CARDINAL COMPONENTS

# OSCILLATORS - Short Form Guide

| | | N | DIP | DIP | DIP | DIP | | | Dimmensions | | | Freq. | Operating | Input | Rise/Fall | Start Up | Output | factory |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Cardinal | E | 14 pin | 14 pin | 8 Pin | 8 Pin | Pkg | Pkg | | | | Range | Temperature | Voltage | Time | Time | Load | lead-time |
| | Series | W | | Gull | | Gull | Cer | Plas | L | W | H | MHZ | Range Topr | | Max | ** | * | weeks |
| | | | TH | SMD | TH | SMD | SMD | | mm | mm | mm | f * | C,I,M *** | * | * | | | |
| Std Osc | C11 | | X | X | | | | | 20.8 | 13.2 | 5.08 | 1 ~ 100 | C,I | 5 | 4 ns | 15 ms | TTL | 5 to 7 |
| Std Osc | CTH11 | | X | X | X | X | | | 20.8 | 13.2 | 5.08 | 1 ~ 70 | C,I,M | 5 | 6 ns | 10 ms | CMOS & TTL | 5 to 7 |
| Std Osc | CH11 | | X | X | X | X | | | 20.8 | 13.2 | 5.08 | 1.8 ~ 100 | C,I | 5 | 7 ns | 10 ms | CMOS & TTL | 5 to 7 |
| Std Osc | CPO | | | | | | | X | 14 | 9.8 | 4.7 | 1.5 ~ 70 | C,I | 5 | 7 ns | 10 ms | CMOS & TTL | 5 to 7 |
| Std Osc | CCO65S | | | | | | X | | 7.5 | 5.1 | 1.7 | 1.8432 ~ 70 | C,I,M | 5 | 10 ns | 10 ms | CMOS & TTL | 5 to 7 |
| Std Osc | CC065H | | | | | | X | | 7.5 | 5.1 | 1.7 | 1.8432 ~ 80 | C,I,M | 5 | 7 ns | 10 ms | CMOS & TTL | 5 to 7 |
| Std Osc | CC065L | | | | | | X | | 7.5 | 5.1 | 1.7 | 1.8432 ~ 80 | C,I,M | 3.3 | 7 ns | 5 ms | CMOS & TTL | 5 to 7 |
| Std Osc | CC85 | | | | | | X | | 7 | 5 | 1.7 | 80 ~ 125 | C,I,M | 3.3, 5 | 3 ns | 10 ms | CMOS & TTL | 5 to 7 |
| Std Osc | CC532 | | | | | | X | | 5 | 3.2 | 1 | 2.5 ~ 67 | C,I,M | 3 | 10 ns | 10 ms | CMOS & TTL | 12 to 14 |
| Std Osc | CC137 | | | | | | X | | 5 | 3.2 | 1 | 1.5 ~ 100 | C | 3.3,5 | 10 ns | 10 ms | CMOS & TTL | 6 to 8 |
| Std Osc | CC155 | * | X | X | X | X | X | X | All package options | | | 155.52 | C,I | 3.3,5 | 2.4 ns | 10 ms | CMOS & TTL | consult factory |
| | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | Dimmensions | | | Freq. | Operating | Input | Trim | Max | Output | factory |
| | Cardinal | | | | | | | | | | | Range | Temperature | Voltage | Range | Aging | Load | lead-time |
| | Series | | | | | | | | L | W | H | MHZ | Range Topr | | Max | 25 degress C | * | weeks |
| | | | | | | | | | mm | mm | mm | f * | C,I,M *** | * | | | | |
| TCXO | CTCX | | TH-3 leads | | | | | | 18.3 | 11.7 | 4.7 | 4 ~ 25 | C,I,M | 5 | 3 PPM | 1 PPM/Yr | Clipped Sine/Parallel | 8 to 10 |
| TCXO | CTX4 | | SMD | | | | | | 11.4 | 9.6 | 4 | 12 ~ 19.680 | C,I | 5,4,3.7,3.3,3 | 3 PPM | 1 PPM/Yr | Clipped Sine/Parallel | 8 to 10 |
| TCXO | CTX6 | | SMD | | | | | | 11.4 | 9.6 | 4 | 12 ~ 19.680 | C,I | 5 | 3 PPM | 1 PPM/Yr | Clipped Sine/Parallel | 8 to 10 |
| TCXO | CTX8 | | SMD | | | | | | 18.3 | 11.7 | 4.7 | 9.6 ~ 20 | C,I | 5 | 3 PPM | 1 PPM/Yr | Clipped Sine/Parallel | 8 to 10 |
