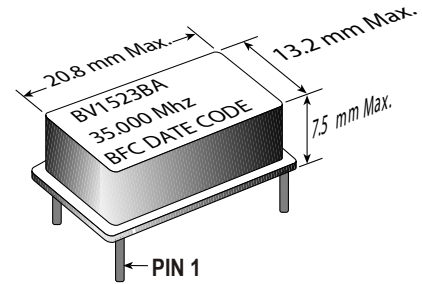




5V Voltage Controlled Crystal Oscillators

Applications:

- Phase Locked Loops (PLL's)
- Clock Recovery
- Reference Signal Tracking
- Synthesizers
- Frequency Modulation/Demodulation



Features:

- 2.0 to 52 MHz Frequency Range
- 0.5V to 4.5V Control Voltage
- ±25ppm Stability
- Variety of Deviation Sensitivity Options
- -40°C to +85°C Operating Temperature Range
- UM1 Crystal



Electrical Specifications

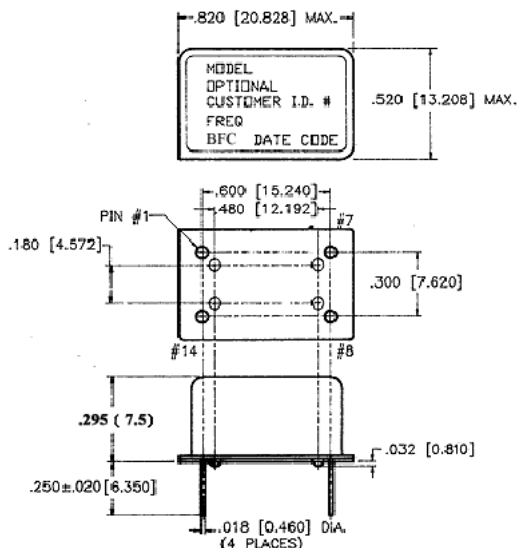
Model	BV1523BA			
Frequency Range (MHz)	2 to 16	16.001 to 25.000	25.001 to 33.000	33.001 to 52.000
Input Current (mA)	< 17	< 19	< 26	
Frequency Control Function	For Custom Deviation Range, Vc Range, etc, Consult Factory			
Deviation (ppm)				
Minimum	± 100 ppm		± 100 ppm	
Maximum	± 150 ppm		± 190 ppm	
Linearity (%)	< 5		< 10	
Modulation Bandwidth (± 3 dB)	> 2 KHz	> 20 KHz		
Nominal Control Voltage (V)	2.5			
Control Voltage Range (V)	0.5 to 4.5			
Transfer Function	Positive			
Input Impedance	> 50KΩ @ 10 KHz			
Frequency Stability (ppm)				
Overall	Inclusive of Calibration, Temp. Volt. Load and Aging			
0°C to + 70°C	± 25 ppm		± 40 ppm	
-40°C to + 85°C	± 50 ppm		± 55 ppm	
Temperature Range				
Operating	-40°C to +85°C			
Storage	-40°C to +125°C			
Supply Voltage (V)	+ 5.0 V ± 5%			
Symmetry (%) CMOS/TTL	45/55	40/60		
Start Up Time (ms)	< 10			

Typical SSB Phase Noise (dBC/Hz)
Offset from Carrier

10 Hz	- 65
100 Hz	- 95
1 KHz	- 120
10 KHz	- 140
100 KHz	- 150

Mechanical Dimensions

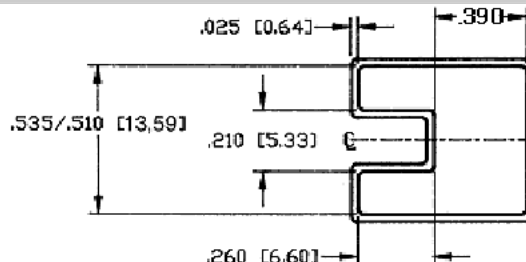
PIN	Function
1	Voltage Control
7	Gnd/ & Case Gnd
8	Output
14	+V _{CC}



Part Numbering Guide

Shipping Tube Cross Section

BV1523BA X - Specify Frequency
 "Blank" = 0°C to 70°C Operating Temp.
 "M" = -40°C to +85°C Operating Temp.



Test Circuit Diagram

Output Waveform

