



ECL/PECL COMPATIBLE CLOCK OSCILLATORS IN 14 PIN DIP - XO14E Series

FEATURES

- RoHS Compliant (Pb-Free), Frequency Range to 200.00 MHz, 10KH ECL Compatible
- Very Low Phase Jitter, Excellent Noise Margin
- Low Output Impedance, Available with Complimentary Output (Output2)
- Best Suited for ECL Logic Devices

SPECIFICATIONS

Frequency Range	30 MHz to 200 MHz
Input Voltage	PECL: Vcc = +5.0 VDC \pm 5%; for XO14EA and XO14EB LVPECL: Vcc = +3.3 VDC \pm 5%; for XO14EAL and XO14EBL ECL: Vee = -5.2 VDC \pm 5%; for XO14EC and XO14ED
Input Current	60 mA Maximum
Storage Temperature	-55°C to 125°C
Overall Frequency Stability	100 = \pm 100 ppm; 50 = \pm 50 ppm; 25 = \pm 25 ppm
Temperature Range	A = 0°C to 70°C; B = -40°C to 85°C; G = -10°C to 70°C
Standard Stability	100G = \pm 100 ppm / -10°C to 70°C
Duty Cycle (at 50% Vp-p)	0 = No tristate 60/40%; 2 = No tristate 55/45%
Output Load	5 ECL
Logic "1" / Logic "0" Level	PECL: +4.0V MIN / +3.42V MAX; LVPECL: +2.59V MIN / +1.55V MAX; ECL: -1.0V MIN / -1.6V MAX
Rise/Fall Time (Tr/Tf)	2 ns Maximum, measured between 20% to 80% Vp-p
Start-up time	10 ms Maximum
Phase Jitter (RMS, 1 Sigma)	1 ps Max for fj > 1kHz; 0.3 ps Typical for fj = 12KHz to 20MHz
Pin Connections □	XO14EA: Pin#1 - N/C; Pin#7 - GND (case); Pin#8 - Output1; Pin#14 - Vcc XO14EB: Pin#1 - Output2; Pin#7 - GND (case); Pin#8 - Output1; Pin#14 - Vcc XO14EC: Pin#1 - N/C; Pin#7 - Vee; Pin#8 - Output1; Pin#14 - GND (case) XO14ED: Pin#1 - Output2; Pin#7 - Vee; Pin#8 - Output1; Pin#14 - GND (case)
Typical Part Number	XO14EA(or B/C/D)-Frequency-Freq. Stability-Temperature Range-Duty cycle
P/N Example	XO14EAL-77M760-100G0: 20.8 x 13 x 8 mm 14-pin DIP metal package, 77.76 MHz PECL output, 3.3V supply voltage, \pm 100 ppm / -10°C to 70°C, Duty cycle: 60/40

OUTLINE DRAWING

