

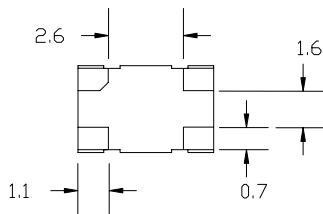
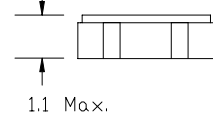
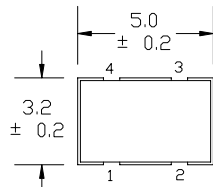


SMD Oscillator, TTL / HC-MOS, Spread Spectrum  
Ceramic Package, 3.2 mm x 5 mm

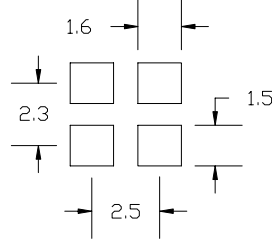
ISM72 Series

Frequency	10 MHz to 80.000 MHz
Output Level	HC-MOS
Level	'0' = 0.1 Vcc Max., '1' = 0.9 Vcc Min.
Duty Cycle	50% ± 10%
Rise / Fall Time	7 nS Max.
Output Load	15 pF HC-MOS
Frequency Stability	See Frequency Stability Table (Includes room temperature tolerance and stability over operating temperature)
Start-up Time	10 mS Max.
Enable / Disable Time	Disable = 10 nS Max., Enable = 10 mS Max.
Supply Voltage	3.3 VDC ± 5%
Current	15 mA Max. @ Fo < 28 MHz, 20 mA Max. @ Fo > 28 MHz
Temperature	
Operating	See Operating Temperature Table
Storage	-40° C to +85° C
Environmental / Tape and Reel	See Appendix B for Environmental information, Appendix C for Tape and Reel information
Package Information	MSL = N.A., Termination = e4

Tri-State Function	
Pin 1 Open	Enable
Pin 1 ≥ 80% Vdd	Enable
Pin 1 ≤ 20% Vdd	Disable



Connection and Recommended pad layout



- Pin 1      Connection: Enable / Disable
- Pin 2      Connection: Ground
- Pin 3      Connection: Output
- Pin 4      Connection: Vcc

Dimension Units: mm

Part Number Guide		Sample Part Number: ISM72 - 316BBH - 20.000					
Package	Input Voltage	Operating Temperature	Symmetry (Duty Cycle)	Modulation Ratio	Stability (in ppm)	Enable / Disable	Frequency
ISM72 -	3 = 3.3 V	1 = 0° C to +70° C	6 = 40 / 60 Max.	A = ±0.5 %	A = ±25 *	H = Enable	- 20.000 MHz
		6 = -10° C to +70° C		B = ±1 %	B = ±50		
		3 = -20° C to +70° C		C = ±2 %	C = ±100		
		2 = -40° C to +85° C					

NOTE: A 0.01 µF bypass capacitor is recommended between Vcc (pin 4) and Gnd (pin 2) to minimize power supply noise.

\* Not available for all temperature ranges. \*\* Frequency, supply, and load related parameters.