| TCXO | CT4S | | SMD | | | | | | 11.4 | 9.6 | 2.5 | 9.6 ~ 32 | C,I | 5, 3. | 3 PPM | 1 PPM/Yr | Clipped Sine/Parallel | 8 to 10 |
| TCXO | CC124 | | TH | | | | | | 18.3 | 11.7 | 4.7 | 1 ~ 35 | C,I | 5, 3. | 3 PPM | 1 PPM/Yr | CMOS & TTL | 8 to 10 |
| TCXO | CC128 | | SMD | | | | | | 11.4 | 9.6 | 2.5 | 1 ~ 35 | C,I | 5 | 3 PPM | 1 PPM/Yr | CMOS & TTL | 8 to 10 |
| TCXO | CC131 | | SMD | | | | | | 18.3 | 11.7 | 4.5 | 1 ~ 35 | C,I | 5 | 3 PPM | 1 PPM/Yr | Clipped Sine/Parallel | 8 to 10 |
| TCXO | CTX7 | * | SMD | | | | | | 7 | 5 | 1.8 | 8 ~ 36 | C,I | 5, 3.3 | 3 PPM | 1 PPM/Yr | Clipped Sine/Parallel | 8 to 10 |
| TCXO | CC132 | | SMD | | | | | | 18.3 | 11.7 | 4.5 | 1 ~ 35 | C,I | 5,4,3.7,3.3,3 | 3 PPM | 1 PPM/Yr | CMOS & TTL | 8 to 10 |
| | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | Dimmensions | | | Freq. | Operating | Input | Stability | Frequency | Output | factory |
| | Cardinal | | | | | | | | L | W | H | Range | Temperature | Voltage | Range | Tuning | Load | lead-time |
| | Series | | | | | | | | mm | mm | mm | MHZ | Range Topr | | Options | Range | * | weeks |
| | | | | | | | | | | | | f * | C,I,M *** | * | | | | |
| VCXO | CV01 | | TH | | | | | | 20.8 | 13.2 | 5.08 | 1 ~ 150 | C,I,M | 5, 3.3 | 25-100 PPM | 350 PPM | TTL/HCMOS | 8 to 10 |
| VCXO | CV04 | | TH | | | | | | 13.2 | 13.2 | 5.6 | 1 ~ 40 | C,I,M | 5, 3.3 | 25-100 PPM | 350 PPM | TTL/HCMOS | 8 to 10 |
| VCXO | CC121 | | SMD | | | | | | 9.6 | 11.4 | 3.9 | 8 ~ 120 | C | 5, 3.3 | 20-50 PPM | 50 PPM | TTL/HCMOS | 8 to 10 |
| VCXO | CC165 | | SMD | | | | | | 13.2 | 9.6 | 6.4 | 8 ~ 30 | C | 5, 3.3 | 50 PPM | 100 PPM | TTL/HCMOS | 8 to 10 |
| VCXO | CC127 | | SMD | | | | | | 9.6 | 11.4 | 2.5 | 9.6 ~ 32 | C | 5 | 10-50 PPM | 50 PPM | TTL/HCMOS | 8 to 10 |
| VCXO | CC154 | | SMD | | | | | | 7 | 5 | 1.8 | 8 ~ 36 | C,I,M | 5, 3.3 | 50 PPM | 100 PPM | HCMOS | 8 to 10 |
| | | | | | | | | | | | | | | | | | | |
| VCTCXO | CC129 | | SMD | | | | | | 9.6 | 11.4 | 3.9 | 1 ~ 35 | C,I | 5 | 1.5 ~ 5 PPM | 5 to10 PPM | TTL/CMOS | 8 to 10 |
| VCTCXO | CC123 | | TH | | | | | | 18.3 | 11.7 | 4.7 | 1 ~ 35 | C,I | 5 | 1.5 ~ 5 PPM | 5 to10 PPM | TTL/CMOS | 8 to 10 |
| VCTCXO | CC133 | | SMD | | | | | | 18.3 | 11.7 | 4.5 | 1 ~ 35 | C,I | 5 | 1.5 ~ 5 PPM | 5 to10 PPM | Clipped Sine/Parallel | 8 to 10 |
| VCTCXO | CC134 | | SMD | | | | | | 18.3 | 11.7 | 4.5 | 1 ~ 35 | C,I | 5 | 1.5 ~ 5 PPM | 5 to10 PPM | TTL/CMOS | 8 to 10 |
| VCTCXO | CC142 | | SMD | | | | | | 13.4 | 8.5 | 5 | 10 ~ 35 | C,I | 5, 3.3 | 1.5 ~ 5 PPM | 5 to10 PPM | Clipped Sine/Parallel | 8 to 10 |
| VCTCXO | CTX8V | | SMD | | | | | | 18.3 | 11.7 | 4.7 | 9.6 ~ 32 | C,I | 5 | 2.5 ~ 5 PPM | 8 to15 PPM | Clipped Sine/Parallel | 8 to 10 |

C = -10$^0$C to + 70$^0$C
I = -40$^0$C to + 85$^0$C
M= -55$^0$C to 125$^0$C

* Other selections available
** Varies depending upon frequency

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