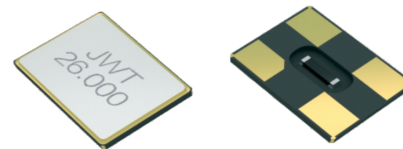


2.5x2.0mm SMD Crystal-TSX QM Series



Product Features

1. Reliable seam sealed ceramic package
2. Wide operating temperature
3. Built-in thermistor
4. Complete Pb-free

Applications

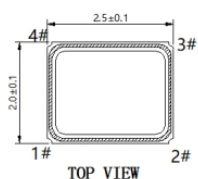
1. Smart phone
2. Smart wearable
3. GNSS

Specifications

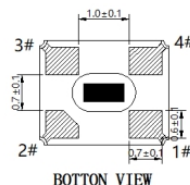
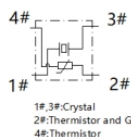
| Model | QM2520 | |
|---|-------------------------|-----------------------------|
| Nominal frequency range | 19.200MHz | 26.000MHz |
| Oscillation mode | Fundamental (AT-cut) | Fundamental (AT-cut) |
| Frequency tolerance at 25°C±3°C | ±10ppm | ±10ppm |
| Operating temperature range | -30°C~105°C | -40°C~105°C |
| Frequency stability over temperature(Ref.to 25°C) | ±12ppm at -30~+85°C | ±10ppm at -30~+85°C |
| Storage temperature range | -40°C~105°C | -40°C~105°C |
| Equivalent series resistance | 80Ω Max | 30Ω at -30~+95°C |
| | | 35Ω at -40~-30°C,+95~+105°C |
| Tuning sensitivity | 10ppm/pF MIN | 10.8~13.2ppm/pF |
| Spurious mode series resistance | 1100Ω (±1MHz) | 500Ω (±1MHz) |
| Q Factor | 75K MIN | 75K MIN |
| Insulation resistance | 500MΩ MIN (at DC 100V) | 500MΩ MIN (at DC 100V) |
| Reflow | ±2ppm (After 3 reflows) | ±2ppm (After 3 reflows) |
| Inflection point (T=T0-C2/(3*C3)) | 30.5~33.5°C | 29~32°C (30.5°C Type) |
| Load capacitance | 7pF | 7pF,9pF |
| Drive level max | 100uW | 200uW |
| Aging at first year | ±0.7ppm | ±0.7ppm |

Notes: The above parameters are for normal demands, If you have any different demands, Please contact us.

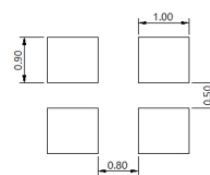
Dimensions (Unit: mm)



Terminal land connections



Land pattern (Recommended)



| Pin | Function |
|-----|--------------------|
| #1 | Xtal |
| #2 | Thermistor and GND |
| #3 | Xtal |
| #4 | Thermistor |