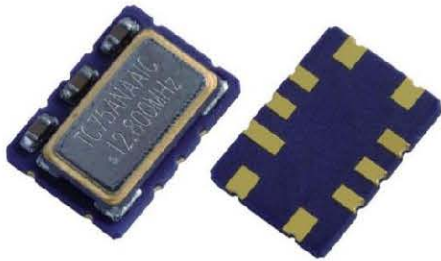


TC75A/VT75A



Description:

- Low Jitter $\pm 10 \times 10^{-6}$ Max.
- Frequency Stability $\pm 1.0 \times 10^{-7}$
- Green Product
- Small Volume
- Dribbling Packaging
- Military Radio
- PCS Base Station
- Measuring Equipment

t

Performance Characteristics

| Parameter | | Condition | TC75A / VT75A | | |
|-------------------------|---------------------|-----------|----------------------------|----------------------------|-----------------------|
| Frequency Range | F ₀ | | 10.000MHz~26.000MHz | | |
| Nominal Frequency (MHz) | F ₀ | | 10 | 12.8 | 13 19.2 19.44 25.6 26 |
| Frequency Tolerance | F _{tol} | At 25°C | ≤±2.0 ppm | | |
| Frequency Stability | F _{0_Tc} | | See Table Below | | |
| Supply Voltage | V _{DD} | | A:+3.3 VDC±10% | | B:+5.0VDC±10% |
| Output Waveform | | | CMOS | H: Peak clipping sine wave | |
| Output Load | | | 15pF | 10KΩ//10pF±10% | |
| Supply Current | I _{DD} | | 6.0mA Max. | 3.5mA Max. | |
| Output Level | "0" V _{OL} | | 10%V _{DD} | | 0.8V (P-P) Min. |
| | "1" V _{OH} | | 90%V _{DD} | | |
| Low Jitter | F _{cont} | | See Selection Guide | | |
| Output Symmetry | SYM | | 45%~55% | | — |
| Phase noise | | 12.8MHz 下 | 100Hz | 1KHz | 10KHz |
| | | | -120dBc/Hz | -140dBc/Hz | -145dBc/Hz |
| Start-Up Time | T _s | | 2mS Max. | | |
| E/D CONTROL GUNCTION | E/D | open | Pin 9 >80% V _{DD} | | |
| | | Close | Pin 9 <20% V _{DD} | | |
| Frequency Aging | F _{age} | 20 Year | ±4.6×10 ⁻⁶ Max. | | |
| VclInput Impedance | R _{in} | | 100KΩ | | |
| Storage Temperature | T _{stg} | | -55°C~+125°C | | |

Frequency Temperature Stability Table

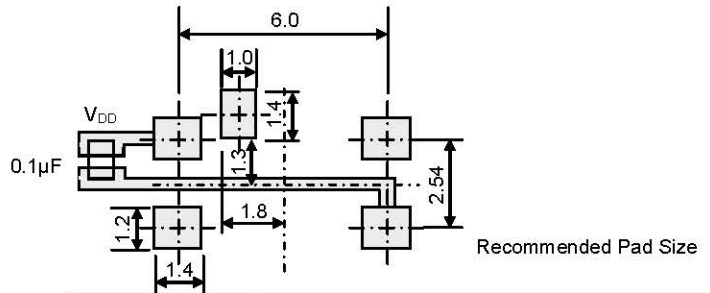
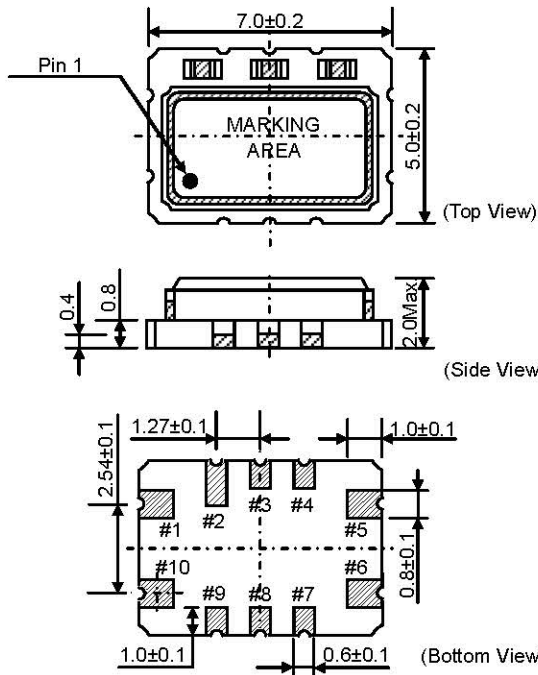
| Temperature Range | Frequency Stability | | | | | |
|-------------------|-----------------------|-------------------------|-------------------------|-------------------------|-----------------------|-------------------------|
| | E:±1×10 ⁻⁷ | 1:±2.8×10 ⁻⁷ | Z:±3.7×10 ⁻⁷ | H:±0.5×10 ⁻⁶ | I:±1×10 ⁻⁶ | J:±1.5×10 ⁻⁶ |
| A: 0°C ~ +50°C | ● | ● | ● | ● | ● | ● |
| B: -10°C ~ +60°C | ● | ● | ● | ● | ● | ● |
| C: -20°C ~ +70°C | | ● | ● | ● | ● | ● |
| D: -30°C ~ +75°C | | | ◎ | ◎ | ● | ● |
| ΔG: -40°C ~ +85°C | | | ◎ | ◎ | ● | ● |

