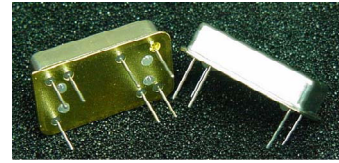


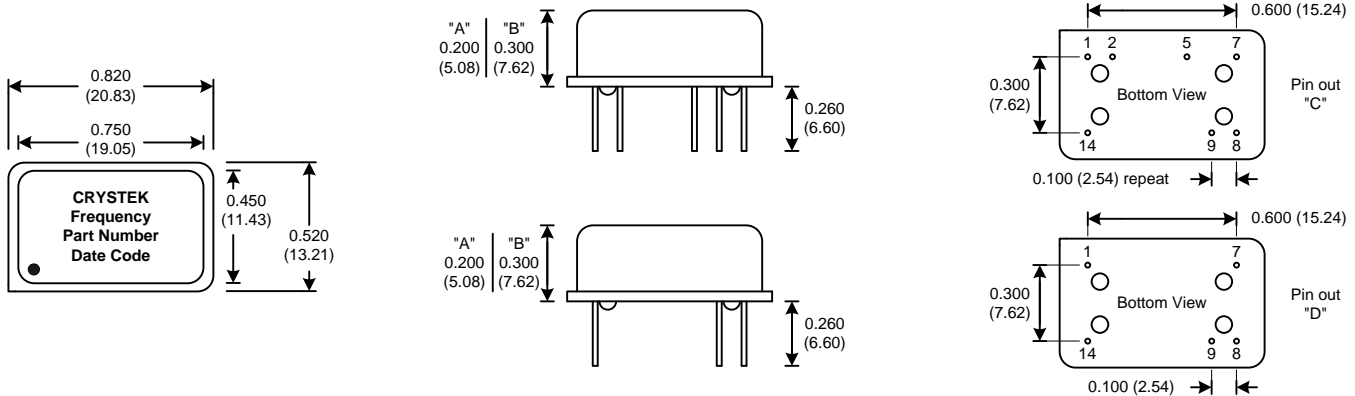
Differential LVPECL/PECL Voltage Controlled Crystal Oscillator



CVP-140 Model 14 Pin DIP, 3.3V LVPECL & 5V PECL

Frequency Range:	15 MHz to 175 MHz
Frequency Pulling:	(CVP-140) $\pm 50\text{ppm}$ Min, $\pm 100\text{ppm}$ Max (CVP-141) $\pm 75\text{ppm}$ Min, $\pm 150\text{ppm}$ Max (CVP-142) $\pm 100\text{ppm}$ Min, $\pm 200\text{ppm}$ Max (CVP-143) $\pm 200\text{ppm}$ Min, $\pm 200\text{ppm}$ Max
Frequency Stability:	$\pm 20\text{ppm}$ @ 0°C to 70°C
(inclusive of all conditions)	
Temperature Range:	0°C to 70°C
Storage:	-45°C to 90°C
Input Voltage:	5V $\pm 0.5\text{V}$ 3.3V $\pm 0.3\text{V}$
Control Voltage:	2.5V $\pm 2.0\text{V}$ 1.65V $\pm 1.65\text{V}$
Input Current:	88mA Typical
Output:	Differential PECL/LVPECL
Symmetry:	45/55% Max @ 50% Vdd
Rise/Fall Time:	350ps Max @ 20% to 80% Vdd
Linearity:	$\pm 10\%$ Max
Logic:	Terminated to Vdd-2V into 50 ohms Logic "0" "0" = Vcc-1.85V Min, Vcc-1.62V Max Logic "1" "1" = Vcc-1.02V Min, Vcc-0.81V Max
Disable Time	200ns Max
Start-up Time	1ms Typ., 2ms Max
Phase Jitter:	12kHz to 80MHz 0.5psec Typ., 1psec RMS Max
Aging:	$< 3\text{ppm}$ 1 st /yr, $< 1\text{ppm}$ every year thereafter

Designed to meet drop in replacement requirements for PECL/LVPECL applications. The CVP-140 Series supports three pullability configurations. Available in two 14 Pin DIP configurations. Standard can height is 0.300" with low profile 0.200" option available.



Pad	Connection	
1	Volt Cont.	Volt Cont.
2	N/C	
5	N/C	
7	GND	GND
8	OUT	OUT
9	COUT	COUT
14	Vdd	Vdd
Pin Option	"C"	"D"

Environmental Specifications:

Shock: 1000 Gs, 0.35 ms, 1/2 sine wave, 3 shocks in each plane
Vibration: 10 ~ 2,000 Hz of 06" d.a or 20 Gs, whichever is less
Humidity: Resistant to 85% R.H. at 85°C

Mechanical Specifications

Leak: In accordance with MIL-Std-883, Method 1014, Cond 1A
Pins: Kovar, with gold over nickel
Bend Test: Will withstand two bends of 90° from reference
Header: Steel with gold over nickel (package "C" only)
Case: Stainless steel
Marking: Epoxy ink or engraved
Resistance to Solvents: MIL-STD 202, Method 215

Crystek Part Number Guide

CVP - 14X - X - X - 155.520

#1 CVPL=3.3V, CVP=5V
 #2 Pull 14X 140=(50-100), 141=(75-150), 142=(100-200), 142=(200+)
 #3 Package Height (A) or ((B) Standard)
 #4 Pin out configuration (C) or (D)
 #5 Frequency in MHz: 3 or 6 decimal places

Example:
 CVP-141AC-155.520 = 5V, 45/55, 0/70°C, 20ppm, 50-100ppm Pullability, 0.200" Height, 7 pins, 155.520 MHz

Specifications subject to change without notice.

TD-030707 Rev. E