

TC26-3

S.M.D. TEMPERATURE COMPENSATED CRYSTAL OSCILLATOR (TCXO)

The TC26-3 series provides a range of temperature compensated crystal oscillators operating at +3.3V supply with either HCMOS or clipped sinewave outputs. The optional voltage control feature and flexible design makes this range of TCXO's an ideal choice for existing and future applications where reliability, cost and performance are critical factors.



ADVANTAGES

- † Surface Mount
- † Extended Temperature Range
- † Optional Output and Adjust Method.
- † Wide Operating Frequency Range

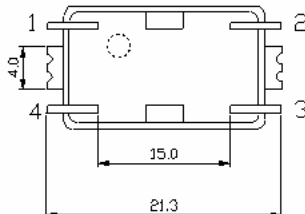
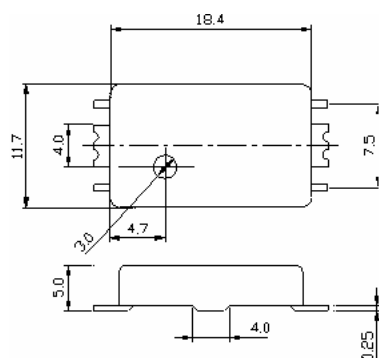
APPLICATIONS

- † Telecommunications
- † Portable Instrumentation
- † Mobile Communications.
- † Global Positioning Systems (GPS)

ELECTRICAL PERFORMANCE (Ta=25°C, CL = 10k Ω /10pF and Vcc = +3.3V)

PARAMETER	MINIMUM	MAXIMUM	UNITS
NOMINAL FREQUENCY (Fo)	8.0	100	MHz
CALIBRATION TOLERANCE	-1.0	+1.0	ppm
FREQUENCY STABILITY			ppm
Over Temperature Range (See Note 2)	-2.5	+2.5	
Ageing (per year at +25°C)	-1.0	+1.0	
Over Supply Voltage Variation (Vcc = +3.3V $\pm$ 5.0%)	-0.3	+0.3	
OPERATING TEMPERATURE RANGE (See Note 2)	-40	+85	°C
STORAGE TEMPERATURE RANGE	-55	+105	°C
SUPPLY VOLTAGE (Vcc) (See Note 2)	+3.135	+3.465	V
SUPPLY CURRENT (Dependant upon nominal frequency)	2.0	15.0	mA
OUTPUT WAVEFORM HCMOS/TTL (Order code TC26-3A)			
Logic Levels	0.1Vcc	0.9Vcc	V
Duty Cycle (@ Vcc/2)	40	60	%
Fall and rise times	3	10	ns
OUTPUT WAVEFORM Clipped sinewave (Order code TC26-3B)			V
Peak to Peak amplitude	0.7		
FREQUENCY ADJUSTMENT (Internal trimmer)	$\pm$ 3		ppm
VOLTAGE CONTROL +1.65V $\pm$ 1.5V (Add suffix V to order code)	$\pm$ 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	CONNECTION
1	N/C or Vcont.
2	GND
3	OUTPUT
4	VCC

- NOTES**
- 1) To order, state part number, options and nominal frequency e.g. TC26-3AV 10.000MHz
 - 2) Other temperature ranges, stabilities and supply voltages are readily available upon request.
 - 3) Other specifications available upon request

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