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| FREQUENCY STABILITY | |
| OVER: | |
| OPERATING TEMP. RANGE : | <i>see note 1</i> |
| LONG TERM AGING 1ST YEAR: | < ±0.7 ppm * |
| 10 YEARS: | < ±4.0 ppm * |
| SUPPLY VOLTAGE ± 0.5 V | < ±0.1 ppm * |
| LOAD ±10%: | < ±0.01 ppm |
| POWER SUPPLY | |
| SUPPLY INPUT: | V _{cc} = 12 V ±0.5 V * |
| INPUT CURRENT : | < 25 mA @ +30 °C * |
| INPUT CURRENT : | < 40 mA @ -20 °C * |
| FREQUENCY CONTROL RANGE | |
| CONTROL VOLTAGE: | <i>see note 2</i> |
| FREQUENCY DEVIATION: | > ±4 ppm * |
| RESPONSE SLOPE: | positive |
| OUTPUT | |
| OUTPUT SIGNAL: | Sine wave |
| HARMONICS: | -10 dBc * |
| SPURIOUS: | -70 dBc * |
| LEVEL: | > 1V _{pp} < 2V _{pp} |
| LOAD: | > 1kΩ // 5pF ±10% |
| ENVIRONMENT | |
| OPERABLE TEMP. RANGE: | -40 to +85 °C |
| STORAGE TEMP. RANGE: | -65 to +125 °C |
| VIBRATION: | 10 to 2000 Hz / 10 g |
| SHOCK: | 2000 g, 0.3 ms, ½ sine |
| PACKAGE: | DIL 14, 4 pins, GND to case |
| PACKAGE HEIGHT: | 8 mm (see packaging info) |
| WARM-UP | |
| ΔF/F: | within spec after 30s @ 0 °C * |
| CURRENT: | < 250 mA during 10s |
| MISCELLANEOUS | |
| SHORT TERM STABILITY: | < 5 E-10 0.1 s to 30 s Typical 5 E-11 @ 1 s |
| PHASE NOISE (BW = 1Hz): | 10 Hz: -100 dBc / Hz (typical, @ 10MHz in static conditions) 100 Hz: -130 dBc / Hz 1 KHz: -140 dBc / Hz 10 KHz: -145 dBc / Hz |
| * Customer's specification on request | |

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| NOTE 1 | |
| TEMP. RANGE * | OCXOS-AR1, AV5 0 to +60 °C |
| STABILITY * | ±0.05 ppm (0.1 ppm peak to peak) |
| TEMP. RANGE * | OCXOS-BR1, BV5 -20 to +70 °C |
| STABILITY * | ±0.1 ppm (0.2 ppm peak to peak) |
| TEMP. RANGE * | OCXOS-CR1, CV5 -40 to +85 °C |
| STABILITY * | ±0.2 ppm (0.4 ppm peak to peak) |

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| NOTE 2 | |
| ADJUSTMENT WITH RESISTOR (connected to ground) | OCXOS-AR1, BR1, CR1 0 to 10 kΩ |
| INPUT IMPEDANCE | > -4.7 kΩ |
| ADJUSTMENT WITH VOLTAGE | OCXOS-AV5, BV5, CV5 0 to 5 V |
| INPUT IMPEDANCE | > 47 kΩ |

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|------------------------|-------|----------------------|-----------|
| MARKING EXAMPLE | | | |
| Micro Crystal | | Micro Crystal | |
| OCXOS-BV5 | | Type | Spec No. |
| 20.000 MHz | 09.25 | Frequency | Date Code |
| ○ | 12 | ○ (PIN 1) | Piece No. |

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|-------------------------------------|--|-----------------------------|---|
| ORDERING INFORMATION EXAMPLE | | | |
| O C X O S - B V 5 20 MHz x x x | | | |
| Oscillator Type | OCXO = oven controlled Crystal Oscillator | | N° of customer spec. |
| Oscillator Version | S = sine wave | Oscillator output frequency | |
| Temperature Range | A = 0 to +60°C; +/-0.05ppm B = -20 to +70°C; +/-0.1ppm C = -40 to +85°C; +/-0.2ppm X = custom spec. | Frequency Adjustment | R1 = external resistor V5 = voltage 5V Y = custom spec. |

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|-----------------------------------|---------|---------|---------|---------|---------|
| STANDARD FREQUENCIES (MHz) | | | | | |
| 10.0000 | 12.8000 | 16.0000 | 16.3840 | 19.4400 | 20.0000 |

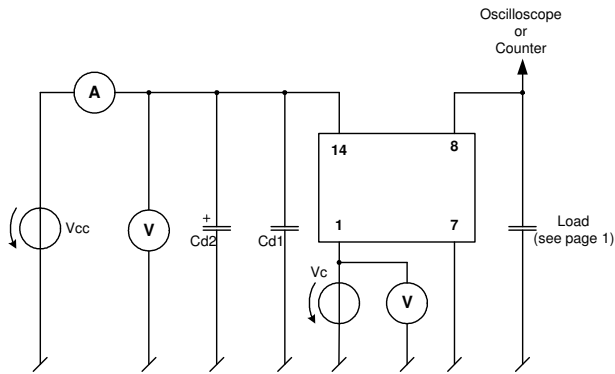
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| DATE: | October 2009 | Revision No.: 9 |
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In accordance with our policy of continuous development and improvement, we reserve the right to modify the design or the specifications of our products without prior notice.

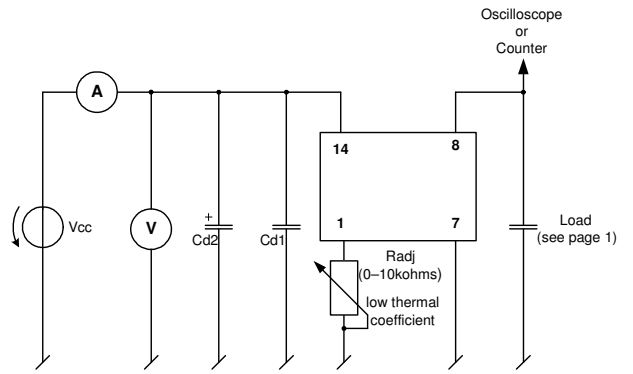
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Application and Test Circuit:

Adjustment with voltage



Adjustment with resistor



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