

ME Series

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



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



Pin Connections

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

Ordering Information

| ME | 1 | 3 | X | A | D | -R | 00.0000 | MHz |
|---------------------------------------|---|-------------------|---------------------------------|-------------------|---|----------------------------|---------|-----------------|
| Product Series | | | | | | | | |
| Temperature Range | | | | | | | | |
| 1: 0°C to +70°C | | 2: -40°C to +85°C | | 5: -10°C 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 Wng; 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.

| | PARAMETER | Symbol | Min. | Typ. | Max. | Units | Condition | |
|---------------------------|------------------------|---|---|------|-----------------------|--------|------------|------------------------------|
| Electrical Specifications | Frequency Range | F | 19.44 | | 155.52 | MHz | | |
| | Frequency Stability | $\Delta F/F$ | (See Ordering Information) | | | | | |
| | Operating Temperature | T _A | (See Ordering Information) | | | | | |
| | Storage Temperature | T _S | -55 | | +125 | °C | | |
| | Input Voltage | V _{cc} | 4.75 | 5.0 | 5.25 | V | | |
| | Input Current | I _{ee} /I _{cc} | | 35 | 60 | mA | | |
| | Symmetry (Duty Cycle) | | (See Ordering Information) | | | | | V _{cc} -1.3 V level |
| | Load | | 130 Ω to V _{cc} -2V or Thevenin Equivalent | | | | | See Note 1 |
| | Rise/Fall Time | T _r /T _f | | | 2.5 | ns | See Note 2 | |
| | Logic "1" Level | V _{oh} | V _{cc} -0.98 | | | V | | |
| | Logic "0" Level | V _{ol} | | | V _{cc} -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 | +260°C for 10 secs. Max. | | | | | | |
| | Hermeticity | Per MIL-STD-202, Method 112 (1 x 10 ⁻⁸ atm.cc/s of helium) | | | | | | |
| | Solderability | Per EIAJ-STD-002 | | | | | | |

- Internally terminated outputs. See load circuit diagram #4.
- Rise/Fall times are measured between V_{cc} -0.98 V and V_{cc} -1.63 V.

MtronPTI reserves the right to make changes to the product(s) and service(s) described herein without notice. No liability is assumed as a result of their use or application.

Please see www.mtronpti.com for our complete offering and detailed datasheets. Contact us for your application specific requirements: MtronPTI 1-800-762-8800.