



MICRO LAMBDA WIRELESS, INC.

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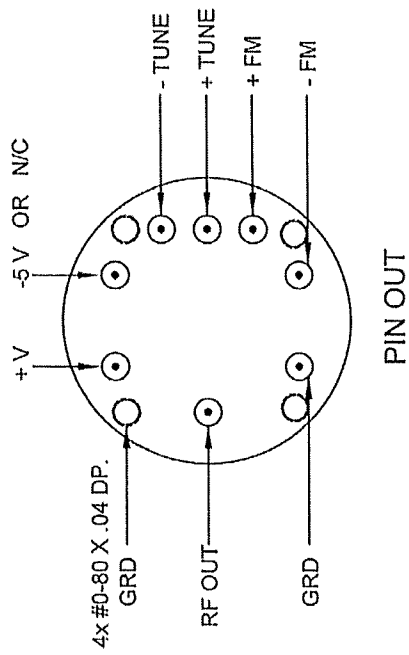
TO-8 YIG OSCILLATOR SPECIFICATION

MODEL NO. MLTO-71020 Rev E
Base model no. _____ RoHS Compliant
Customer Catalog Date 08-25-23
Customer Part Number _____

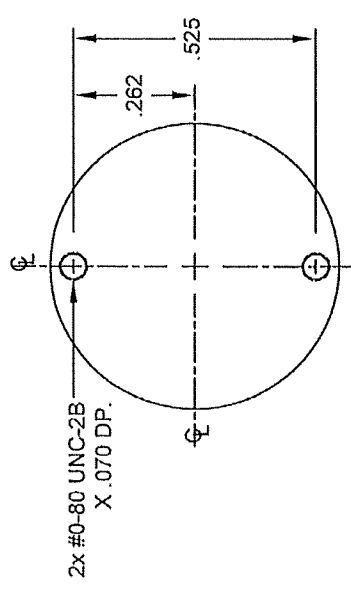
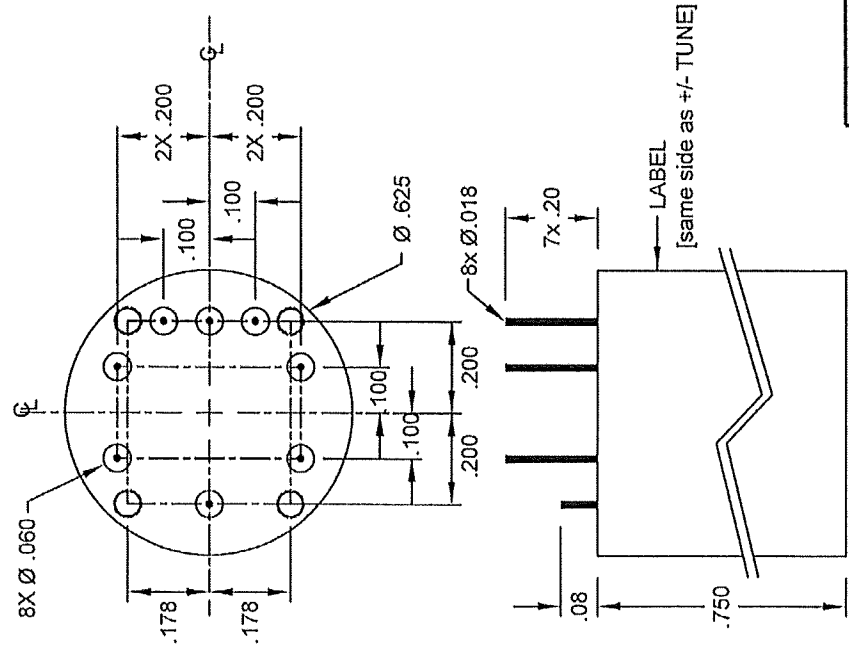
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|--------------------------------|------------------------|---|---|---|
| Frequency Range | <u>10.0 - 20.5</u> GHz | | | |
| Free-Run Frequency | <u>15.5</u> GHz | | | |
| Free-Run Frequency Settability | <u>+/- 500</u> MHz | | | |
| Power Output | <u>+3</u> dBm | <input checked="" type="checkbox"/> min | <input type="checkbox"/> typ | <input type="checkbox"/> max |
| Power Output Variation / Freq | <u>12</u> dB | <input type="checkbox"/> min | <input type="checkbox"/> typ | <input checked="" type="checkbox"/> max |
| Frequency Drift over Temp | <u>+/- 50</u> MHz | <input type="checkbox"/> min | <input type="checkbox"/> typ | <input checked="" type="checkbox"/> max |
| Pulling Figure (12dB RL) | <u>2</u> MHz | <input type="checkbox"/> min | <input checked="" type="checkbox"/> typ | <input type="checkbox"/> max |
| Pushing Figure (+ Vdc supply) | <u>2</u> MHz/V | <input type="checkbox"/> min | <input checked="" type="checkbox"/> typ | <input type="checkbox"/> max |
| Pushing Figure (-5Vdc supply) | <u>2</u> MHz/V | <input type="checkbox"/> min | <input checked="" type="checkbox"/> typ | <input type="checkbox"/> max |
| Harmonics | <u>-12</u> dBc | <input checked="" type="checkbox"/> min | <input type="checkbox"/> typ | <input type="checkbox"/> max |
| Spurious Output | <u>-70</u> dBc | <input checked="" type="checkbox"/> min | <input type="checkbox"/> typ | <input type="checkbox"/> max |
| Magnetic Susceptibility | <u>n/a</u> kHz/Gauss | <input type="checkbox"/> min | <input checked="" type="checkbox"/> typ | <input type="checkbox"/> max |
| Phase Noise @ 10 kHz offset | <u>-94</u> dBc/Hz | <input checked="" type="checkbox"/> min | <input type="checkbox"/> typ | <input type="checkbox"/> max |
| Phase Noise @ 100 kHz offset | | | | |
| 10.0 to 16.2 GHz | <u>-123</u> dBc/Hz | <input type="checkbox"/> min | <input type="checkbox"/> typ | <input type="checkbox"/> max |
| 16.2 to 18.6 GHz | <u>-120</u> dBc/Hz | <input type="checkbox"/> min | <input type="checkbox"/> typ | <input type="checkbox"/> max |
| 18.6 to 20.5 GHz | <u>-118</u> dBc/Hz | <input type="checkbox"/> min | <input type="checkbox"/> typ | <input type="checkbox"/> max |

