

The VC29-3 series provides a range of voltage controlled crystal oscillators operating at +3.3V supply with a HCMOS/TTL compatible output. The control voltage range of ± 100 ppm minimum ensures an absolute pull range of at least ± 50 ppm with a typical linearity of $\pm 3\%$.



ADVANTAGES

- 4Surface Mount Package
- 4Cost Effective
- 4Wide Operating Frequency
- 4Wide Frequency Adjustment Range

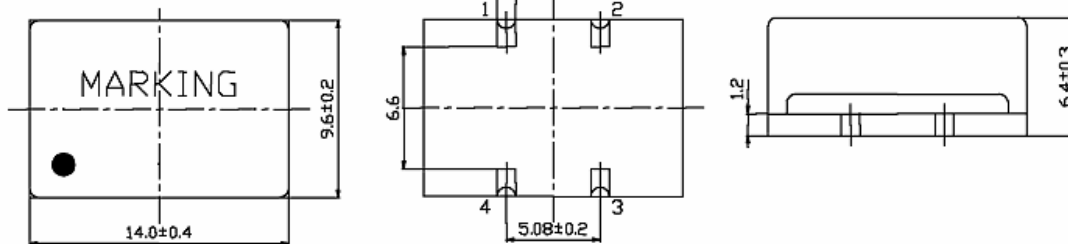
APPLICATIONS

- 4Telecommunications
- 4Portable Instrumentation
- 4Synthesizers.
- 4Phase Locked Loops.

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

PARAMETER	MINIMUM	MAXIMUM	UNITS
NOMINAL FREQUENCY (Fo)	4.0	100	MHz
CALIBRATION TOLERANCE (With +1.65V on pin 1)	-10	+10	ppm
FREQUENCY STABILITY			ppm
Over Temperature Range (See Note 2)	-25	+25	
Ageing (per year at +25°C)	-2.0	+2.0	
Over Supply Voltage Variation (Vcc = +3.3V $\pm 5.0\%$)	-5.0	+5.0	
OPERATING TEMPERATURE RANGE (See Note 2)	-20	+70	°C
STORAGE TEMPERATURE RANGE	-40	+85	°C
SUPPLY VOLTAGE (Vcc) (See Note 2)	+3.135	+3.465	V
SUPPLY CURRENT (Dependant upon nominal frequency)	5.0	25.0	mA
OUTPUT WAVEFORM HCMOS/TTL			
Logic Levels	0.1Vcc	0.9Vcc	V
Duty Cycle (@ Vcc/2)	40	60	%
Fall and rise times	3	10	ns
Voltage Control Range +1.65V ± 1.5 V (Positive polarity)	± 100	± 200	ppm
Linearity		± 10	%
Input Impedance	50,000		Ω
Modulation Bandwidth	10		kHz

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 = Voltage Control
 2 = Ground
 3 = Output
 4 = Vcc

NOTES 1) To order, state part number and nominal frequency e.g. VC29-3 32.768MHz
 2) Other temperature ranges, stabilities and supply voltages are readily available upon request.

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