## QEN 49/55-DH

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# **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	ר:	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:	E	nable/Disable
Option :external trim	nmer	3 to 20 pF
	up to 33	MHz on pin 1

Ageing  $(45^{\circ}C/1^{st} \text{ year}) : \le \pm 5 \text{ ppm}$ 

#### Minimum ordering information requirement (See <u>Table 1</u> for available combinations) (See <u>page 3-19</u> for package drawing)



Note:

- 1. Options with the same marker may not be combined with each other.
- 2. 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	"0" on pin 1 =High Z on pin 3
	10 ns	"1" on pin 1 =enable on pin 3
14 MHz - 100 MHz	6 TTL-gates/25 pF	Attention: should pin 1 not be
	5 ns	used, please always tie to Vcc

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