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|---|-------------------|---|---|---|
| <u>Main Coil Characteristics</u> | | | | |
| Sensitivity (+/- 1 MHz) | <u>10</u> MHz/mA | <input checked="" type="checkbox"/> min | <input type="checkbox"/> typ | <input checked="" type="checkbox"/> max |
| Linearity | <u>+/- 30</u> MHz | <input type="checkbox"/> min | <input type="checkbox"/> typ | <input checked="" type="checkbox"/> max |
| Hysteresis | <u>40</u> MHz | <input type="checkbox"/> min | <input checked="" type="checkbox"/> typ | <input type="checkbox"/> max |
| Input Impedance @ 1 kHz rate | <u>11</u> Ohm | <input type="checkbox"/> min | <input checked="" type="checkbox"/> typ | <input type="checkbox"/> max |
| | <u>30</u> mH | <input type="checkbox"/> min | <input checked="" type="checkbox"/> typ | <input type="checkbox"/> max |
| Feedthrough Capacitance | <u>0</u> pF | <input type="checkbox"/> min | <input checked="" type="checkbox"/> typ | <input type="checkbox"/> max |

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|---------------------------------------|-------------------|---|---|---|
| <u>FM Coil Characteristics</u> | | | | |
| Sensitivity (+/- 10 %) | <u>350</u> kHz/mA | <input checked="" type="checkbox"/> min | <input type="checkbox"/> typ | <input checked="" type="checkbox"/> max |
| 3 dB Bandwidth | <u>5</u> MHz | <input type="checkbox"/> min | <input checked="" type="checkbox"/> typ | <input type="checkbox"/> max |
| Deviation @ 400 kHz rate | <u>+/- 50</u> MHz | <input checked="" type="checkbox"/> min | <input type="checkbox"/> typ | <input type="checkbox"/> max |
| Input Impedance @ 1 MHz rate | <u>1</u> Ohm | <input type="checkbox"/> min | <input checked="" type="checkbox"/> typ | <input type="checkbox"/> max |
| | <u>1</u> uH | <input type="checkbox"/> min | <input checked="" type="checkbox"/> typ | <input type="checkbox"/> max |
| Feedthrough Capacitance | <u>0</u> pF | <input type="checkbox"/> min | <input checked="" type="checkbox"/> typ | <input type="checkbox"/> max |



WEIGHT: .78 Oz (22g)



| REV | DESCRIPTION | DATE | APPROVED |
|-----|-------------|------|----------|
| | | | |

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|---|--|---|--|
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ANGLES * .XX .010 .XXX .005 | | CONTRACT NO. APPROVALS DATE DRAWN: N. NGUYEN 12/15/22 CHECKED: John M... 12-15-22 ISSUED | MICRO LAMBDA WIRELESS, INC. PC MOUNT OSCILLATOR (Ø .625" X .750" HIGH W/ 4 MTC. SCREWS) SIZE CAGE No. 0RN63 DWG. NO. 99-0091-020 REV. E |
| DO NOT SCALE DRAWING | | SCALE | SHEET |