# LEADED TCXOs

# IQTCXO-250, -251, -252

#### **ISSUE 7; 14 OCTOBER 2004**

#### **Delivery Options**

Please contact our sales office for current leadtimes

#### Description

 IQTCXO-250, -251, -252 are temperature compensated crystal oscillators (TCXOs), providing a high degree of frequency stability over a wide temperature range.

#### Waveform

- Clipped Sine 1V pk pk min
- Square HCMOS
- Clipped Sine 0.7V pk pk min

#### **Package Outline**

■ 14 pin DIL compatible enclosure with internal trimmer

#### Ageing

■ ±1ppm typical first year

#### **Frequency Adjustment**

■ ±3ppm minimum internal trimmer adjustment

#### **Storage Temperature Range**

■ -40 to 85°C

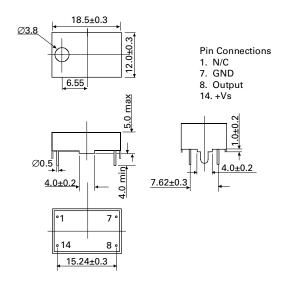
#### Marking

- Model number
- Frequency Stability Code/Operating Temperature Code
- Frequency
- Date Code (Year/Week)

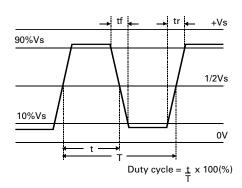
#### **Minimum Order Information Required**

- Frequency + Model Number + Frequency Stability
  - + Operating Temperature

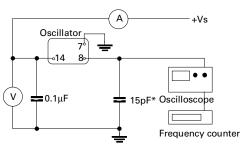
#### Outline in mm



#### **Output Waveform - HCMOS**



#### **Test Circuit - HCMOS**



\*Inclusive of jigging & equipment capacitance

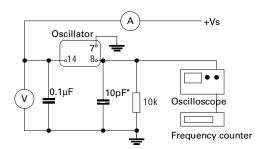
#### Electrical Specifications - maximum limiting values when measured in test circuit

Frequency Range	Supply Voltage	Supply Current	Output Waveform	Output	Duty Cycle	Model Number
3.20 to 40.0MHz	5V±0.25V	5mA	Clipped Sine	1Vpk-pk min	_	IQTCXO-250
3.20 to 40.0MHz	5V±0.25V	20mA	Square	HCMOS	40/60%	IQTCXO-251
3.20 to 40.0MHz	3V±0.15V	3mA	Clipped Sine	0.7Vpk-pk min	_	IQTCXO-252

## Frequency Stabilities Available Over Operating Temperature Ranges

Operating	Frequency Stabilities Vs Operating Temperature Range						
Frequency Range	±1.5ppm ±2.0ppm		±2.5ppm	±5.0ppm			
0 to 50°C	Code CP	Code GP	Code HP	Code KP			
-10 to 60°C	_	Code GR	Code HR	Code KR			
-20 to 70°C	_	_	Code HS	Code KS			
-30 to 75°C	_	_	Code HU	Code KU			
-40 to 85°C	_	_	_	Code KX			
Ordering Example Frequency		24.0MHz	Ι <u>ΩΤ</u> (ΧΟ-250 HR				
Model number ———							
Frequency Stability Vs 0	perating Temperature Code —						

## **Test Circuit - Clipped Sine**



<sup>\*</sup>Inclusive of jigging & equipment capacitance