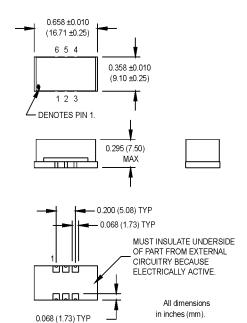
## M6005 Series 9x14 mm FR-4, 3.3 Volt, HCMOS/TTL, TCXO







- Stratum 3 compliant stability and aging
- Ideal for WLL/DWDM/ATM, and SONET/ SDH applications



## **Ordering Information** 00.0000 -R M6005 D MHz **Product Series** M6005 = 3.3 V Temperature Range 1: 0°C to +70°C 2: -40°C to +85°C 6: -20°C to +70°C 8: 0°C to +50°C Stability · L: ±5 ppm Frequency Control (Pin #1) F: Fixed Symmetry/Logic Compatibility A: 40/60 CMOS/TTL B: 45/55 TTL C: 45/55 CMOS Package/Lead Configurations K: FR-4, 6 Pad RoHS Compliance Blank: non-RoHS compliant part -R: RoHS compliant part Frequency (customer specified)

## **Pin Connections**

| FUNCTION    | SMT |  |  |
|-------------|-----|--|--|
| N/C         | 1   |  |  |
| Tristate    | 2   |  |  |
| Ground/Case | 3   |  |  |
| Output      | 4   |  |  |
| N/C         | 5   |  |  |
| +Vdd        | 6   |  |  |

| UGGESTED SOLD | ER PAD LAYOUT |  |  |  |  |  |
|---------------|---------------|--|--|--|--|--|
| <b>→</b>      | 0.200 (5.08)  |  |  |  |  |  |
| +=-  -        | 0.078 (1.98)  |  |  |  |  |  |
| +++           |               |  |  |  |  |  |
|               | 0.210         |  |  |  |  |  |
| +++           | <del></del>   |  |  |  |  |  |
| 0.120 (3.05)  |               |  |  |  |  |  |

|                | PARAMETER             | Symbol | Min.                             | Тур.  | Max.   | Units   | Condition/Notes     |
|----------------|-----------------------|--------|----------------------------------|-------|--------|---------|---------------------|
| Specifications | Frequency Range       | F      | 60                               |       | 170    | MHz     |                     |
|                | Operating Temperature | TA     | (See Ordering Information)       |       |        |         |                     |
|                | Storage Temperature   | Ts     | -55                              |       | +105   | °C      |                     |
|                | Frequency Stability   | ÄF/F   | (See Ordering Information)       |       |        |         | See Note 1          |
|                | Aging                 |        |                                  |       |        |         |                     |
|                | 1st Year              |        |                                  |       | 1.5    | ppm     |                     |
|                | Thereafter (per year) |        |                                  |       | 0.5    | ppm     |                     |
| ica            | Input Voltage         | Vdd    | 3.15                             | 3.3   | 3.45   | V       |                     |
| ξį             | Input Current         | ldd    |                                  |       | 50     | mA      |                     |
| )<br>Jbe       | Output Type           |        |                                  |       |        |         | CMOS/TTL            |
| ≣lectrical \$  | Load                  |        | 2 TTL or 15 pF max.              |       |        |         |                     |
|                | Symmetry (Duty Cycle) |        | (See Ordering Information)       |       |        |         |                     |
| ect            | Logic "1" Level       | Voh    | 2.5                              |       |        | V       |                     |
| Ĕ              | Logic "0" Level       | Vol    |                                  |       | 0.5    | V       |                     |
|                | Rise/Fall Time        | Tr/Tf  |                                  |       | 10     | ns      |                     |
|                | Tristate Function     |        | Input Logic "1": output active   |       |        |         |                     |
|                |                       |        | Input Logic "0": output disables |       |        |         |                     |
|                | Start up Time         |        | 10                               |       |        | ms      |                     |
|                | Phase Noise (Typical) | 10 Hz  | 100 Hz                           | 1 kHz | 10 kHz | 100 kHz | Offset from carrier |
|                | @155.52 MHz           | -60    | -90                              | -110  | -120   | -120    | dBc/Hz              |

1. Stability is inclusive of five year aging at 25°C.

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