

7.0 mm x 5.0 mm VCXO

V85F series

Description:

The V85F Voltage-controlled Crystal Oscillator (VCXO) Series products provide a wide range of options in frequency stability, operating temperature range, and multiple supply voltages in a 7.0 x 5.0 mm SMD package.



Features:

- Available in frequencies from 1.500 MHz to 200 MHz
- Tri-state Enable/Disable
- Hermetically sealed ceramic SMD package
- TTL/HCMOS compatible
- RoHS-6/Leadfree compliant

Frequency Range,

Frequency
1.5 to 200.0 MHz

Operating Temperature

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

Frequency Stability:

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

Frequency stability only refers to frequency drift over temperature.
 Frequency tolerance at 25C will be +/- 15 ppm max. at midrange control voltage.
 Frequency versus +/- 10% power supply variation will be: +/- 5 ppm max.
 Frequency versus +/- 10% load variation will be +/- 3 ppm max.
 Not all combinations of stability and temperature ranges available.

Aging: (typical at 156MHz after 30 days continuous operation)

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

Supply Voltage (Vs):

Power Supply (Vs)	3.3 Vdc +/-10%	5.0 Vdc +/-10%
Product Code	C	D

Frequency versus Voltage (Absolute Pull Range):

3.3 volt		5.0 volt	
0 to 3.3v on Pin 1	Product Code	0.5v to 4.5v on Pin1	Product Code
+/-100 ppm min	N/A	+/-100 ppm min	N/A

Current Consumption (I_{DD}):

	I _{DD} (at 3.3V)	I _{DD} (at 5.0V)
Frequency Range (MHz)	mA	mA
1.500 to 19.999	10	15
20.000 to 49.999	20	30
50.000 to 79.999	30	35
80.000to 159.999	40	N/A
160.000 to 200.000	50	N/A

****N/A means those operating frequencies not available at 5.0 volt supply**

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			10
Fall Time (nS)	Tf			10
Output Voltage	V _{OH}	90% V _{DD}		
	V _{OL}			10% V _{DD}

Output Load Choices:

Output Load (pF)	Product Code
15	A
50	B

Tri-state function(TS) Pin 2 or Pin 5:

Tri-state Function	Product Code
Pin 2 TS; Pin 5 N/C	A
Pin 2 N/C; Pin5 TS	B

Start-up Time: 10 mS max.

Ordering Options:

Product Family	Operating Temperature	Frequency Stability	Supply Voltage	Output Load	Tri-state Pin select	Operating Frequency
V85F	A	A	C	A	A	XXX.XXXXMHz
V85F	B	B	D	B	B	XXX.XXXXMHz
V85F	C	C				XXX.XXXXMHz
V85F	D					XXX.XXXXMHz

↑
V85F

↑
C

↑
A

↑
C

↑
A

↑
A

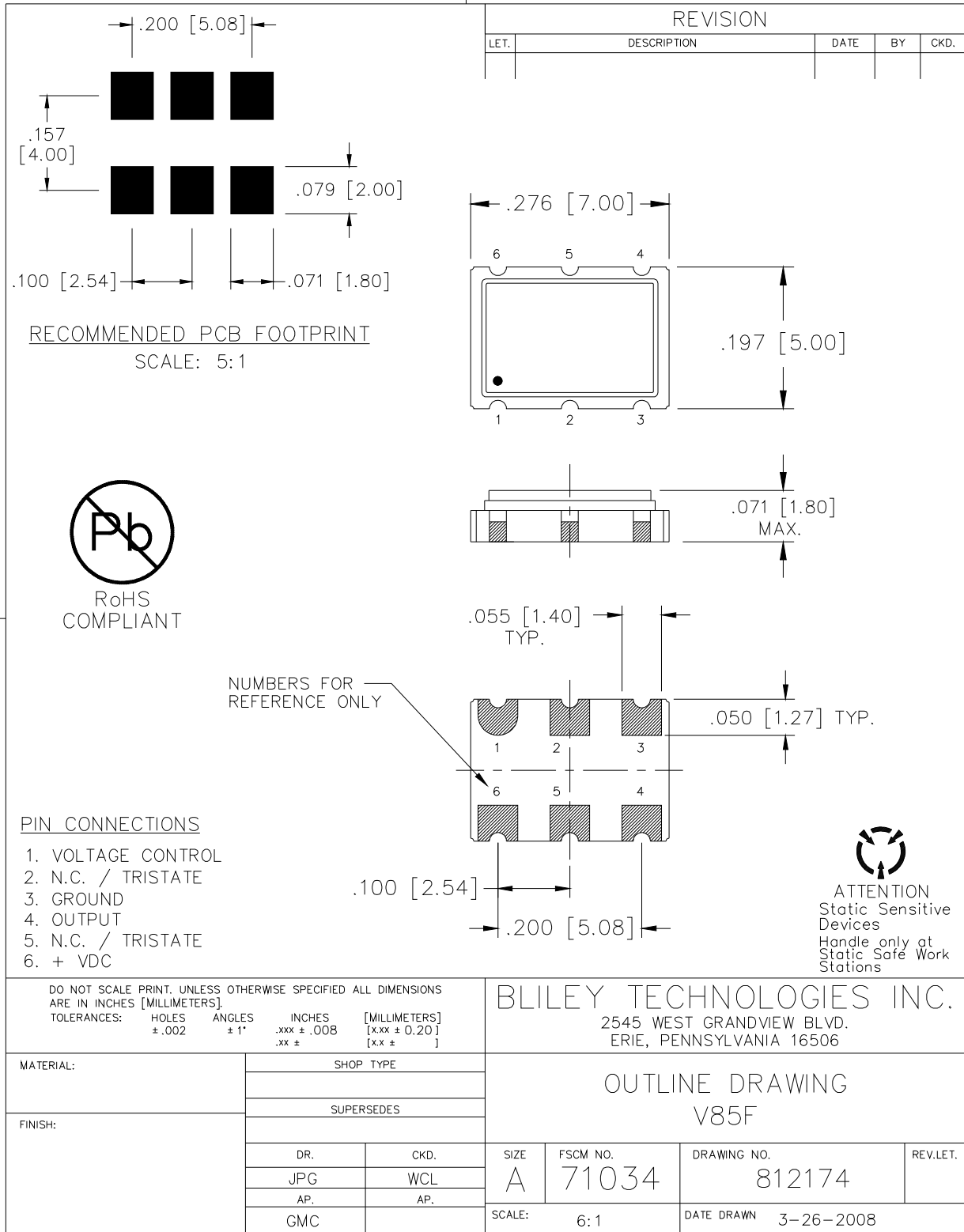
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10.0000MHz

Part Number Build Example

****Consult Bliley sales if other options required**

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

**RoHs compliant ; -20 to 70C ; +/- 25 ppm with a 3.3 volt supply;15 pF load; Pin 2 TS;
And 10 MHz nominal operating frequency.**



PE20D-1