

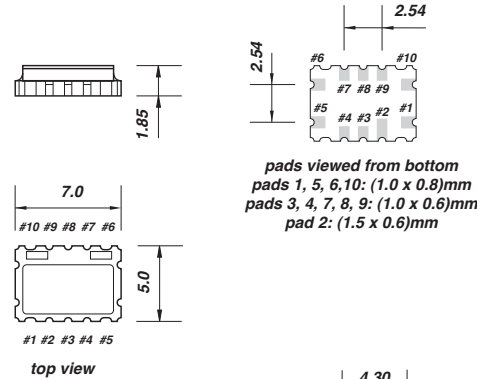
Stratum 3 compliant voltage controlled temperature compensated TCXO. A high quality, smd crystal oscillator manufactured over the frequency range of 5MHz to 26MHz.

Developed for miniature applications in Base Stations, and Stratum 3 qualified systems.  $\pm 4.6$ ppm total tolerance including 20 years ageing.

Total tolerance includes ageing, load variation and supply voltage variation, calibration tolerance and tolerance over temperature range, shock and vibration.

CMOS or clipped sine wave output, supplied on tape and reel; 1000 or 3000 pieces per reel.

**Dimensions(mm)**



- pad connections:
- # 1  $V_c$ :VCTCXO
  - N/C TCXO
  - # 2 N/C
  - # 3 N/C
  - # 4 N/C
  - # 5 ground
  - # 6 output
  - # 7 N/C
  - # 8 N/C
  - # 9 tri-state control
  - # 10  $V_{DD}$

**Electrical specification:**

	5.0Vd.c.		3.3Vd.c.		
	min.	max.	min.	max.	
supply voltage $\pm 5\%$	4.75	5.25	3.13	3.465	Vd.c.
frequency range	(5.0 ~ 26)MHz				MHz
standard frequencies	8.192, 10, 12.80, 16.384, 19.2, 19.44, 20, 25, 26				MHz
frequency tolerance	$\pm 2$				ppm
overall frequency stability	-	$\pm 4.6$	-	$\pm 4.6$	ppm
vs temperature range (-20 +70) $^{\circ}$ C	-	$\pm 0.28$	-	$\pm 0.28$	ppm
vs temperature range (-40 +85) $^{\circ}$ C	-	$\pm 0.37$	-	$\pm 0.37$	ppm
vs supply voltage $\pm 5\%$	-	$\pm 0.30$	-	$\pm 0.30$	ppm
vs load $\pm 10\%$	-	$\pm 0.10$	-	$\pm 0.10$	ppm
vs ageing over 24 hours	-	$\pm 0.02$	-	$\pm 0.02$	ppm
vs 20 years ageing	-	$\pm 2.5$	-	$\pm 2.5$	ppm
supply current CMOS o/p	-	6	-	6	mA
supply current clipped sine wave o/p	-	3.5	-	3.5	mA
CMOS o/p high logic 1	$90\% V_{DD}$		$90\% V_{DD}$		V
CMOS o/p low logic 0		$10\% V_{DD}$		$10\% V_{DD}$	V
duty cycle CMOS	45	55	45	55	%
output level clipped sine wave o/p	0.8	-	0.8	-	Vp-p
load CMOS	15pF		15pF		
load clipped sine wave	10k $\Omega$ //10pF		10k $\Omega$ //10pF		
$V_c$ control voltage range	0.5	2.5	0.5	2.5	V
pulling range	$\pm 5$	-	$\pm 5$	-	ppm
$V_c$ input impedance TCVCXO	100	-	100	-	k $\Omega$
phase noise @12.80MHz +100Hz	-120		-120		dBc/Hz
phase noise @12.80MHz +1kHz	-140		-140		dBc/Hz
phase noise @12.80MHz +10kHz	-148		-148		dBc/Hz
start up time	-	2	-	2	milli sec.
tri-state: active o/p	$0.7V_{DD}$	-	$0.7V_{DD}$	-	V
tri-state: high impedance o/p	-	$0.3V_{DD}$	-	$0.3V_{DD}$	V
storage temperature range	(-55 +125) $^{\circ}$ C				$^{\circ}$ C