



TCXO I104 Series

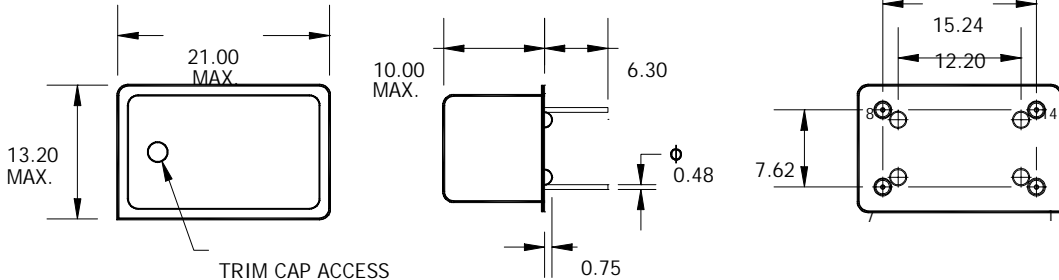
14 Pin DIP TTL/HCMOS, Clipped Sine Wave

| | | | |
|----------------------------|---|---------------------------------------|-------------------|
| Frequency | 500KHz To 100.000 MHz | | |
| Output Level | As Specified | | |
| | TTL | HCMOS | Clipped Sine Wave |
| | '0'= 0.4 Vdc Max., '1'=2.4 Vdc Min. | '0'=0.1 Vcc Max., '1'=0.9 Vcc Min. | 0dBm |
| Duty Cycle | 45/55 | 45/55 | NA |
| Rise/ Fall Time | < 5 nS * | < 5 nS * | NA |
| Output Load | 2 TTL | 15 pF Max. | 20 KΩ/5 pf |
| Stability | | | |
| Frequency vs. Temperature | See Table I Temperature Stability | | |
| Aging @ 25°C | ± 0.005 ppm/day | | |
| Frequency vs. Voltage | ±0.5 ppm max / ±5% change | | |
| Frequency vs. Load | ±0.02 ppm / ±10% change | | |
| Phase Noise | 10 Hertz From Carrier | -90 dBc max | |
| | 100 Hertz from Carrier | -120 dBc max | |
| | 1000 Hertz from Carrier | -135 dBc max | |
| Frequency Adjustment Range | Electrical ± 10 ppm Pin 1 or Mechanical to Spec | | |
| Supply Voltage | 5.0VDC ±5% | 12.0VDC ±5% | |
| Current | 20mA Max | | |
| Operating Temperature | See Table | | |
| Storage Temperature | -40°C to +125°C | | |

| Temp °C | Code | Stability Graph in ppm | | | | | | | | | |
|---------|------|------------------------|------|------|------|------|------|------|------|------|------|
| | | ±0.5 | ±1.0 | ±1.5 | ±2.0 | ±2.5 | ±3.0 | ±3.5 | ±4.0 | ±4.5 | ±5.0 |
| 0~+50 | 7 | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| -10~+60 | 8 | | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| -30~+60 | 11 | | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| -30~+70 | 10 | | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| -30~+75 | 4 | | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| -40~+80 | 2 | | | | | ** | ** | ** | ** | ** | ** |

| Part Number Guide | | Sample Part #: | | I104-7N5-20.000 | |
|-------------------|-------------------|---------------------|---|--------------------------|------------|
| | Temperature Range | Frequency Stability | Output | Supply Voltage | Frequency |
| I104 | 7= 0°C ~ +50°C | N = ±1.0 ppm | 1=HCMOS 2=TTL 3=Clipped Sine Wave | 5=5.0 Vdc or 12=12.0 Vdc | 20.000 MHz |

UNIT DIMENSION: mm



- PIN CONNECTION
- 1 NC
 - 7 GROUND
 - 8 OUTPUT
 - 14 Vcc