

F1139BA Series

9x14 mm FR-4, 3.3 Volt, PECL, Clock Oscillator



- Former **Champion** TECHNOLOGIES, INC. Product
- Clock Recovery, Optic Transmission Equipment, Digital Cross Connect Equipment

Ordering Information

00.0000
MHz

F1139BA X X -R

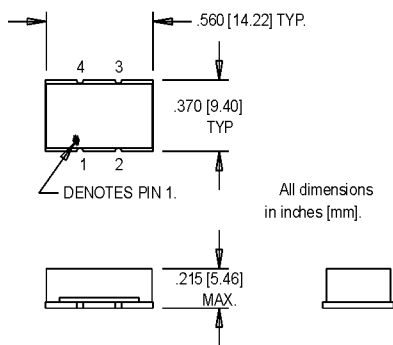
Package _____

Stability _____
 Blank: ±20 ppm (0°C to +70°C only)
 B: ±50 ppm

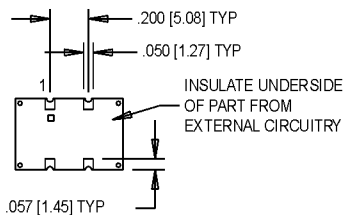
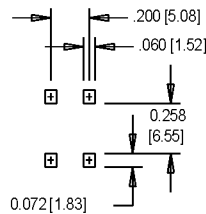
Temperature Range _____
 Blank: 0°C to +70°C
 M: -40°C to +85°C

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

Frequency (customer specified) _____



SUGGESTED SOLDER PAD LAYOUT



Pin Connections

| PIN | FUNCTION |
|-----|------------|
| 1 | Output |
| 2 | Vss/Ground |
| 3 | Output |
| 4 | +Vcc |

| Electrical Specifications | PARAMETER | Symbol | Min. | Typ. | Max. | Units | Condition/Notes | |
|---------------------------|-----------------------|-----------------|---|------|-----------------------|---------|-------------------------------------|------------|
| | Frequency Range | F | 70 | | 200 | MHz | | |
| | Operating Temperature | T _A | (See Ordering Information) | | | | | |
| | Storage Temperature | T _s | -40 | | +85 | °C | | |
| | Frequency Stability | ΔF/F | (See Ordering Information) | | | | | See Note 1 |
| | Aging | | | | | | | |
| | 1st Year | | | ±2 | | ppm | | |
| | Thereafter (per year) | | | ±1 | | ppm | | |
| | Input Voltage | V _{cc} | 3.135 | 3.3 | 3.465 | V | | |
| | Input Current | I _{cc} | | | 70 | mA | | |
| | Output Type | | | | | | PECL | |
| | Load | | 50 Ω to (V _{cc} - 2V) or Thevenin equivalent | | | | | |
| | Symmetry (Duty Cycle) | | 45 | | 55 | % | (V _{cc} - 1.3) ref. level | |
| | Output Skew | | | | 100 | ps | 50% | |
| | Logic "1" Level | V _{oh} | V _{cc} -1.02 | | V _{cc} -0.72 | V | 50Ω into (V _{cc} - 2) load | |
| | Logic "0" Level | V _{ol} | V _{cc} -1.95 | | V _{cc} -1.60 | V | 50Ω into (V _{cc} - 2) load | |
| | Rise Time | T _r | | | 450 | ps | 20% to 80% | |
| | Fall Time | T _f | | | 450 | ps | 80% to 20% | |
| Start up Time | | | | 10 | ms | | | |
| Random Jitter | R _j | | 5 | 12 | ps RMS | 1-Sigma | | |

1. Inclusive of calibration, temperature, voltage, load and 10 years aging.

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.

MtronPTI Lead Free Solder Profile

