

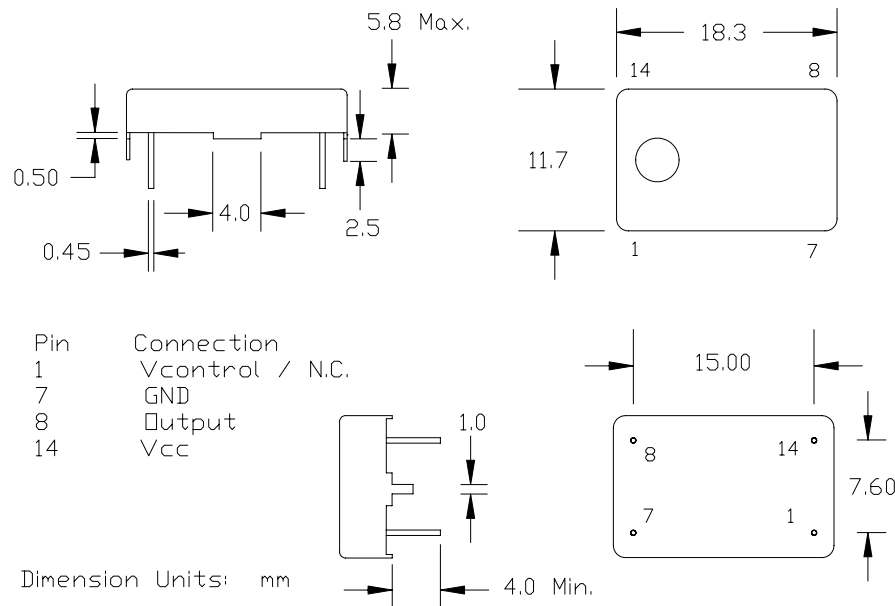


Leaded Oscillator, TCXO, TCVCXO
Metal Package, Full Size DIP

I121 / I122 / I321 / I322 Series *

| | I122 / I322 | I121 / I321 |
|-------------------------------|--|--|
| Frequency | 1.000 MHz to 40.000 MHz | 9.600 MHz to 40.000 MHz |
| Output Level | HC-MOS / TTL | Clipped Sine |
| Level | '0' = 0.1 Vcc Max., '1' = 0.9 Vcc Min. | 1.0 V p-p Min. |
| Duty Cycle | 50% ± 10% | |
| Rise / Fall Time | 10 nS Max. | |
| Output Load | 15 pF, Fo < 50 MHz = 10 TTL, Fo > 50 MHz = 5 LSTTL | 20K Ohms / 10 pF |
| Frequency Stability | See Frequency Stability Table | |
| Frequency Stability at +25° C | ± 1 ppm (I121 and I122) | |
| Aging | ± 1 ppm / Year Max. | |
| Supply Voltage | See Supply Voltage Table, tolerance ±5 % | |
| Current | 20 mA Max. *** | 3 mA Max. |
| Control Voltage (I321 / I322) | 1.65 VDC ± 1.5 VDC, ±5 ppm Min. for Vcc = 3.3 VDC | 2.5 VDC ± 2.0 VDC, ±5 ppm Min. for Vcc = 5.0 VDC |
| Slope | Positive | |
| Temperature | | |
| Operating | See Operating Temperature Table | |
| Storage | -40° C to +85° C | |
| Environmental | See Appendix B for information | |
| Package Information | MSL = 2a., Termination = e1 | |

* I122 = HC-MOS TCXO, I121 = Clipped Sine TCXO, I322 = HC-MOS TCVCXO, I321 = Clipped Sine TCVCXO



| Part Number Guide | | Sample Part Number: I121 - 1Q3 - 20.000 | | |
|--------------------------------------|-----------------------|---|----------------|--------------|
| Package and Output | Operating Temperature | Frequency Stability vs. Temperature | Supply Voltage | Frequency |
| I121 - I122 - I321 - I322 - | 7 = 0° C to +50° C | **O = ±1.5 ppm | 3 = 3.3 VDC | - 20.000 MHz |
| | 1 = 0° C to +70° C | **P = ±2.0 ppm | 5 = 5.0 VDC | |
| | 3 = -20° C to +70° C | Q = ±2.5 ppm | | |
| | 2 = -40° C to +85° C | R = ±3.0 ppm | | |
| | | J = ±5.0 ppm | | |

NOTE: A 0.01 µF bypass capacitor is recommended between Vcc (pin 4) and Gnd (pin 2) to minimize power supply noise.
** Not available for all temperature ranges. *** Frequency, supply, and load related parameters.