

QEN14

20.7 x 13.1 mm, 14 pin DIL package



Frequency and Electrical Characteristics

Parameter		Min. Ty		Тур.	Max.		Unit T		Test co	ndition / Des	scription
Nominal frequency (Fn)		0.4096			1.	50	MHz				
Operating temperature range				0 to +70	-4	10 to +85	°C		See 'Ord	der Part Exam	nple'
Storage tem	perature range	-55			+:	125	°C				
Frequency stability over temperature ¹					±	15 to ±100	ppm		See 'Ord	der Part Exam	nple'
Long-term s	tability (Ageing)				±	5	ppm		Frequen	cy drift over	1 year at 25°C
Power supp	ly voltage(V _{cc}) 3.3V (BH option) 5.0V (H option)			3.3 5.0		.465 .250	V_{DC}		See 'Ord	der Part Exam	nple'
Duty cycle		40		50	6	0	%				
Rise & fall time					10	0	ns		From 10	% V _{CC} to 90%	ν _{cc}
Start-up time					10	0	ms				
Output load	HCMOS TTL load				1.		pF LS-TTL				
	Maximum output load		Frequency			V _{CC} = 5V	V _{CC} = 3	3.3V			
			Up to	50.000MHz 70.000MHz 150.00MHz		50 pF 30 pF 15 pF	30 pF 20 pF 15 pF				
Input current			Load	capacitance	Fre	equency		V _{CC} :	= 5V	V _{CC} = 3.3V	
			C _L = 1	C _L = 15 pF		0.500 to 23.999MHz 24.00 to 49.999MHz 50.00 to 69.999MHz 70.0 to 150.000MHz		20 r 30 r 40 r 60 r	nA nA	15 mA 20 mA 30 mA 45 mA	

 $^{^1 \ \}text{Include 25°C tolerance, operating temperature range, input voltage change (V_{CC}\pm5\%), load change (15pF \pm10\%), first year ageing, shock and vibration.}$



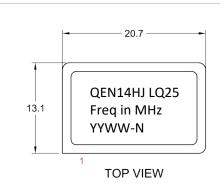
Order Part Example - QEN14HJ LQ25 / 10.000MHZ

Parameter	Product family and package	Supply Voltage (V _{cc})	Option	Operating temperature range	Frequency stability** (FvT)	Nominal Frenquency (Fn. MHz)
Code	QEN14	Н	J	LQ	25	10.000MHZ
Decode	QEN = XO 14 = 14 pin, Full size DIL	H = 5.0V BH = 3.3V	J = Tri-state R = Duty cycle 45/55%	LQ = 0 to 70°C JQ = -10 to 70°C HQ = -20 to 70°C DT = -40 to 85°C	15 = ±15ppm 25 = ±25ppm 50 = ±50ppm 100 = ±100ppm	Please enter Fn
		Operating				

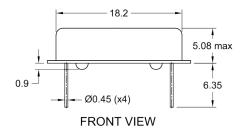
**	Maximum	deviation:
	IVIAXIIIIUIII	ueviation.

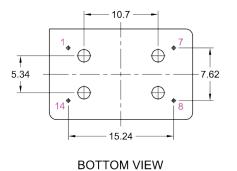
Operating temperature range	±15ppm	±25ppm	±50ppm	±100ppm
0 to 70°C	Yes	Yes	Yes	Yes
-10 to 70°C	_	Yes	Yes	Yes
-20 to 70°C	_	Yes	Yes	Yes
-40 to 85°C	_	Yes	Yes	Yes

Model Outline, Recommended Pad Layout, Marking and Packaging



Marking		Note				
Line 1	QEN14HJ LQ25	Product code: See order example				
Line 2	10.000	Frequency in MHz (6 digits)				
Line 3	2439-N	Year code (YY): 24 = 2024, Week code (WW): 39 = Week 39 of the year, N = Manufacturing code				





Pin	Connections
1	NC / Tri-state Open = Active, 1 = Active, 0 = High Z
7	GND
8	Output
14	Vcc

NOTE:

- Packaging: ESD carton box
- Dimension unit is in millimetre.