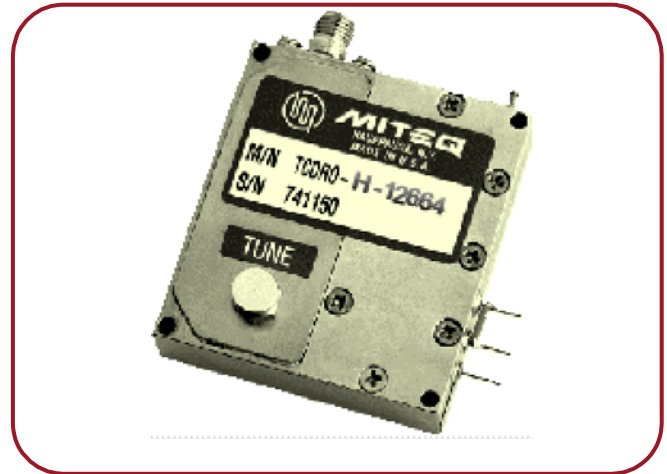


TEMPERATURE COMPENSATED DIELECTRIC RESONATOR OSCILLATORS

TCDRO SERIES: H

FEATURES

- Ultra-clean source ideal for low spur application
- High-reliability design
- Very low frequency drift over temperature
- Buffered output
- 100% burn-in



ELECTRICAL SPECIFICATIONS

PARAMETERS	SERIES - ST: H
Operating frequency range (note 2)	12 – 16 GHz
Output power (note 1)	+17 dBm, min
Output power variation over temperature range	± 1.5 dB, max
Fundamental	N/A
Harmonics	-20 dBc, max
Spurious	-80 dBc, max
Mechanical tuning	± 10 MHz, min
Frequency pushing	20 kHz/V, max
Frequency pulling (1.5:1 VSWR)	0.5 MHz, P-P max.
Frequency drift temp. coefficient (note 3)	0.9 ppm/ $^{\circ}$ C, max
Phase noise @ 10 kHz offset	75 dBc/Hz, typ.
DC power	15 Volts
Current	220 mA, Max.
Outline drawing	7
Temperature range	-20 to +70 $^{\circ}$ C

Notes:

1. Output power is guaranteed into 50 ohm load.
2. Operating frequency must be specified.
3. Averaged over the full temperature range

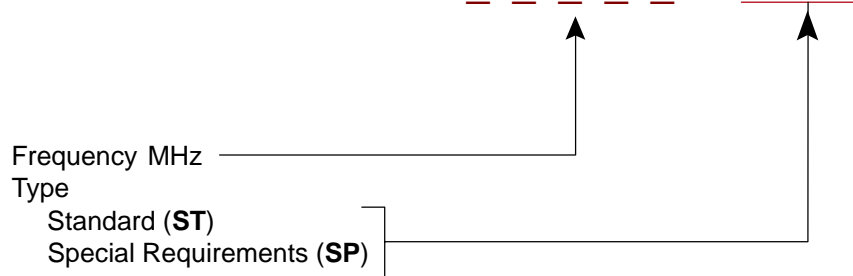
OPTIONS

- Special (-SP) (please contact factory before ordering)
Special is defined as a requirement with a specification(s) different than the standard catalog. For example, extended or narrowed temperature range, different output power, different DC power requirement, etc.

TEMPERATURE COMPENSATED DIELECTRIC RESONATOR OSCILLATOR

ORDERING INFORMATION

TCDRO – H



Note: When specifying options, include applicable detailed information.

Example 1: 16 GHz TCDRO standard: TCDRO-H-16000-ST.

Example 2: 12 GHz TCDRO with any specification different than listed in catalog: TCDRO-H-12000-SP, please contact MITEQ.

MECHANICAL SPECIFICATIONS

Outline drawings

Size: Outline 7 1.8" x 2" x 0.65"

Weight.....Frequency dependent, please consult MITEQ where critical

RF connectorsSMA female

DC connectorsFeedthru filter

ENVIRONMENTAL SPECIFICATIONS

MITEQ's standard dielectric resonator oscillators have been designed to meet the below maximum environmental conditions.

Temperature

Operating -55 to +95°C

Storage -65 to +115°C

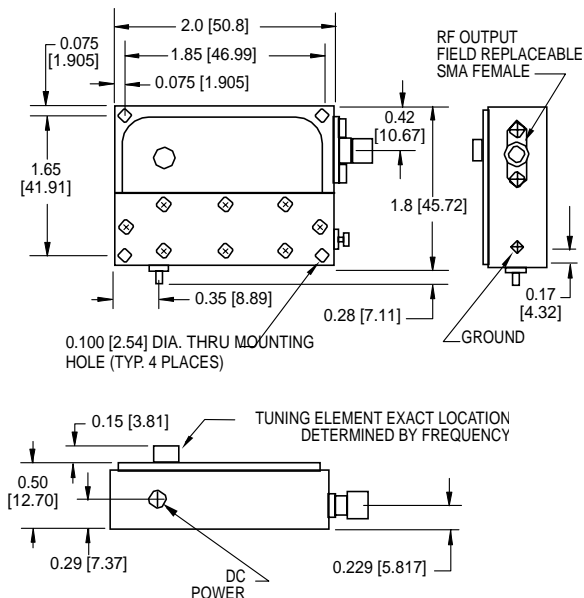
Humidity..... 95% at 40°C noncondensing

Shock (survival) 30 g's, 10 ms pulse

Vibration (survival) 20 to 2000 Hz random to 4 g's rms

OUTLINE DRAWINGS

OUTLINE 7



NOTE: DIMENSIONS SHOWN IN BRACKETS [] ARE IN MILLIMETERS.