



INDUSTRIAL & MILITARY SMD XO

Description

The QEN 79 series is a true hybrid construction with chip and wire bonding to a ceramic substrate for high reliability and small size. The crystal resonator is mounted on a 3 points supporting pad bonded to the ceramic substrate. They are designed to operate at extended temperature up to -55° C to +125° C and available to 100 MHz. This series is designed to withstand tough mechanical environment and class B screening if applicable. It's presented in a J-lead version and both supply voltage (5 V and 3.3 V). It offers an enable/disable option.



An alternative is available in a leadless version, the QEN 92, which has the same design but offers a tristate function in standard. Consult your local sales office to know available solutions.

Frequency range

1.75 MHz to 100 MHz

Applications

- Cellular base stations
- PCS base stations
- Synthesizers
- Test equipment
- Portable instrumentation and avionics

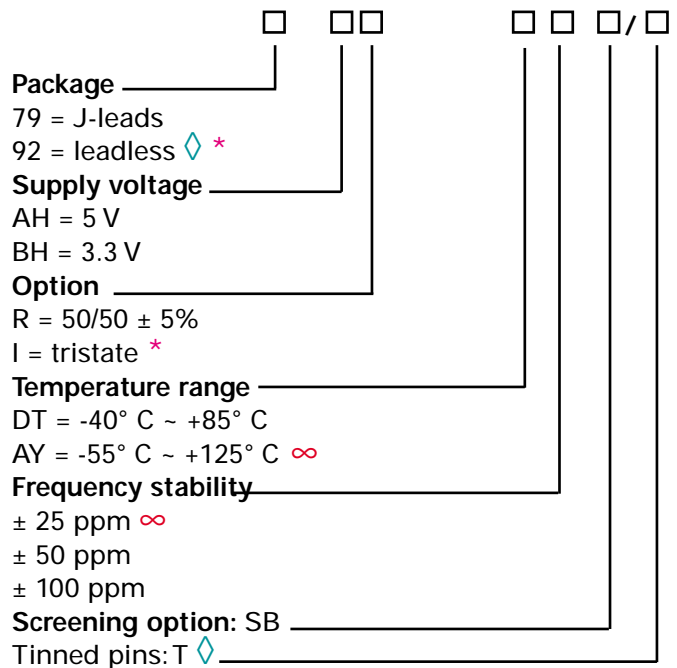
Features

- Temperature ranges: up to -55° C to +125° C
- Frequency stability: ±15 to ±100 ppm
- Supply voltage: +5 V or +3.3 V
- Current consumption: @ (5 V): 25 to 40 mA
@ (3.3 V): 12 to 20 mA
- Load: @ (5 V): 50pF/10TTL-gates
@ (3.3 V): 15 pF
- Option duty cycle: 50/50 ± 5 %
- Option: enable/disable on pin 1 Package 79
- Tristate output: Package 92
- Option: screening B
- Ageing (45°C/1st year): ≤ ± 5 ppm

Minimum ordering information requirement
(See Table 1 for available combinations)

(See page 3-17 and 3-18 for package drawing)

Example: QEN 79 - AHR 50 MHz DT50 SB/T



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 stabilities available

	QEN 79/92-AH 5 V supply voltage		QEN 79/92-BH 3.3 V supply voltage		Tristate on pin 1 Package 92	Option Tristate on pin 1 Package 79
	±25 ppm	±50 ppm	±25 ppm	±50 ppm		
1.5 MHz - 30 MHz	Yes	Yes	Yes	Yes	"0" on pin 1 = High Z on pin 3 "1" on pin 1 = enable on pin 3 Attention: should pin 1 not be used, please always tie to Vcc	
30 MHz - 80 MHz	Yes	Yes	Yes	Yes		
80 MHz - 100 MHz	Yes	Yes				