





### Oven Controlled Crystal Oscillators

RoHS Compliant

Series	Features	Stability	Package Size
 <b>OHM4</b>	10 MHz–120 MHz ♦ <u>CMOS</u> ♦ 3.3 V or 5.0 V ♦ High Accuracy ♦ EFC ±15.0 ppm min available.	$\pm 25\text{ppb}$ over 0° to +60°C $\pm 250\text{ppb}$ over -40° to +85°C	Through Hole DIP/DIL
 <b>OHM4 STRATUM 3</b>	10 MHz–40 MHz ♦ <u>CMOS</u> ♦ 3.3 V or 5.0 V ♦ High Accuracy ♦ EFC ±15.0 ppm min available	$\pm 4.6\text{ ppm}$ over all conditions for 15 years	Through Hole DIP/DIL
 <b>OSM4</b>	10 MHz–120 MHz ♦ <u>Sine Wave</u> ♦ 3.3 V or 5.0 V ♦ High Accuracy ♦ EFC ±15.0 ppm min available.	$\pm 0.5\text{ ppm}$ over -30° to +85°C	Through Hole DIP/DIL
<b>Specialized OCXO's</b> 	10 MHz–150 MHz ♦ Engineered to customer specifications ♦ Double Ovens ♦ MIL and IEC standards ♦ Stratum III and IIIe ♦ Ultra low phase noise ♦ Sine Wave, CMOS, PECL, and LVDS outputs ♦ Oven Alarms  See Specialized OCXO guide	Stabilities available to $\pm 5.0\text{ ppb}$ over -40° to +85°C	Industry standard and custom Packages  Vibration isolated packages




#### APPLICATIONS

#### COMMON FREQUENCIES (MHz)

♦ Wireless Communication	10.0	20
♦ Base stations	12.8	20.48
♦ Handsets	13	25
♦ Point to point radios	16	26
♦ Broadband access	16.8	27
♦ GPS	19.2	38.4
♦ Test equipment	19.44	40

### OCXO equivalent Crystal Oscillators

RoHS Compliant

Series	Features	Stability	Package Size
 <p><b>OeD4</b></p>	10 MHz–40 MHz ♦ <u>CMOS</u> ♦ 2.5 V or 3.3 V ♦ EFC of ±5.0 ppm min available	$\pm 50\text{ppb}$ over 0° to +70°C $\pm 100\text{ppb}$ over -40° to +85°C $\pm 4.6\text{ ppm}$ over all conditions for 15 years	3.2 x 5.0 mm Ceramic LCC
 <p><b>OeA4</b></p>	10 MHz–40 MHz ♦ <u>CMOS</u> ♦ 2.5 V or 3.3 V ♦ EFC of ±5.0 ppm min available	$\pm 50\text{ppb}$ over 0° to +70°C $\pm 100\text{ppb}$ over -40° to +85°C $\pm 4.6\text{ ppm}$ over all conditions for 15 years	5.0 x 7.0 mm Ceramic LCC
 <p><b>OeM4</b></p>	10 MHz–40 MHz ♦ <u>CMOS</u> ♦ 2.5 V, 3.3 V, 5.0 V or 12 V ♦ EFC of ±5.0 ppm min available.	$\pm 50\text{ppb}$ over 0° to +70°C $\pm 100\text{ppb}$ over -40° to +85°C $\pm 4.6\text{ ppm}$ over all conditions for 15 years	Through Hole DIP/DIL Equivalent to OHM4

### Comparison of the Pletronics OCXO and OeXO Performance

Specification	OHM4 DIP/DIL OCXO	OeA4, OeD4, OeM4	Remark
Stability -10°C to 70°C	$\pm 0.05$	$\pm 0.05$	
Stability -40°C to 85°C	$\pm 0.10$	$\pm 0.10$	
Aging 1 <sup>st</sup> year 10 years	$\pm 0.3$ $\pm 2.5$	$\pm 0.3$ $\pm 2.5$	
Phase Noise 10Hz 100Hz 1KHz 10KHz	-100 -130 -140 -145	-100 -120 -144 -151	dBc/Hz
Warm up time to reach the specified frequency	120 seconds at 25°C	<1 second at any temperature	
Power Supply Current	170 mA	5 mA	at -20°C
	110 mA	5 mA	at 30°C
	250 mA	5 mA	at turn on and up to 30 seconds

#### APPLICATIONS

#### COMMON FREQUENCIES (MHz)

Excellent solution for battery powered devices	10.0	20
	13.0	26
	19.2	