

Features and Benefits

Wide Pulling Range (+/- 27 ppm)
 5V supply ; 20 mA current drain
 36.864MHz operating frequency

Typical Applications:

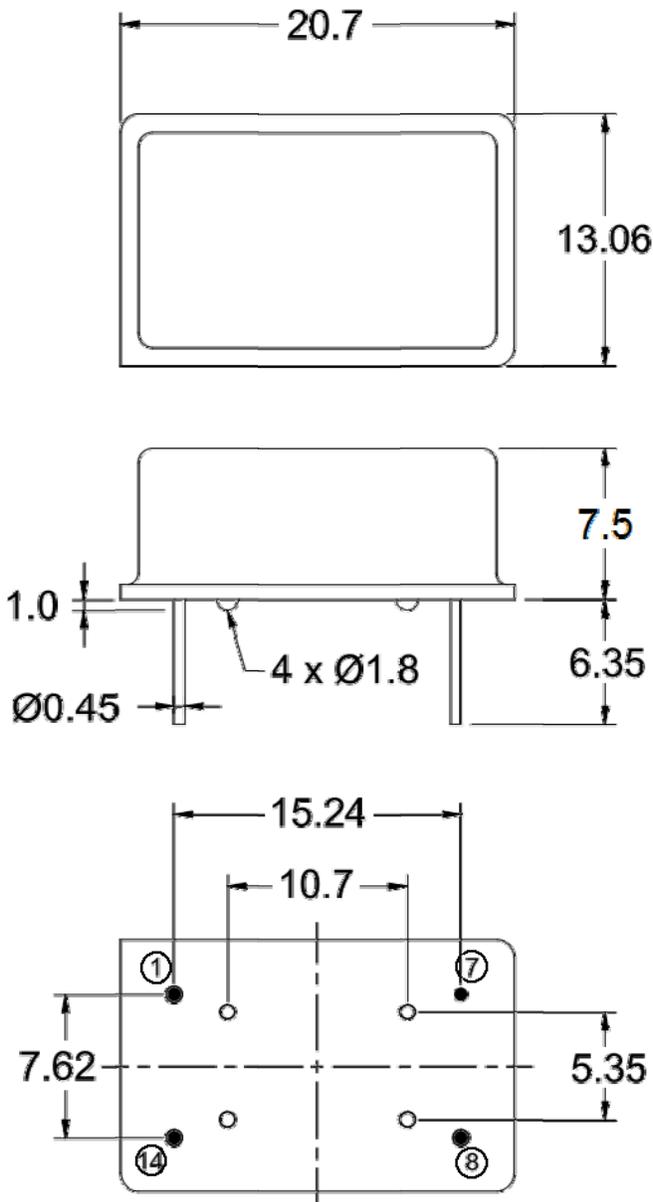
Mobile Radio; Wireless Data
 Microwave Communications

Description

Discrete temperature compensated VCTCXO packaged in a rugged DIP package industry standard.

Mechanical Drawing & Pin Connections

Drawing No: MD140028-1



| Pin | Function |
|-----|-----------------|
| 1 | Voltage Control |
| 7 | Ground |
| 8 | Output |
| 14 | +Vs |

MD140028-1
 Unit = mm

Specifications

| Oscillator Specification | Sym | Condition | Value | | | Unit | Note |
|---------------------------------|------------------|----------------------------|---------|--------|---------|------|-----------------------|
| | | | Min. | Typ. | Max. | | |
| Operational Frequency Range | F_{nom} | | | 36.864 | | MHz | |
| HCMOS | Logic Level 1 | With 15 pF typ. load | 0.9*Vcc | | | V | |
| | Logic Level 0 | | | | 0.1*Vcc | V | |
| | Rise / Fall Time | | | | 6 | ns | 10%-90% |
| | Duty Cycle | | 40 | | 60 | % | |
| Power Supply | | | | | | | |
| Voltage | V_{cc} | | 4.75 | 5.00 | 5.25 | V | |
| Current Consumption | | Steady-state, +25°C | | | 20 | mA | |
| Frequency Control* | | | | | | | |
| Control voltage range | V_c | | 1.50 | 2.50 | 3.50 | V | Tuning Slope Positive |
| Tuning range | | | +/- 27 | | | ppm | |
| Frequency Stability | | | | | | | |
| Versus temperature | | -20°C to +55°C, ref 25°C | -0.5 | | +0.5 | ppm | |
| Tolerance at 25°C | | ref 25°C at center control | -1.0 | | +1.0 | ppm | |
| 5% change in supply voltage | | | -0.1 | | +0.1 | ppm | |
| 10% change in load | | | -0.1 | | +0.1 | ppm | |
| First Year Aging | | | -1.0 | | +1.0 | ppm | @25°C |
| Environmental Conditions | | | | | | | |
| Operating temperature range | | -20°C to +55°C | | | | | |
| Storage temperature range | | -40°C to +85°C | | | | | |