



# BMV3 SERIES VCXO

## 7X5X 2.0MM 6 PAD CERAMIC SMD PKG



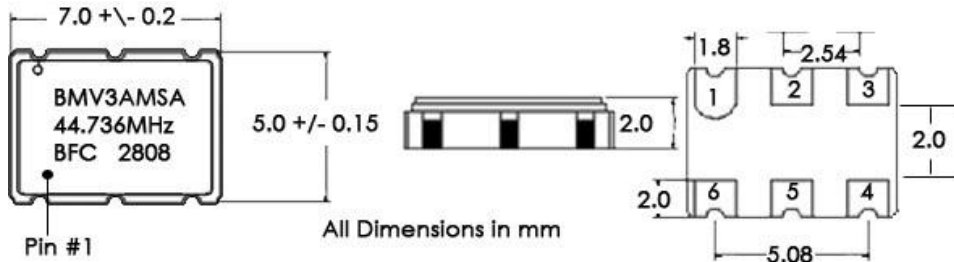
**Features:**

- Ceramic Base Construction, Metal Lid
- 1.0 to 125.0 MHz Frequency Range
- 0.3V to 3.3V Control Voltage
- $\pm 25$ ppm,  $\pm 50$ ppm or  $\pm 75$ ppm Frequency Stability
- -40°C to +85°C Operating Temperature Option
- Ground Shielded 6-Pad SMD 5.0x7.0x2.0mm LCC Pkg.
- **RoHS Compliant**
- Very Low Phase Jitter with Fundamental Crystal Design
- Leadless Chip Carrier (LCC) Ultra Small SMD Package
- Enable/Disable Control on Pin#2 or Pin#5
- Wide Frequency Pulling Range
- Industry Standard 6 Pad Footprint

ELECTRICAL SPECIFICATIONS								
Model		BMV3						
Frequency Range (MHz)		1 MHz to 125 MHz						
Input Voltage (Vcc)		+3.3 VDC $\pm$ 5%						
Input Current		30 mA Maximum, depending on Frequency and output load						
Control Voltage (Vc)		+1.65V $\pm$ 1.5V						
Storage Temperature		-55°C to 125°C						
Frequency Stability		$\pm 25$ ppm (STD)	$\pm 50$ ppm (Suffix "A")	$\pm 50$ ppm (Suffix "B")	$\pm 25$ ppm (Suffix "C")			
Absolute Pull Range (Min)		$\pm 50$ ppm (STD)	$\pm 50$ ppm (Suffix "A")	100 ppm (Suffix "B")	$\pm 75$ ppm (Suffix "C")			
Temperature Range		0°C to 70°C (STD)	-10°C to 70°C (Suffix "G")		-40 to +85 (Suffix "M")			
Duty Cycle		Tristate 60/40% symmetry (STD); Tristate 55/45% symmetry (Suffix "S")						
Output Load		HCMOS: drive up to 15 pF load; TTL: drive up to 10 TTL gates						
Logic	Logic "1" Level	0.9Vcc Minimum						
	Logic "0" Level	0.1Vcc Maximum						
Rise / Fall Time (Tr/Tf)		5 ns Maximum at 20% to 80% Vp-p						
Start-up time		10 ms Maximum						
Phase Jitter (RMS, 1 Sigma)		1 ps Maximum for fj > 1 kHz; 0.3 ps Typical for fj = 12KHz to 20MHz						
Modulation Bandwidth		12 kHz Minimum at -3dB						
Linearity / Slope		$\pm 10\%$ Maximum of best straight line fit / Positive						
Input Impedance		10 k Ohms Minimum						
Setability at Fnom, 25°C		+1.65V $\pm$ 0.4V for 3.3V part						
Tristate Function		Input (Pin 2 or 5) High (>2.2V) or open: Output (Pin 4) active Input (Pin 2 or 5) Low (<0.5V): Output disabled in high impedance						
Enable/Disable Time		100 ns Maximum						
Phase Noise (Vcon = 0 V)	Offset	10Hz	100Hz	1kHz	10kHz	100kHz	1MHz	10MHz
	dBc/Hz(77.760MHz)	-72	-100	-123	-130	-125	-125	-142

Part Numbering Guide					
Model	Frequency Stability (APR)	Operating Temperature Range	Tri-State Symmetry	Pin Connections	Frequency
BMV3	Blank = $\pm 25/\pm 50$ ppm	Blank = 0°C to 70°C	Blank = Tri-State 60/40%	A = E/D Pin#2, N/C Pin#5	
	A = $\pm 50 / \pm 50$ ppm	G = -10°C to 70°C	S = Tri-State 55/45%	B = E/D Pin#5, N/C Pin#2	
	B = $\pm 50 / 100$ ppm	M = -40 to +85			
	C = $\pm 25 / 75$ ppm				

Example					
BMV3	C	M	S	A	10.0 MHz



- Pin Connections**
- #1 : Voltage Control
  - #2 : E/D(A) or N/C(B)
  - #3 : Ground
  - #4 : Output
  - #5 : N/C(A) or E/D(B)
  - #6 : Vcc