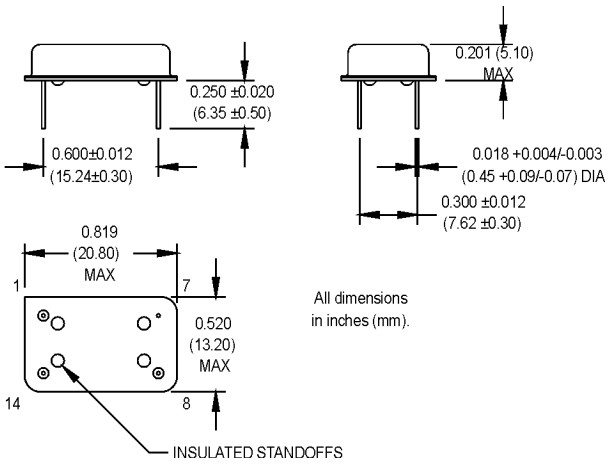
# ME Series

## 14 pin DIP, 5.0 Volt, ECL, PECL, Clock Oscillator

RoHS Compliant

### ME Series ECL/PECL Clock Oscillators, 10 KH
### Compatible with Optional Complementary Outputs




All dimensions in inches (mm).

### Ordering Information

00.0000 MHz

ME 1 3 X A D -R

**Product Series**

**Temperature Range**
- 1: 0°C to +70°C
- 2: -40°C to +85°C
- 5: -10°to +85°C
- 6: -20°C to +70°C
- 7: 0°C to +85°C

**Stability**
- 1: ±1000 ppm
- 2: ±500 ppm
- 3: ±100 ppm
- 4: ±50 ppm
- 6: ±25 ppm
- *8: ±20 ppm

**Output Type**
- X: Single Output
- Z: Dual Output

**Symmetry/Logic Compatibility**
- A: 40/60 (std.)
- B: 45/55

**Package/Lead Configurations**
- A: DIP; Gold Flash Header
- D: DIP; Nickel Header
- G: Gull Wing; Nickel Header
- X: Gull Wing; Gold Flash Header

**RoHS Compliance**
- Blank: non-RoHS compliant part
- -R: RoHS compliant part

**Frequency (customer specified)**

*Contact factory for availability.

### Pin Connections

| PIN | FUNCTION(S) (Model Dependent) |
|---|---|
| 1 | N/C, Output #2 |
| 7 | -Vee, Ground |
| 8 | Output #1 |
| 14 | +Vcc |

| | PARAMETER | Symbol | Min. | Typ. | Max. | Units | Condition |
|---|---|---|---|---|---|---|---|
| Electrical Specifications | Frequency Range | F | 19.44 | | 155.52 | MHz | |
| | Frequency Stability | ΔF/F | (See Ordering Information) | | | | |
| | Operating Temperature | TA | (See Ordering Information) | | | | |
| | Storage Temperature | Ts | -55 | | +125 | °C | |
| | Input Voltage | Vcc | 4.75 | 5.0 | 5.25 | V | |
| | Input Current | Iee/Icc | | 35 | 60 | mA | |
| | Symmetry (Duty Cycle) | | (See Ordering Information) | | | | Vcc -1.3 V level |
| | Load | | 130 Ω to Vcc -2V or Thevenin Equivalent | | | | See Note 1 |
| | Rise/Fall Time | Tr/Tf | | | 2.5 | ns | See Note 2 |
| | Logic "1" Level | Voh | Vcc -0.98 | | | V | |
| | Logic "0" Level | Vol | | | Vcc -1.63 | V | |
| | Cycle to Cycle Jitter | | | 11 | 25 | ps RMS | 1 Sigma |
| Environmental | Mechanical Shock | Per MIL-STD-202, Method 213, Condition C | | | | | |
| | Vibration | Per MIL-STD-202, Method 201 & 204 | | | | | |
| | Wave Solder Conditions | See page 147 | | | | | |
| | Hermeticity | Per MIL-STD-202, Method 112 (1 x $10^{-8}$ atm.cc/s of helium) | | | | | |
| | Solderability | Per EIAJ-STD-002 | | | | | |

1. Internally terminated outputs. See load circuit diagram #4.
2. Rise/Fall times are measured between Vcc -0.98 V and Vcc -1.63 V.