| PERICA PSE Tech SPECIFICAT | nology Corp | oration | | |
|-------------------------------------|---|-------------------------------------|--|--|
| CUSTOMER | | | | |
| NOMINAL FREQUENCY | 40.0 | 40.000000 MHz | | |
| PRODUCT TYPE | TYPE FW 2.0x1.6 | TYPE FW 2.0x1.6 SEAM SEALED CRYSTAL | | |
| SPEC. NO. (P/N) | FW | FW400WFMT1 | | |
| CUSTOMER P/N | | | | |
| ISSUE DATE | Jur | e 22, 2016 | | |
| VERSION | | Α | | |
| | | | | |
| APPROVED | PREPARED | QA | | |
| APPROVED Brenda | PREPARED | QA Dong Yang | | |
| APPROVED Brenda APPROVED BY O | Claine | QA Domp Yang AVL Status | | |
| APPROVED BY O | CUSTOMER : | Dong Yang | | |
| Brenda APPROVED BY | CUSTOMER : th approval to PSE-TW ration Industrial Park, iwan (R.O.C.) *RoHS *HF-Ha | Stand Jang AVL Status | | |

TYPE FW 2.0x1.6 SEAM SEALED CRYSTAL

FW400WFMT1

VER. A 22-Jun-16

VERSION HISTORY

| erision No. | Version Date | Customer Receipt Date | Supplier Receipt Date | Description | Notes |
|----------------|-----------------|--------------------------|--------------------------|-----------------|-------|
| А | Jun.22,2016 | | | Initial Release | |
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TYPE FW 2.0x1.6 SEAM SEALED CRYSTAL

FW400WFMT1

VER. A 22-Jun-16

ELECTRICAL SPECIFICATIONS

| ltem | Symbol | Specifications | Units | Notes |
|--|--------|--------------------|-------|------------------------------------|
| Nominal Frequency | Fn | 40.000000 | MHz | |
| Mode of Oscillation | MO | AT Cut-Fundamental | | |
| Calibration Load Capacitance | CL | 12 | pF | |
| Calibration Tolerance | FL | ±7 | ppm | at 25°C±3°C |
| Operating Temperature Range | TR | -40 to +100 | °C | |
| Frequency Stability (Frequency Deviation over the Operating Temperature Range) | F/T | ±17 | ppm | Reference to the Frequency at 25°C |
| Operating Drive Level | | 100 | μW | |
| Maximum Drive Level | | 200 | μW | Max. |
| Equivalent Series Resistance | ESR | 30 | Ω | Max |
| Shunt Capacitance | C0 | 3 | pF | Max |
| Aging at 25°C | | ±3 | ppm | Max, 1st year |
| Storage Temperature | 1 | -55 to +125 | °C | |
| Insulation Resistance | 1 1 | 500 | MΩ | Min |

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TYPE FW 2.0x1.6 SEAM SEALED CRYSTAL

FW400WFMT1

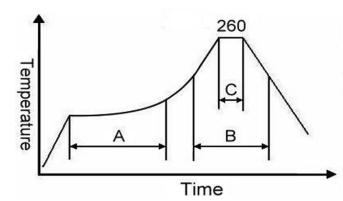
VER. A 22-Jun-16

| RELIABILITY SPECIFICATIONS | | |
|--|--|--|
| MECHANICAL AND ENVIRONMENTAL RATINGS: | | |
| a) FINE LEAK TEST: JESD22-A109 (Condition 1A) (3x10 ⁻⁹ Pa m ³ /s) | | |
| b) GROSS LEAK TEST: JESD22-A109 (Condition C) | | |
| c) MOISTURE RESISTANCE: JESD22-A113 | | |
| d) SHOCK: JESD22-B104 (Condition B) | | |
| e) SOLDERABILITY : (RoHS version): J-STD-002 | | |
| f) VIBRATION: JESD22-B103 | | |
| g) SOLVENT RESISTANCE: JESD22-B107 | | |

h) RESISTANCE TO SOLDERING HEAT (RoHS version): J-STD-020D Table 5.2 Pb free devices (3 cycles max)

