

MXO5026 Series

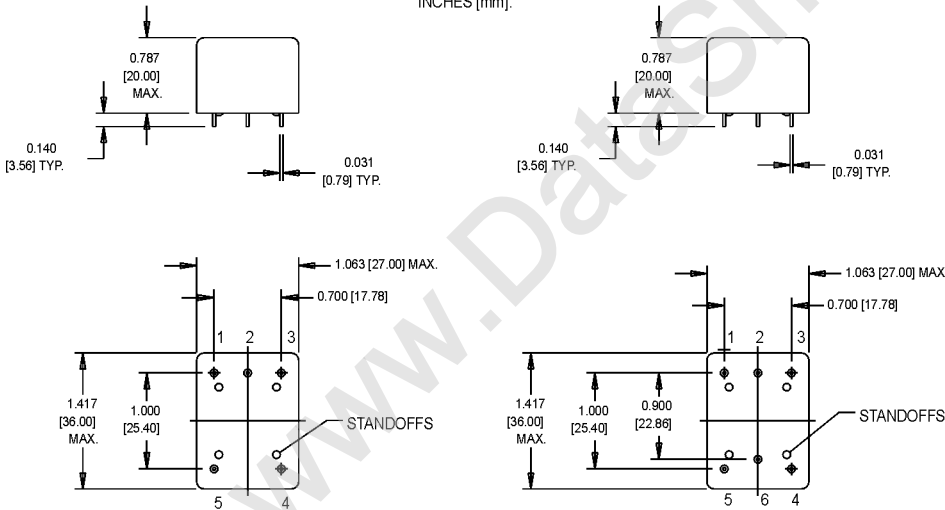
1.4x1 in., 12.0 Volt, CMOS/TTL/Sinewave, OCXO



- Available in AT or SC cut, featuring low phase noise in a small package
- Ideal for base stations, instrumentation and test equipment where size is a factor

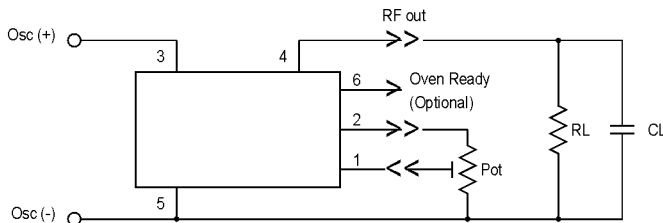
| Ordering Information | |
|--------------------------------|--|
| Product Series | MXO5026 |
| Temperature Range | 1: 0°C to +70°C 8: 0°C to +50°C B: -30°C to +70°C C: -40°C to +70°C |
| Stability | A: $\pm 1.0 \times 10^{-7}$ D: $\pm 6.0 \times 10^{-8}$ F: $\pm 4.0 \times 10^{-8}$ J: $\pm 2.0 \times 10^{-8}$ C: $\pm 7.0 \times 10^{-8}$ E: $\pm 5.0 \times 10^{-8}$ G: $\pm 3.0 \times 10^{-8}$ K: $\pm 1.0 \times 10^{-8}$ |
| Crystal Cut | A: AT Cut S: SC Cut |
| Output Type | C: CMOS S: Sinewave H: HCMOS T: TTL |
| Package Type | D: DIP |
| Frequency (Customer Specified) | 00.0000 MHz |

DIMENSIONS ARE SHOWN IN INCHES [mm].



Pin Connections

| PIN | FUNCTION |
|-----|-----------------------------|
| 1 | Frequency Adjust |
| 2 | Vref |
| 3 | Supply (+) |
| 4 | RF Output |
| 5 | Case Ground & Supply Return |
| 6 | Oven Ready (Optional) |



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MXO5026 Series

1.4x1 in., 12.0 Volt, CMOS/TTL/Sinewave, OCXO



| Electrical Specifications | PARAMETER | SC-cut | AT-cut |
|---------------------------|-----------------------------|--|--------------------------|
| | Frequency Range | 10 MHz | 10 MHz |
| | Temperature Range | -10°C to +70°C | -10°C to +70°C |
| | Temperature Stability | $\pm 2.0 \times 10^{-8}$ | $\pm 6.0 \times 10^{-8}$ |
| | Supply Voltage | +12 Vdc $\pm 5\%$ | +12 Vdc $\pm 5\%$ |
| | Aging Over 1 Year | $\pm 5.0 \times 10^{-8}$ | $\pm 2.0 \times 10^{-7}$ |
| | Aging After First Year | $\pm 2.0 \times 10^{-8}$ | |
| | Warm-up Current | .400 mA max | |
| | Current @ 25°C steady state | 125 mA max | |
| | Warm-up Time @ 25°C | to within ± 0.10 ppm of Fo in 3 min, ± 0.01 ppm in 5 min | |
| | Duty Cycle | 50 $\pm 10\%$ | |
| | Load | 2 Gates/20 pF max | |
| | Aging Adjustment | External 10 k pot/voltage | |
| | Deviation | $\pm 5.0 \times 10^{-7}$ | |
| | Slope | Positive | |
| | Phase Noise | | |
| | 1 Hz | -90 dBc/Hz | |
| | 10 Hz | -120 dBc/Hz | |
| | 100 Hz | -140dBc/Hz | |
| | 1 kHz | -150 dBc/Hz | |
| 10 kHz | -155 dBc/Hz | | |
| <u>Sinewave Version</u> | | | |
| Spurious | -75 dBc max | | |
| Harmonics | -30 dBc max | | |
| Load | 50 Ω to 1 k Ω | | |
| Output Level | +7 dBm min into 50 Ω | | |
| <u>HCMOS Version</u> | | | |
| Duty Cycle | 40/60 | | |
| Load | 2 Gates | | |

OCXO

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | S | A | C | D | E | F | G | J | K |
| T | | C | C | C | A | C | C | S | C |
| 1 | | C | C | C | C | C | A | C | S |
| 8 | | C | A | C | C | C | S | N | N |
| B | | A | C | C | C | S | N | N | N |
| C | | A | C | C | C | S | N | N | N |

A = AT Cut S = SC Cut
 C = Consult Factory N = Not Available

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