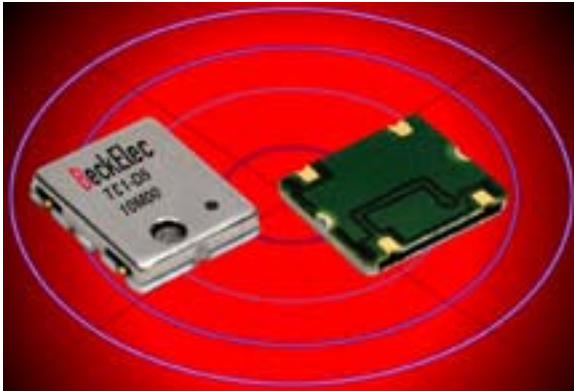


## TC1/VT1/VT2 MINIATURE SURFACE MOUNT TCXO & VCTCXOs



10 to 50 MHz  
 +2.8 to +5.3 Vdc operating input voltage  
 Low Phase Noise  
 Voltage Tune options  
 Low Current 2.0 mA maximum  
 Mechanical trimmer  
 Surface mount  
 RoHS Compliant

TYPICAL P/N **TC1- D 5 10M0** = 10.0 MHz

**5** = +5.0 Vdc (2.8 to 5.3 Vdc)  
**D** = ±2.5 ppm -30°C to +75°C  
**TC1** = TCXO with mechanical trim

Frequency Range: 10 MHz to 50 MHz  
 Stability Options: **A** = ±1.0 ppm 0°C to +50°C  
**B** = ±1.5 ppm -20°C to +70°C  
**C** = ±2.0 ppm 0°C to +70°C  
**D** = ±2.5 ppm -30°C to +75°C  
**E** = ±5.0 ppm -40°C to +85°C  
**F** = ±2.5 ppm -40°C to +85°C  
**G** = ±2.0 ppm -30°C to +75°C

Supply Options **TC1**: **5** = 2.8 to 5.3 VD  
 Supply Options **VT1 & VT2**: **5** = 5.0 Vdc ±10%  
**3** = 3.0 Vdc ±10%

Voltage Tune Options: PAD 1  
**VT1** = Voltage Tune and Mechanical Trim  
 ±1.5 PPM/Vdc Minimum voltage tuning.  
**VT2** = Voltage Tune Only  
 ±2.0 PPM/Vdc Minimum voltage tuning.

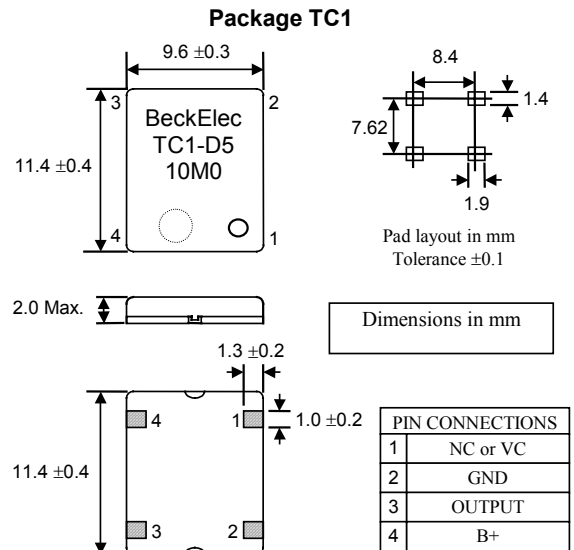
Stability vs B+: ≤±0.3 ppm for ±5% variation  
 Stability vs Load: ≤±0.3 ppm for ±10% variation  
 Stability vs time: <1.0 ppm/ first year at 40°C

Mechanical trimmer: ±4.0 ppm min.

Output: Clipped Sinewave  
 Load: 10kΩ // 10pF 0.7Vp-p min.  
 Input current: 1.5mA Max <25 MHz  
 Phase Noise at 10MHz: -90 dBc at 10hz  
 -128 dBc at 100hz  
 -147 dBc at 1 KHz  
 -148 dBc at 10 KHz

Harmonics: 2<sup>nd</sup> harmonic > 3 dBc down  
 3<sup>rd</sup> harmonic > 10 dBc down  
 4<sup>th</sup> harmonic > 18 dBc down

Packaging: Reels of 500, 1000 & 2000  
 or Bulk packaging



Cleaning: Parts **should not** be immersed in solvents.  
 No clean is the recommended procedure.

Reflow profile: Warm-up: 25°C to 150°C >30 seconds  
 Pre-heat: 150°C to 170°C 60 to 90 seconds  
 Reflow: 200°C to 240°C 20 to 40 seconds  
 230°C to 240°C peak <10 seconds