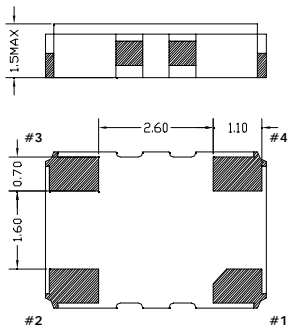
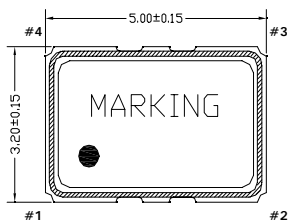


## 5.0 x 3.2mm<sup>f</sup> SMD VCTCXO SPECIFICATIONS

### ■ ELECTRICAL SPECIFICATIONS

| Parameters                                              |                         | Electrical Specifications          |      |                         |        |
|---------------------------------------------------------|-------------------------|------------------------------------|------|-------------------------|--------|
|                                                         |                         | MIN                                | TYP  | MAX                     | UNITS  |
| Frequency(Fo) ref: 25℃                                  |                         | 9.600                              |      | 30.000                  | MHz    |
| Frequency Stability                                     | Vs. Temperature Range   | ±1.5, ±2.0, ±2.5                   |      |                         | ppm    |
|                                                         | Vs. Supply Voltage(±5%) |                                    |      | ± 0.3                   | ppm    |
|                                                         | Vs. Load(±5%)           |                                    |      | ± 0.2                   | ppm    |
|                                                         | Vs. Aging(at 25℃)       |                                    |      | ± 1.0                   | ppm    |
| Frequency Tolerance at 25℃                              |                         |                                    |      | ±1.0, ±1.5              | ppm    |
| Operating Temperature Range <sup>1)</sup>               |                         | -30                                |      | 80                      | ℃      |
| Storage Temperature Range                               |                         | -40                                |      | 85                      | ℃      |
| Supply Voltage                                          |                         | 2.4                                |      | 3.6                     | VDC    |
| Current Consumption                                     |                         |                                    |      | 5.0(TTL)<br>2.0(C-sine) | mA     |
| Output Voltage Level                                    |                         | Vdd 90%(TTL)<br>0.8(C-sine)        |      |                         | Vp-p   |
| Output Waveform                                         |                         | Clipped Sinewave, TTL              |      |                         |        |
| Output Load                                             |                         | 10kΩ//10pF(C-sine), 1kΩ//15pF(TTL) |      |                         |        |
| Auto-Frequency-Control(AFC) Voltage                     |                         | 0.0                                |      | Vdd                     | V      |
| Auto-Frequency-Control(AFC) Range                       |                         | ± 3.0                              |      | ± 20.0                  | ppm    |
| Dynamic Behavior1 (-20℃ TO 80℃)                         |                         |                                    |      | ± 0.30                  | ppm/℃  |
| Dynamic Behavior2 (-30℃ TO -20℃)                        |                         |                                    |      | ± 1.0                   | ppm/℃  |
| Start-up Time(90% of Vp-p)                              |                         |                                    |      | 3.0                     | mS     |
| Duty Cycle                                              |                         | 40                                 |      | 60                      | %      |
| Harmonics                                               |                         |                                    |      | -9.0                    | dBc    |
| Phase Noise                                             | 10Hz Carrier Offset     |                                    | -86  |                         | dBc/Hz |
|                                                         | 100Hz Carrier Offset    |                                    | -115 |                         | dBc/Hz |
|                                                         | 1KHz Carrier Offset     |                                    | -138 |                         | dBc/Hz |
|                                                         | 10KHz Carrier Offset    |                                    | -146 |                         | dBc/Hz |
| Remark 1) Operating Temperature Range -40~85℃ available |                         |                                    |      |                         |        |

### ■ DIMENSION (UNIT : mm)



| TERMINAL | PIN CONNECTION |
|----------|----------------|
| #1       | VCON OR OPEN   |
| #2       | GROUND         |
| #3       | OUTPUT         |
| #4       | VDD            |

**MARKING**

