

## CRYSTAL OSCILLATOR - XO

QEN 49/55-DH



## INDUSTRIAL & MILITARY DIL XO

### Description

To complete our standard QEN 14-H and QEN 4-H, we propose our QEN 49/55-DH that uses an Ag/Pd hybrid circuit board and a crystal resonator mounted on 3 points in a DIL 14. These low cost oscillators are designed for high vibration resistance clock oscillator and extended temperature range up to -55° C to +125° C. The QEN 55-DH utilizes HCMOS active circuit technology up to 100 MHz. The same performances are presented for higher environmental severity in a 14 pins DIL package under the designation QEN 49-DH. The tristate output is ideal for automated test or frequency switching applications.



### Frequency range

1 MHz to 100 MHz

### Applications

Airborne indoor applications  
Railroad security equipment  
Every outdoor electronics

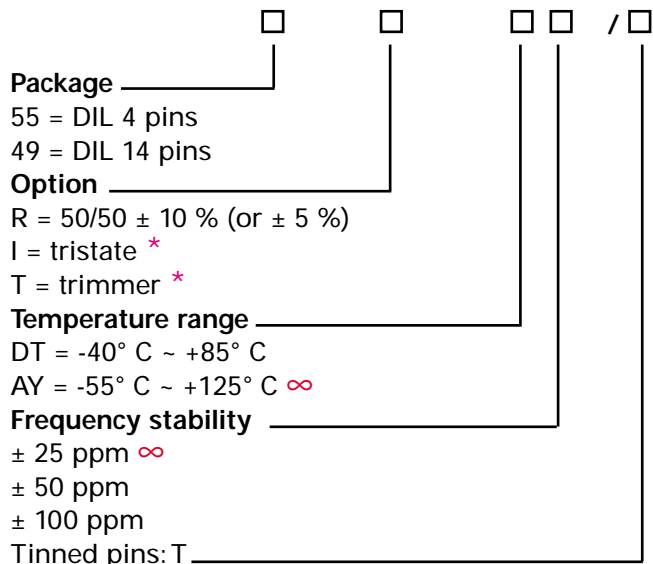
### Features

Temperature ranges: up to -55° C to +125° C  
Frequency stability: ±25 to ±100 ppm  
Supply voltage: +5 V  
Current consumption: 10 to 30 mA  
Load: 15 pF-25pF/2-6TTL-gates  
Option duty cycle: Up to 14 MHz 50/50 ± 5%  
From 14 MHz 50/50 ± 10%  
Option: Enable/Disable  
Option :external trimmer 3 to 20 pF  
up to 33 MHz on pin 1

Ageing (45°C/1<sup>st</sup> year) : ≤ ± 5 ppm

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

Example: QEN 55 - DHR 16 MHz AY50 / T



### 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.

Table 1:  
Other temperature ranges  
and stability available

	QEN 49/55-DH	Option Enable/disable on pin 1
1 MHz - 14 MHz	2TTL-gates/15 pF 10 ns	"0" on pin 1 =High Z on pin 3 "1" on pin 1 =enable on pin 3
14 MHz - 100 MHz	6 TTL-gates/25 pF 5 ns	Attention: should pin 1 not be used, please always tie to Vcc