●: Optional ◎: Customized Δ: Industrial ▽: Automotive ☆: Military Products

Note: for those not marked in the selection table of frequency and temperature stability, please communicate with us for confirmation

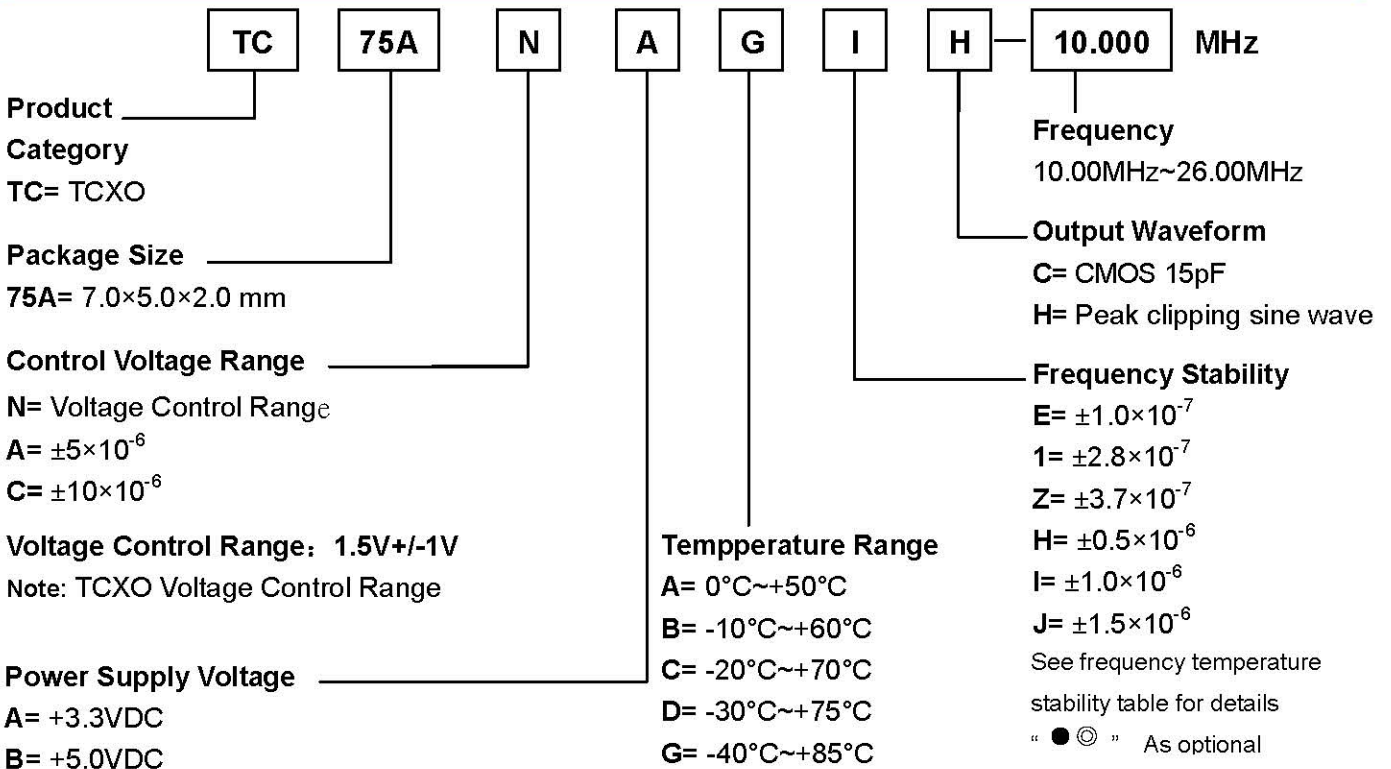
TC75A / VT75A

Outline Size (mm)



| Pin 1 | Functionality |
|-------------------|---|
| #1 | Pressure control end for pressure control and temperature compensation Temperature compensation is suspended |
| #2、#3、#4 #7、#8 | Suspended |
| #5 | Ground |
| #6 | Output |
| #9 | E/D |
| #10 | Power |

Selection Guide



Sample Selection

TC75A-NBAIH-10MHz

TCXO / No Voltage Control Function / +5.0VDC / 0°C~+50°C / ±1.0×10⁻⁶ / Peak clipping sine wave / 10MHz

VT75A-ABAIH-10MHz

VCTCXO / ±5PPM 1.5V±1V / +5.0VDC / 0°C~+50°C / ±1.0×10⁻⁶ / Peak clipping sine wave / 10MHz