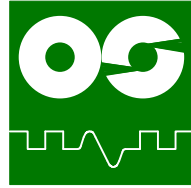


OnSpec Oscillators



OSO-TCCT-Range OSO-TCAT-Range

Digitally Temperature Compensated
Crystal Oscillators

Digitally compensated crystal oscillators available
with a variety of temperature ranges and stabilities.

Frequency range:

HC MOS 1Hz - 20 MHz

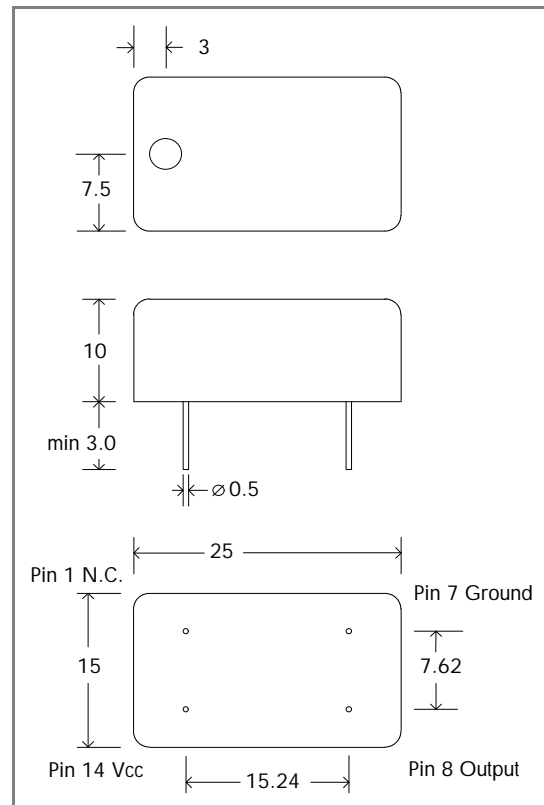
AHC MOS 20 - 80 MHz

* 3.3 V Supply also available

During operation, the oscillator frequency is adjusted
to cancel out the change due to frequency. A
microcontroller is used to perform the elaborate
control algorithm, which is individually calibrated to
each oscillator.

Fitted with an adjustment facility to compensate for
ageing.

Specification	OSO-TCCT-Range	OSO-TCAT-Range
Output	HC MOS	AHC MOS
Frequency	1 Hz - 20 MHz	20 - 80 MHz
Rise & Fall times (under 10 MHz)	5 ns max (10 ns max)	3 ns max
V _{OH} min	0.9 V _{CC}	0.9 V _{CC}
V _{OL} max	0.1 V _{CC}	0.1 V _{CC}
Symmetry	55/45..45/55%	55/45..45/55%
* Supply voltage (optionally)	5 V ± 5% (3.3 V ± 5%)	5 V ± 5% (3.3 V ± 5%)
Supply Current	10mA max	30mA max
Temperature range & stability	See Table	See Table
Adjustment range	± 10 ppm min	± 5 ppm min



	0°C - 50°C	-10°C - 60°C	-20°C - 70°C	Difficulty and Cost of Manufacture	
±0.3 ppm	OSO-TC?T-B0.3	OSO-TC?T-C0.3		Easier	☐
±1 ppm	OSO-TC?T-B001	OSO-TC?T-C001	OSO-TC?T-D001	Moderate	◐
±2 ppm	OSO-TC?T-B002	OSO-TC?T-C002	OSO-TC?T-D002	More difficult	◑
±3 ppm	OSO-TC?T-B003	OSO-TC?T-C003	OSO-TC?T-D003		◒

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