LOW PHASE NOISE DTCXO

Description

The QED45-BO/BH series exhibit a lower phase noise figure and a better ageing over 10 - 15 years by using a special version of the compensation process and a quartz resonator of high quality.

Frequency range

4 MHz to 60 MHz

Applications

SatCom base stations
Low phase noise requirement
Test equipment
Navigation devices

Features

Temperature ranges:		up to -40° C to +85° C
Frequency stability:		≤ ±0.2 ppm
Supply voltage:		+5 V ±5%
Input current:		≤ 50 mA
Frequency adjustment:		≥ ±2 ppm
Ageing:		≤ ±0.2 ppm/1st year
		≤±1.5 ppm/10 years
Phase noise:	10 Hz	-95 dBc/Hz
@ 10 MHz	100 Hz	-125 dBc/Hz
	1 kHz	-145 dBc/Hz
	10 kHz	-150 dBc/Hz

Better phase noise on request
Start-up time: ≤ 10 S

Minimum ordering information requirement

(See Table 1 for available combinations)

Example: QED 45 - BO P 10 MHz DT47 □ □ □ □ □

Package
45 = standard (36 x 27)

Output
BO = Sine 50 Ω
BH = HCMOS

Option
P = External potentiometer or resistor 20kΩ
V = External Control Voltage 0.5 V to 4.5 V

Temperature range
HQ = -20° C ~ +70° C
DT = -40° C ~ +85° C ◆

Thermal stability
±0.2 ppm ◆
±0.4 ppm

Note: 1. Options with the same marker may not be combined with each other.

Table 1:
Other temperature ranges and stability available

Typical value at10 MHz	QED 45-BH	QED 45-BO
	5 MHz to 20 MHz	
Overall stability including	≤ ±2 ppm temperature variation, load variation ±10%, supply variation ±5%, ageing on 10 years	
Input current	≤ 30 mA	
Output levels	"0" ≤ 0.5 V / "1" ≥ 4.5 V	0 dBm
Load	5 TTL or 20 pF (HCMOS)	50 Ω
Duty cycle	50/50% ± 10%	N/A
Rise/Fall time	≤ 10 nS	N/A
Harmonics & Sub-Har.	N/A	≤-30 dBc
Option P Option	Package page 3-54	

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