

7.0 mm x 5.0 mm XO

C85E series

Description:

The C85E Crystal Oscillator (XO) Series products provide a wide range of options in temperature stability, operating frequency range, and multiple supply voltages in a 7.0 x 5.0 mm ceramic package.



Features:

- Available in frequencies from 1.0 MHz to 165 MHz.
- Tri-state Enable/Disable
- Hermetically sealed ceramic SMD package
- TTL/HCMOS compatible
- RoHS-6/Leadfree compliant

Frequency Range, Operating Temperature, and Frequency Stability:

Frequency
1.000 to 165MHz

Operating Temperature	Product Code
-10 to +60C	A
0 to +70C	B
-20 to 70C	C
-40 to 85C	D

Freq. Stability	Product Code
+/- 25 ppm	A
+/- 50 ppm	B
+/- 75 ppm	C
+/-100ppm	D

***Frequency stability includes 25C tolerance, drift over temperature, change versus voltage and load, 20 year aging, shock and vibration

Aging: (typical at 20MHz after 30 days continuous operation)

Frequency	Timeframe	Aging	Product Code
20 MHz	1st Year	+/- 5.0ppm	N/A

Supply Voltage (Vs):

Power Supply (Vs)	1.8 Vdc +/-10%	2.5 Vdc +/-10%	3.3 Vdc +/-10%
Product Code	A	B	C

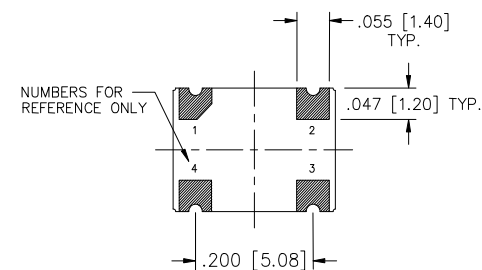
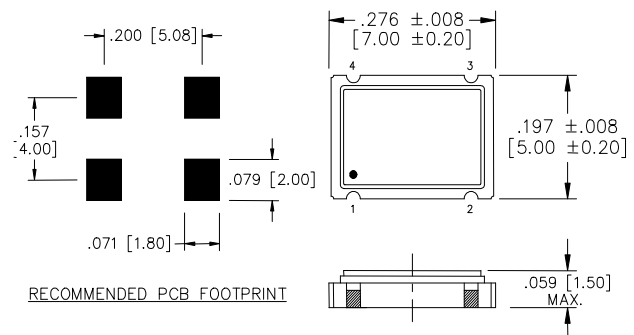
Supply Voltage Sensitivity (+/- 10%) : +/- 2 ppm max. frequency change

Current Consumption (I_{DD}):

Frequency Range (MHz)	I _{DD} (at 1.8 V)	I _{DD} (at 2.5V)	I _{DD} (at 3.3V)
	mA	mA	mA
1.000 to 23.999	10	12	15
24.000 to 49.999	12	15	20
50.000 to 69.999	15	20	30
70.000 to 132.999	25	30	45
133.000 to 165.000	35	40	55

Environmental:

Storage Temperature	-55 to +125 °C
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Output Waveform:

		Min	Typical	Max
Output Symmetry	At 50% V _{DD}	45%	50%	55%
Rise Time (nS)	Tr	3	5	10
Fall Time (nS)	Tf	3	5	10
Output Voltage	V _{OH}	90% V _{DD}		
Output Voltage	V _{OL}			10% V _{DD}
HCMOS load (pF)		14.85	15.00	15.15

Start-up Time: 5 mS max.

Tri-state function Pin 1:

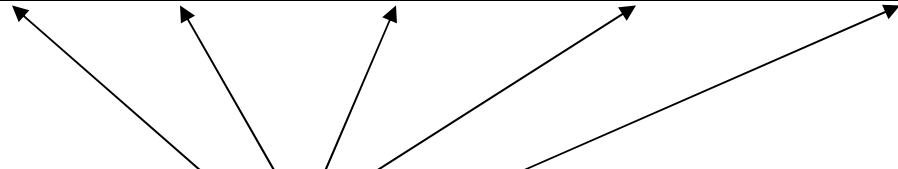
Pin 1 = logic high (0.7*V_{supply}) or open ; Output active at Pin 3

Pin 1 = logic low (0.3*V_{supply}) ; high impedance at pin 3 Output disabled

Ordering Options:

Product Family	Operating Temperature	Frequency Stability	Supply Voltage	Operating Frequency
C85E	A	A	A	XX.XXXX MHz
C85E	B	B	B	XX.XXXX MHz
C85E	C	C	C	XX.XXXX MHz
C85E	D	D		XX.XXXX MHz

C85E C A B 10.0000MHz
Part Number Build Example



RoHs compliant; -20 to 70C; +/- 25 ppm with a 2.5 volt supply, 10 MHz nominal operating frequency.

Note:

Consult Bliley sales for final package detail once electrical performance is defined.

***Not all combinations of operating frequency and supply voltage are available.**