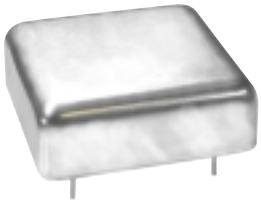
MF ELECTRONICS

TCXO
OSCILLATORS

EH Models
High Stability TCXOs
Stratum 3 Option
1 MHz to 40 MHz

MODELS
EH-D
EH-R
EH-T,
EH-S (Stratum 3)



High Stability EH TCXOs

MF Electronics EH Models Temperature Compensated Crystal Oscillators (TCXOs), provide excellent frequency stability in standardized temperature ranges. Any frequency from 1 MHz to 40 MHz may be specified.

Excellent frequency stability is achieved by using the highest quality quartz crystals with proven long term stability. The EH-S model meets the Bellcore specification for Stratum 3 application.

The EH models feature an hermetically sealed package which provides protection of all components to contaminants in the manufacturing process and in the end-use environment

Convenient Electronic Frequency Control is used to adjust frequency smoothly and accurately. Standard output is HCMOS.

Application-specific models can be created with flexibility from the baseline design taking advantage of the high-performance crystals used in these oscillators.

FIXED FREQUENCY
These oscillators are available from 1.0 MHz to 40 MHz

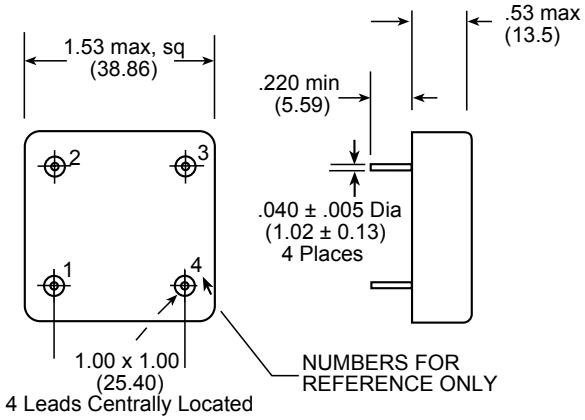
VOLTAGE CONTROL OF FREQUENCY
Trim adequate for 10 year aging

STABILITY-TEMPERATURE
4 models options, including Stratum 3

STRATUM 3
Stratum 3 designed to Bellcore specification

AGING
±3.5 ppm for 10 years

INPUT VOLTAGE
5 volts is standard



APPLICATION
- Stratum 3 application
- SONET/SDH Network Timing
- Instrumentation
- Satcom, LMDS

CONNECTIONS

Pin 1.	RF Output
Pin 2.	5 volts, Vdd
Pin 3.	Ground
Pin 4.	Electronic Frequency Control

Millimeters are shown in ( )

TCXO-EE Models

MF ELECTRONICS
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MF ELECTRONICS

TCXO Oscillator
EH Models ,Stratum 3
1.0 MHz to 40 MHz

MODELS
EH-D
EH-R
EH-T,
EH-S (Stratum 3)

SPECIFICATIONS

Supply Voltage	5.0 V ±5%
Frequencies	Any frequency from 1.0 MHz to 40 MHz
Stability-Temperature, D,R and T Models	
Model EH-D	±0.5 ppm from 0 to +50ºC
Model EH-R	±0.5 ppm from 0 to 70ºC
Model EH-T	±1.0 ppm from -40 to +85ºC
Stability, Stratum 3, EH-S Model	
Stability vs Temperature	±0.3 ppm from 0 to +60ºC
24 hour Holdover Stability	±0.37 ppm for all causes
Long-term Stability	±4.6 ppm for all causes for 10 years
Output, Waveform	HCMOS
Load	15 pf max
Symmetry	40/60 or better
Aging, first year	±1 ppm, max.
Aging, 10 years	±3.5 ppm, max.
Frequency Control, Electronic	±5 min for 2.5 ±2.0 V
Input Current	15 ma, max
Phase Noise, 10 MHz, typical	
100 Hz offset	-115 dBc/Hz
1KHz offset	-145 dBc/Hz
10 KHz offset	-150 dBc/Hz
100 KHz offset	-155 dBc/Hz
Mechanical	
Package	Nickel Silver
Leads	Solder Plated

HOW TO ORDER

For Part Number, use model number with letter option, and add frequency in MHz, for example:

EH-x-24.704M

"EH" is model type

Insert model letter option from specification

"24.704 M" is frequency in MHz

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