

1703 E. Highway 50 Yankton, SD 57078 USA

Phone: 800-762-8800 or 605-665-9321 Fax: 605-665-1709

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SPECIFICATION FOR RoHS 6 COMPLIANT SMT TCXO MtronPTI P/N M6164S023

Electrical Specifications:

| Parameter | Symbol | Min. | Тур. | Max. | Units | Conditions |
|--|---|-------------------------|---------------|---------|-------------|---|
| Frequency of Operation | Fo | | 10.000000 | | MHz | |
| | | Freq | uency Stabili | ities | | |
| vs Temperature | ΔF/F | -1.2 | | +1.2 | ppm | Includes initial accuracy @ +25°C & deviation over operating temperature range. |
| vs Aging | | -4.0 | | +4.0 | ppm | 10 years @ +55°C |
| vs Shock and Vibration | | -0.7 | | +0.7 | | |
| vs. Supply | Fvs | | ± 0.02 | ± 0.1 | ppm | For 5% voltage change |
| vs. Load | F∟ | | ± 0.02 | ± 0.1 | ppm | For 5% load change |
| vs Reflow | | -0.3 | | +0.3 | ppm | |
| Total Frequency Stability | | -6.0 | | +6.0 | | All inclusive 10 years |
| | | | Output | | | |
| Output Type | | Clipped Sine Wave | | | | |
| Output Load | | 10kΩ // 10 <i>pF</i> pF | | | | |
| Output Level | Vout | 8.0 | | | V_{pk-pk} | |
| Tri-state Function | Logic "1", or floating, output Enabled. Logic "0", output Disabled. | | | | | Pad 8 |
| Start-up Time | Tsu | | | 10 | mS | |
| | | Additio | onal Specific | ations | | |
| | | | -100 | | | @ 10Hz Offset |
| SSB Phase Noise (Under Static Conditions) | | | -128 | | dBc/Hz | @ 100Hz Offset |
| | | | -148 | | | @ 1kHz Offset |
| | | | -155 | | | @ 10kHz Offset |
| | | | -156 | | | @ 100kHz Offset |
| | | | -157 | | | @ 1MHz Offset |
| G-sensitivity | | | 0.6 | | ppb/g | |
| • | Su | pply Volta | ge & Power C | onsumpt | ion | |
| Operating Voltage | V _{DD} | +2.85 | +3.0 | +3.15 | V_{DC} | |
| Operating Current | I _{DD} | | | 5 | mA | |

Environmental & Mechanical Requirements:

| Operating Temperature | TA | -40 | | +85 | °C | |
|---------------------------|--|-----|--|------|----|--|
| Storage Temperature | Ts | -55 | | +125 | °C | |
| Mechanical Shock | Per MIL-STD-202, Method 213, Condition C (100 g's, 6 ms duration, ½ sine wave) | | | | | |
| Vibration | Per MIL-STD-202, Method 201 & 204 (10 g's from 10-2000 Hz) | | | | | |
| Solderability | Per MIL-STD-202, Method 208, except steam aging is not required | | | | | |
| Max. Soldering Conditions | See solder profile, Figure 1 | | | | | |
| Package Type | 5.0 x 7.0 x 1.6mm, 10-pad Ceramic Leadless Chip Carrier. RoHS Compliant. | | | | | |



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Mechanical, Marking and Layout Information:

| Pad | Function | | |
|-----|------------------|--|--|
| 1 | N/C | | |
| 2 | N/C | | |
| 3 | N/C | | |
| 4 | Ground/Case | | |
| 5 | Output | | |
| 6 | N/C | | |
| 7 | N/C | | |
| 8 | Tristate | | |
| 9 | +V _{DD} | | |
| 10 | N/C | | |

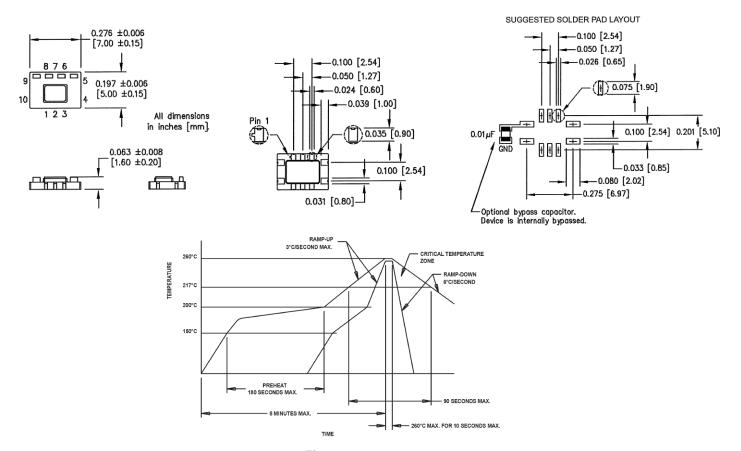


Figure 1

Data Sheet Revision Table:

| Date | Rev. | Author | Details of Revision |
|----------|------|--------|---|
| 01/12/15 | 0 | MM | Original Release. |
| 01/27/15 | Α | MM | Combined initial accuracy @ +25°C and deviation over operating temperature range. |