SUGGESTED IR REFLOW PROFILE

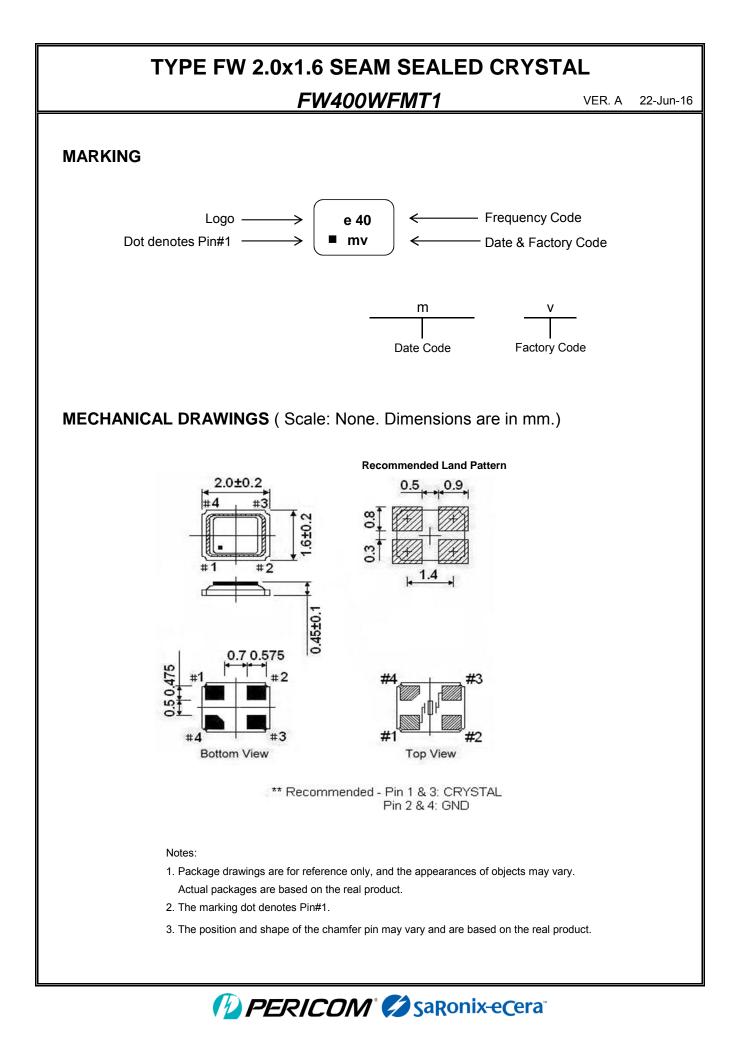
*As per IPC-JEDEC J-STD-020D



| Note: | | | | |
|-------|--------------|-------------|------------|--|
| 0 | Stage | Temperature | Time | |
| Α | Preheat | 150~200°C | 60~120 Sec | |
| В | Primary Heat | 217℃ | 60~150 Sec | |
| С | Peak | 260°C | 10 Sec | |

For soldering reflow profile and reliability test ratings go to: <u>http://www.pericom.com/pdf/sre/reflow.pdf</u>

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TYPE FW 2.0x1.6 SEAM SEALED CRYSTAL FW400WFMT1 22-Jun-16 VER. A Tape & Reel Index Mark 2.0 4.0±0.1 Ø1.55±0.05 ø1.1 1,75±0,1 0.25±0.02 Œ ł 3.5±0.05 8±0.2 2.30 5 1.90 Feeding 4.0±0.1 0.65 Ø60.2±0.5 178+0

- 1. 230mm minimum leafer which consist of carrier and/or tape followed by a minimum of 160mm of empty carrier tape sealed with cover tape.
- 2. 160mm minimum trailer of empty carrier tape sealed with cover tape.

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9.0±0.3 12±1.4

