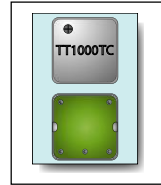


TT-VT1000TC

Crystal Oscillator

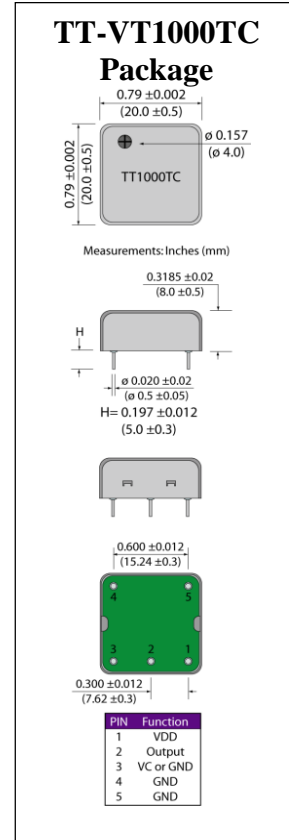


FEATURES:

- Low Cost
- Thru-Hole Metal Can

CMOS and Clipped Sine
20.0 x 20.0 x 8.0 mm

| Parameter | Unit | Min. | Max. |
|------------------------------------|-------|----------------|------|
| Frequency Range (Clipped Sine) | MHz | 1.2 | 200 |
| Frequency Range (CMOS) | MHz | 9.6 | 50 |
| Frequency Tolerance at 25°C | ppm | - | ±2.0 |
| Frequency Stability | | | |
| Vs. Supply Voltage (±5%) change | ppm | - | ±0.3 |
| Vs. Load (±10%) change | ppm | - | ±0.3 |
| Vs. Aging | ppm | - | ±1.0 |
| Storage Temperature Range | °C | -55 | +125 |
| Current Consumption (CMOS) | mA | 20 | 60 |
| Current Consumption (Clipped Sine) | mA | 2 | 5 |
| Load (CMOS) | pF | 15 | |
| Load (Clipped Sine) | | 10 KOhms//10pF | |
| Output Level (CMOS) | V | 90% | 10% |
| Output Level (Clipped Sine) | V p-p | 0.8 | - |
| Duty Cycle (CMOS only) | % | 45/55 | |
| Voltage | | 3.3, 5.0 ±5% | |
| Output Level | Vp-p | 0.8 | - |
| Load | | 10KOhms//10pF | |
| Frequency Adjustment (Trimmer) | ppm | ±3.0 | - |
| Control Voltage Range (VCTCXO) | V | 0.5 | 2.5 |
| Frequency Deviation (VCTCXO) | ppm | ±5 | ±10 |
| Rise and Fall Time (CMOS Only) | ns | - | 4 |
| Start-up Time | mSec | - | 2 |



Frequency Stability vs. Temperature Range

| Temperature | Stability (ppm) |
|-------------|------------------------|
| -10 to 60°C | ±1.5, ±2.0, ±2.5, ±5.0 |
| -20 to 70°C | ±2.0, ±2.5, ±5.0 |
| -40 to 85°C | ±2.5, ±5.0 |

Environmental

| | |
|--------------------|----------|
| Terminal Material | KOVAR |
| Terminal Plating | Sn-Ag-Cu |
| REACH Compliant | Yes |
| RoHS Compliant | Yes |
| RoHS Exemptions | No |
| Re-flow Temp. Max. | 260°C |
| MSL | 1 |



Example Part Number: VT1000TC-A-18-A-27-24M576

| | | | | | | | | | | |
|----------|---|----------------------|---|----------------------|---|----------------------|---|----------------------|---|----------------------|
| VT1000TC | - | <input type="text"/> | - | <input type="text"/> | - | <input type="text"/> | - | <input type="text"/> | - | <input type="text"/> |
| | | 1 | | 2 | | 3 | | 4 | | 5 |
| | | Stability | | Voltage | | Pull Range | | Temp. Range | | Frequency |
| | | A = ±1.5 | | 50= 5.0 V | | A = ±10 | | 16= -10 to 60°C | | Frequency in MHz |
| | | B = ±2.0 | | 33= 3.3V | | B = ±8 | | 27= -20 to 70°C | | i.e. 24M576 |
| | | C = ±2.5 | | | | C = ±5 | | 48= -40 to 85°C | | use M for decimal |
| | | D = ±5.0 | | | | T= TCXO | | | | point |