



QEV4

DIL 8 Pin Half Size VCXO – Communications Equipment Application
Specification (Rev-C)

■ Electrical Characteristics	P01
■ Mechanical Characteristics	P02
■ Ordering Information	P02

QEV4

DIL 8 Pin Half Size VCXO – Communications Equipment Application

Specification (rev-C)

June 14th, 2006

Electrical Characteristics

Electrical Parameters	Unit	Minimum	Typical	Maximum	Test conditions
Frequency range	MHz	1		160	
Output logic	HCMOS / TTL Output				
Operating temperature range	°C		0 to +70	-40 to +85	Refer to Ordering Information
Storage temperature range	°C	-55		+125	
Power supply voltage (V _{CC}) 3.3V version 5.0V version	V _{DC}	3.135 4.750	3.3 5.0	3.465 5.250	Refer to Ordering Information
Typical Calibration	± ppm		15		Ref at 25°C
Frequency Stability (see note 1)	± ppm	±15, ±25, ±50, ±100			Refer to Ordering Information
Stability vs Supply voltage variation	± ppm			5	V _{CC} ± 5%
Stability vs load variation	± ppm			3	15pF ± 10%
Aging (First Year)	± ppm			5	Ref at 25°C
Input current (see table 1)	mA				
HCMOS Output load	pF			15	
Output Logic Levels Output Logic High (V _{OH}) Output Logic Low (V _{OL})	V	90%V _{CC}		10%V _{CC}	
Frequency Pulling range 3.3V => V _C = 1.65 ± 1.50V 5.0V => V _C = 2.50 ± 2.00V	± ppm	± 50 ~ ± 150 minimum ± 50 ~ ± 200 minimum			Refer to Ordering Information
Linearity	%			10	
Duty cycle	%	40	50	60	
Rise & Fall time	ns			10	From 10% V _{CC} to 90% V _{CC}
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.

Note 2: QEV4 is fully RoHS compliant.

Table 1 : Input Current

Frequency range (MHz)	V _{CC} =5V CI=15 pF	V _{CC} =3.3V CI=15pF
1.000 to 10.999	20 mA	10 mA
20.00 to 39.999	40 mA	30 mA
40.00 to 99.999	60 mA	50 mA
100.0 to 160.00	90 mA	80 mA

QEV4

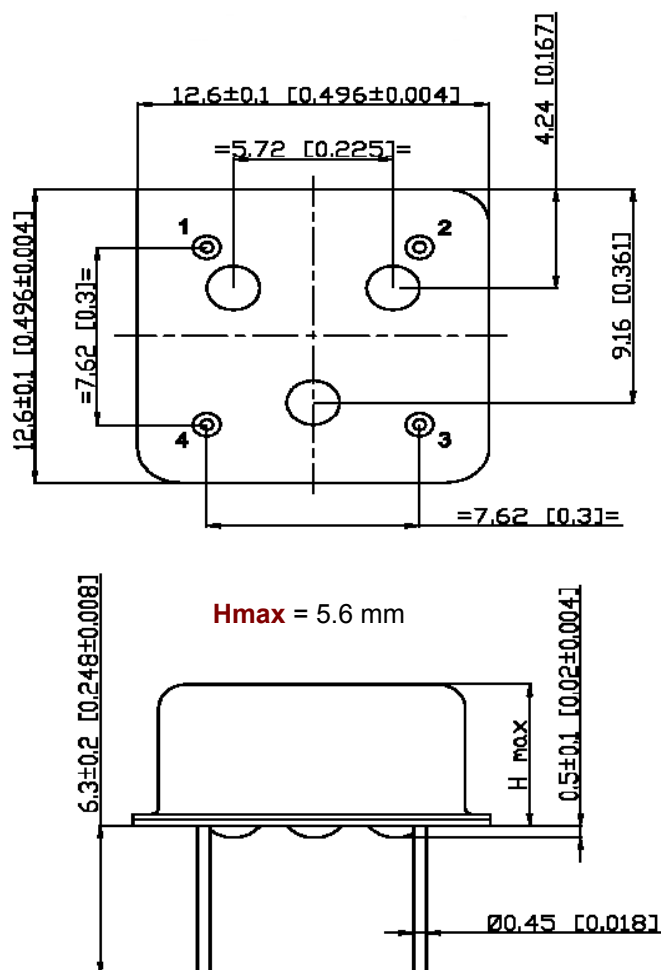
DIL 8 Pin Half Size VCXO – Communications Equipment Application

Specification (rev-C)

June 14th, 2006

Mechanical Characteristics

BOTTOM VIEW



Pin connections

#1	Voltage Control
#2	Ground
#3	Output
#4	+Vcc

Marking

Line 1	Temex part number
Line 2	Frequency in MHz (6 digits)
Line 3	Date code (YYWW) – Manufacturing code

Example for QEV4KH 100LQ25 / 27.000MHz

- ⇒ Line 1 : QEV4KH100LQ25
- ⇒ Line 2 : 27.000MHz
- ⇒ Line 3 : 0624-G

Packaging : Antistatic Tube (40pcs/tube)

Ordering Information

Part numbering system					
QEV4	KH	100	LQ	25	27.000MHZ
↓	↓	↓	↓	↓	↓
Package type	Supply Voltage	Pulling Range	Operating temperature range	Frequency stability	Nominal Frequency (MHz)
DIL Package QEV4 : 8 Pin Half Size	KH : + 5.0V BH : +3.3V	50 : ±50ppm 75 : ±75ppm 100 : ±100ppm 150 : ±150ppm 200 : ±200ppm	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 the nominal frequency