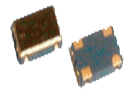




# BSM53 SERIES

## HCMOS/TTL CLOCK OSCILLATOR

### 5.0 X 3.2 X 1.0MM CERAMIC SMD PACKAGE

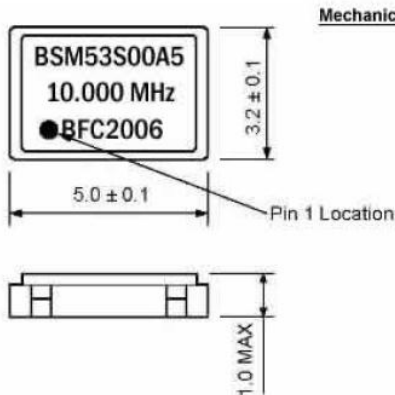


**Features:**

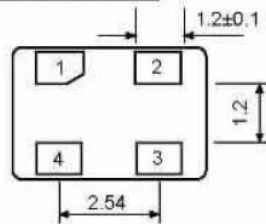
- 1.8432 to 156.0 MHz Frequency Range
- Ultra Miniature (5 x 3.2 x 1.0 mm)
- HCMOS / TTL Compatible Output
- Ceramic LCC SMD Package
- Tape & Reel Packaging Available
- Tri-State Enable / Disable
- 500 kHz to 75.0 MHz Frequency Range
- -40°C to +85°C Temperature Range Available
- 5V, 3.3V and 2.5V Available
- **RoHS Compliant**

ELECTRICAL SPECIFICATIONS			
Frequency Range (MHz)	1.8432 to 75.0MHz	1.8432 to 156.0MHz	
Input Voltage (Vcc)	5.0 VDC ± 10%	3.3 VDC ± 10%	2.5 VDC ± 10%
Frequency Stability (ppm)	100ppm; 50ppm; 25ppm		
Input Current	60mA Maximum Depending on Frequency, Vcc and load		
Storage Temperature	-55°C to 125°C		
Temperature Range	0° to 70°C; -40° to 85°C; -20° to 70°C		
Symmetry	60/40%; 55/45%		
Output Load	HCMOS: Drive up to 50pF Load; TTL Up to 10 TTL Gates		
Rise Time / Fall Time	10ns Maximum		
Logic "1" / Logic "0" Level	0.9 Vcc Minimum / 0.1 Vcc Maximum		
Start Up Time	10ms Maximum		
Phase Jitter (RMS, 1 Sigma)	1 ps Maximum for fj>1 kHz; 0.3ps Typical for fj = 12 kHz to 20 Mhz		
Output Enable Time	100 ns Maximum		
Output Disable Time	100 ns Maximum		
Tri-State Function	Input (PIN 1) High (>2.2V) or Open: Output (PIN 3) Active		
	Input (PIN 1) Low (<0.8V): Output Disables in High Impedance		

Part Number Table					
Model	Voltage	Symmetry	Frequency Stability	Operating Temp. (°C)	Frequency
BSM53	5 = 5.0VDC	22 = 60/40%	B = 100ppm	2 = 0° to 70°C	In MHz
	3 = 3.3VDC	21 = 55/45%	C = 50ppm	5 = -40° to 85°C	
	2 = 2.5VDC		E = 25ppm	3 = -20 to 70°C	

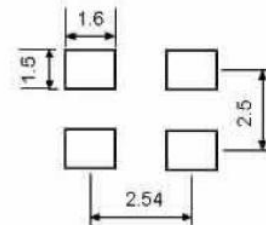


Mechanical Drawing ( Dimensions in mm )



Pin Connections  
 #1: E/D or NC  
 #2: Ground  
 #3: Output  
 #4: Vcc

Recommended Solder Pad Layout



Dimensions in Millimeters

All dimensions are typical unless otherwise specified