------------|
| 6.000 ~ 9.999 | 100 | Fundamental / AT |
| 10.000 ~ 11.999 | 60 | Fundamental / AT |
| 12.000 ~ 14.999 | 50 | Fundamental / AT |
| 15.000 ~ 49.090 | 40 | Fundamental / AT |
| 45.000 ~ 79.999 | 90 | 3 RD Overtone / AT |
| 80.000 ~ 90.000 | 90 | 3 RD Overtone / AT |
| 90.001 ~ 150.000 | 150 | 3 RD Overtone / AT |

Pad Surface Material: Gold (Au)

Dimensions (mm)



Connections

- #1. Crystal
- #2. Grounded to lid
- #3. Crystal
- #4. Grounded to lid

Connections

- #1. Crystal
- #2. Crystal

Please note that all parameters can not necessarily be specified in the same device

Customer to specify : Frequency, Frequency Tolerance, Temperature Stability, Operating Temperature & Load Capacitance

In line with our ongoing policy of product evolution and improvement, the above specification may subject to change without notice

ISO9001:2000 Registered

For quotations or further information please contact us at:

3 The Business Centre, Molly Millars Lane, Wokingham, Berkshire, RG41 2EY, UK

<http://www.actcrystals.com>

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Table 2

| Temp \ Stability | +/- 5ppm | +/- 10ppm | +/- 20ppm | +/- 30ppm | +/- 50ppm |
|------------------|----------|-----------|-----------|-----------|-----------|
| 0~+50°C | + | + | + | + | + |
| -10+60°C | + | + | + | + | + |
| -20~+70°C | | + | + | + | + |
| -30~+80°C | | + | + | + | + |
| -40~+85°C | | + | + | + | + |

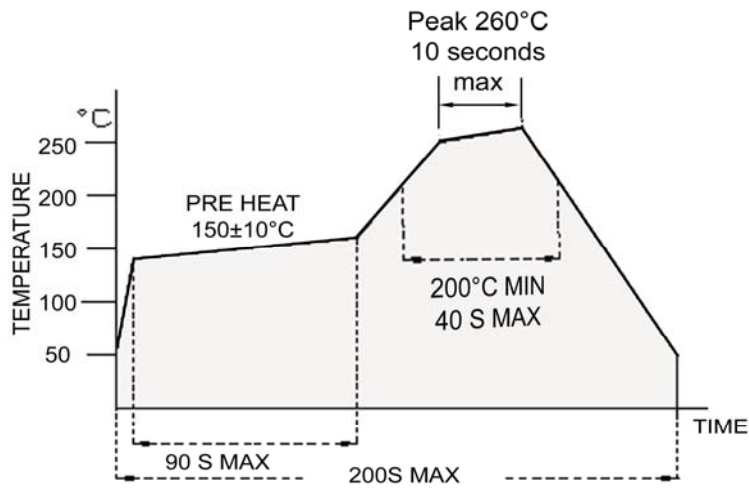
+

Available stabilities

+

Standard stabilities

Standard Re-flow Profile



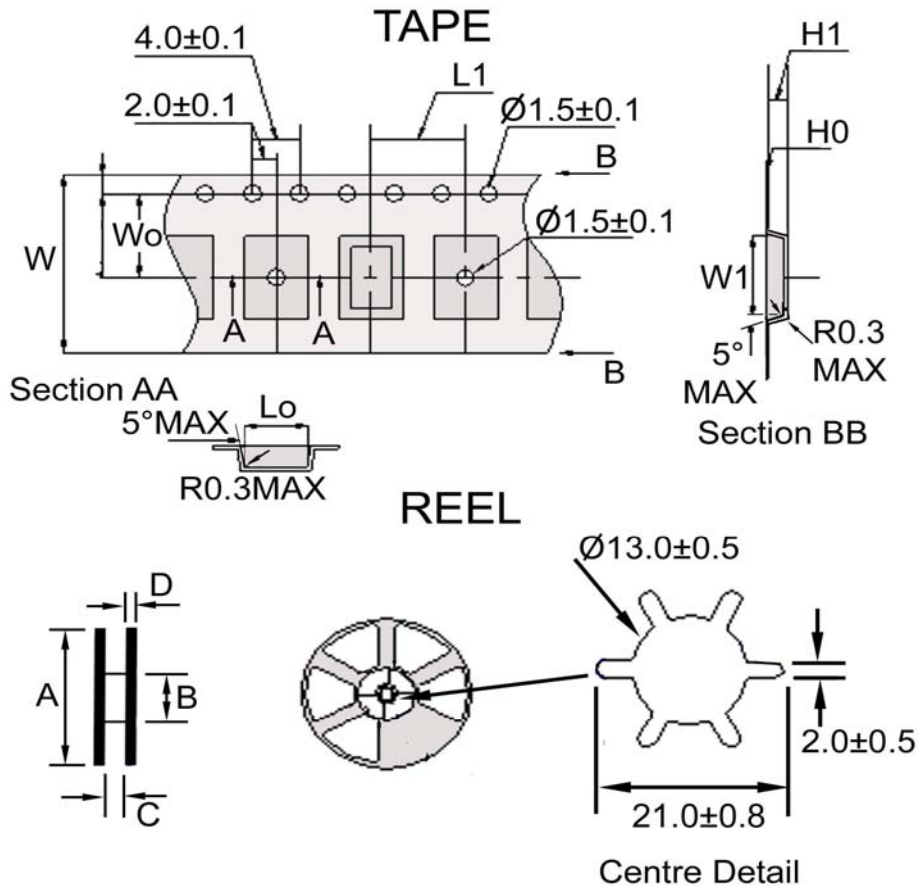
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TAPE & REEL SPECIFICATION
 (1K pcs each reel)



| Tolerance Dimension | TAPE | | | | | | | REEL | | | |
|---------------------|------|------|------|------|------|-------|------|------|----|------|------|
| | W | Wo | W1 | Lo | L1 | Ho | H1 | A | B | C | D |
| | ±0.3 | ±0.1 | ±0.1 | ±0.1 | ±0.1 | ±0.05 | ±0.1 | ±1 | ±1 | ±1.5 | ±0.2 |
| | 16.0 | 7.5 | 7.4 | 5.4 | 8.0 | 0.3 | 1.4 | 178 | 80 | 17.5 | 2.0 |

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