

TC23-5

TEMPERATURE COMPENSATED CRYSTAL OSCILLATOR (TCXO)

The TC23-5 series provides a range of high frequency, temperature compensated crystal oscillators, packaged in a robust, high reliability enclosure. The outputs are matched directly into 50Ω and the series provides first class performance and accuracy with the option of voltage control or mechanical adjustment.



ADVANTAGES

- † Through Hole
- † 50Ω Termination
- † Hermetic Package
- † 400MHz Operating Frequency

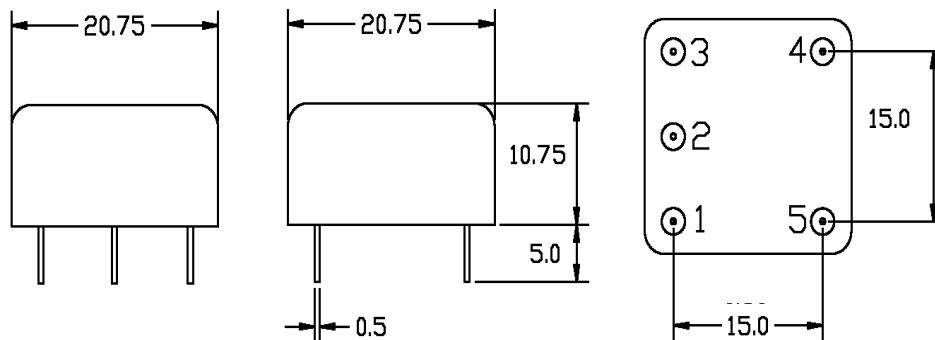
APPLICATIONS

- † Telecommunications
- † Base Stations
- † Test Systems
- † Instrumentation

ELECTRICAL PERFORMANCE (Ta=25°C, RL = 50Ω and Vcc = +5.0V)

PARAMETER	MINIMUM	MAXIMUM	UNITS
NOMINAL FREQUENCY (Fo)	20	400	MHz
CALIBRATION TOLERANCE	-1.0	+1.0	ppm
FREQUENCY STABILITY			ppm
Over Temperature Range (See Note 2)	-1.0	+1.0	
Ageing (per year at +25°C)	-1.0	+1.0	
Over Supply Voltage Variation (Vcc = +5.0V ±5.0%)	-0.3	+0.3	
OPERATING TEMPERATURE RANGE (See Note 2)	0	+50	°C
STORAGE TEMPERATURE RANGE	-40	+85	°C
SUPPLY VOLTAGE (Vcc) (See Note 2)	+4.75	+5.25	V
SUPPLY CURRENT (Dependant upon nominal frequency)	10	30	mA
OUTPUT WAVEFORM A.C. COUPLED SINEWAVE			
Amplitude	0	+5	dBm
Harmonic Distortion		-15	dBc
Sub-harmonic Distortion		-30	dBc
Spurious		-65	dBc
FREQUENCY ADJUSTMENT (Internal trimmer) (Order Code TC23-5T)	±2.0		ppm
VOLTAGE CONTROL +2.5V ±2.0V (Order Code TC23-5V)	±5		ppm

Parameter	Standard Observed
Mechanical Shock	MIL-STD-202 Method 213, Condition C
Vibration	MIL-STD-202 Method 201, 204, and 214
Solderability	IPC/EIA-STD-002A



- Pin Connections
- 1 Vcc
 - 2 Output
 - 3 Ground
 - 4 N/C or Vcont.
 - 5 N/C

- NOTES**
- 1) To order, state part number, options and nominal frequency e.g. TC23-5T 100.000MHz
 - 2) Other temperature ranges, stabilities and supply voltages are readily available upon request.
 - 3) Other specifications available upon request.

Precision Devices INC. – 8840N, Greenview Drive, Middleton WI 53562, Tel- 1-800-274-XTAL, Fax- 1-608-831-3343,
 www.pdixtal.com Outside US Phone- 608-381-4445, E-mail- sales@pdixtal.com
 PD (HK) Ltd. – Tel- (852)-2367-3626, Fax- (852)-2646-3122, E-mail- sales@pdixtal.com.hk
 PD (UK) Ltd. – Tel- +44 (0)1223 834444, Fax- +44(0)1223 834589, E-mail- sales@pdixtal.co.uk