



QEN4

DIL 8 Pin Half Size XO – Communications Equipment Application
Specification (Rev-B)

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Electrical Characteristics

Electrical Parameters	Unit	Minimum	Typical	Maximum	Test conditions
Frequency range	MHz	0.5		150	
Output logic	HCMOS / TTL Output				
Operating temperature range (see table 1)	°C		0 to +70	-40 to +85	Refer to Ordering Information
Storage temperature range	°C	-55		+125	
Power supply voltage (Vcc)	V	+3.3 (± 5%)		+5.0 (± 5%)	Refer to Ordering Information
Frequency Stability (see note 1)	± ppm	15	50	100	Refer to Ordering Information
Aging (First Year)	± ppm			5	Ref at 25°C
Input current (see table 1)	mA				
Output load (see table 2)	HCMOS load	pF	15		
	TTL load	LS-TTL	5		
Duty cycle	%		40/60		Refer to Ordering Information
Rise & Fall time	ns			10	From 10% Vcc to 90% Vcc
Start-up time	ms			10	

Note 1: Include 25°C tolerance, operating temperature range, input voltage change, load change, first year aging, shock and vibration.

Table 1 : Input Current

Frequency range (MHz)	Vcc=5V	Vcc=3.3V
	Cl=15 pF	Cl=15pF
0.500 to 23.999	20 mA	15 mA
24.00 to 49.999	30 mA	20 mA
50.00 to 69.999	40 mA	30 mA
70.00 to 150.00	60 mA	45 mA

Table 2 : Maximum Output Load

Frequency range (MHz)	Vcc=5V	Vcc=3.3V
Up to 50.000	50pF	30pF
Up to 70.000	30pF	20pF
Up to 150.00	15pF	15pF

Table 3 : Maximum Deviation

Operating Temperature Range	±15ppm	±25ppm	±50ppm	±100ppm
0 to 70°C	Yes	Yes	Yes	Yes
-10 to 70°C	-	Yes	Yes	Yes
-20 to 70°C	-	Yes	Yes	Yes
-40 to 85°C	-	Yes	Yes	Yes

