Hang Crystal International

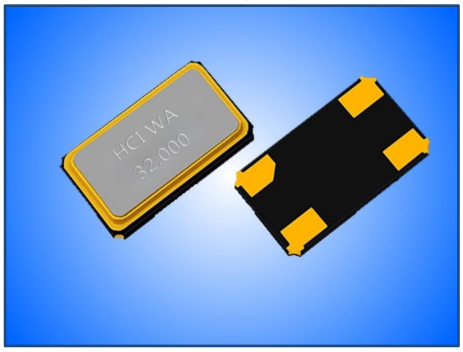
# QUARTZ CRYSTAL UNIT
# 0163M4

## QUARTZ CRYSTAL UNIT IN SMD 6.0X3.5MM CERAMIC SEAM SEAL PACKAGE.

### PRODUCT FEATURES

- Dimensions 6.0x3.5x1.0 with 4 solder pads.
- Highly reliable seam sealed ceramic package.
- Tight tolerances and stabilities over temperature range.
- Automotive compliance to AEC-Q200 available.
- RoHS compliant, LEAD-FREE and HALOGEN-FREE.

### PRODUCT PHOTO (NOT IN SCALE)



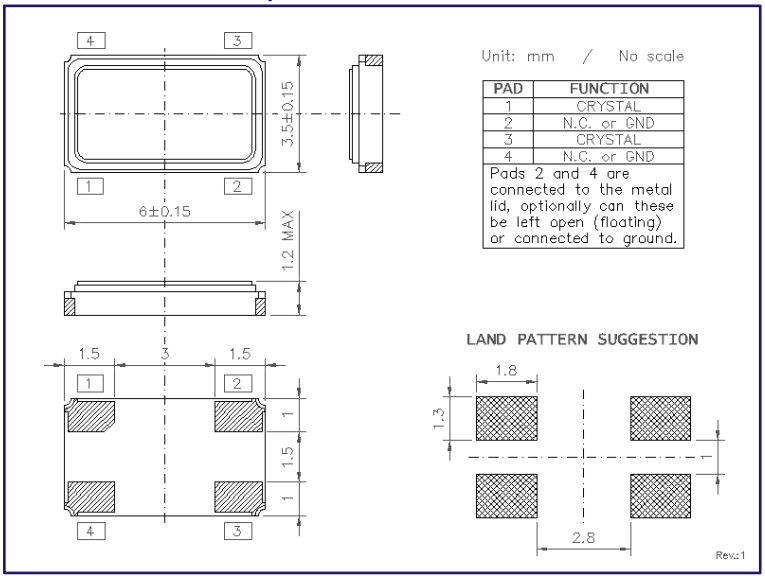

### APPLICATIONS

- Wireless LAN
- Bluetooth
- Mobil communication
- Handheld equipment

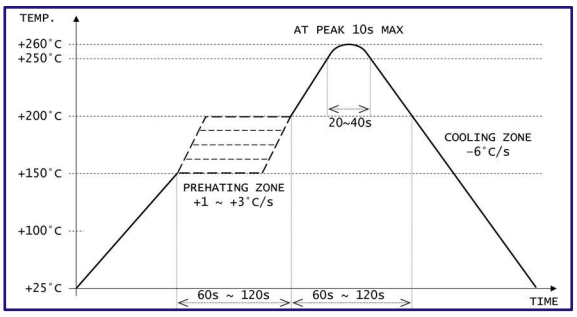
### PRODUCT SPECIFICATIONS

| PARAMETER | 0163M4 | | | | CONDITIONS / REMARKS |
|---|---|---|---|---|---|
| Nominal frequency range | 8.000 ~ 80.000MHz | | | | Fundamental up to 55MHz and 3rd overtone available. |
| Crystal cut and mode | AT-cut / FUND & 3rd OT | | | | |
| Frequency tolerance | ±10ppm / ±20ppm / ±30ppm | | | | Other options available. |
| Frequency stability | ±10ppm | ±15ppm | | | Other options available. |
| Operating temperature range | -20 to +70°C | -30 to +85°C | | | Other options available. |
| Equivalent series resistance | FUND | ESR | 16.1 to 20.0MHz | <45Ω | |
| | 8.0MHz | <100Ω | 20.1 to 55.0MHz | <40Ω | |
| | 8.1 to 10.0MHz | <80Ω | 3rd OT | ESR | |
| | 10.1 to 12.0MHz | <60Ω | 30.0 to 48.0MHz | <100Ω | |
| | 12.1 to 16.0MHz | <50Ω | 48.1 to 80.0MHz | <80Ω | |
| Load capacitance | 6 ~ 32pF or SERIES | | | | Please specify. |
| Shunt capacitance | <5.0pF | | | | -- |
| Drive level | 100μW TYP / 500μW MAX | | | | -- |
| Storage temperature range | -55 to +125°C | | | | -- |

### PACKAGE OUTLINE / DIMENSIONS




### PACKAGING INFORMATION

- Tape & Reel compliant to EIA-481.
- Embossed carrier width 12mm.
- Component pitch in carrier 8mm.
- Reel diameter 180mm.
- QTY per reel: 1,000pcs MAX.

### RECOMMENDED REFLOW PROFILE