



FULL MILITARY DIL XO

Description

These high performance DIL clock oscillators are designed for high vibration and extended temperature range up to -55° C to +125° C. For the same military temperature ranges, our QEN49/55-EH uses ACMOS active circuit technology with a high performance crystal resonator mounted on 3 points. It allows an upper frequency of 60 MHz, as opposed to the classic HCMOS types, which are limited to much lower frequencies.



Frequency range

14 MHz to 160 MHz

Applications

Test equipment
Military airborne
Space applications

Features

Temperature ranges: up to -55° C to +125° C
 Frequency stability: ±25 to ±100 ppm
 Supply voltage: +5 V or -5.2 V
 Current consumption: 20 mA to 50 mA+0.2xF (MHz)
 Load (EH version): See [table 1](#)
 Duty cycle: 50/50 ± 20 %
 Option screening: B or S
 Ageing (45°C/1st year) : ≤ ± 5 ppm

Note:

- Options with the same marker may not be combined with each other.
- Frequency stability inclusive of 25° C calibration, temperature, Vcc and load change.
- Temperature range feasible up to 70 MHz for EH version.

Table 1:
Other temperature ranges and stability available

	QEN 49/55-EH	
	14 MHz - 70 MHz	70 MHz - 160 MHz
Input current (without load)	<20 mA up to 40 MHz <40 mA up to 70 MHz	<50 mA +0.2 F (MHz) @ 25° C, Vcc = 5 V
Output levels (max. load)	Low < 0.5 V High > 4.5 V	Low < 0.44 V High > 3.7 V
Max. output	10-TTL or 25 pF	±24 mA up to 85° C ±15 mA from +85° C to +125° C
Rise/fall time (max. load)	<10 ns from 20 MHz	<2 ns

Minimum ordering information requirement
(See [Table 1](#) for available combinations)
(See [page 3-19](#) for package drawing)

Example: QEN 55 - EH 70 MHz AY50 SB / T

