

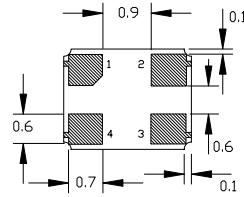
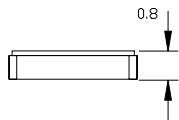
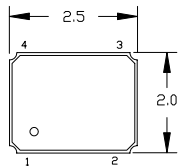


SMD Oscillator, TTL / HC-MOS  
Ceramic Package, 2.0 mm x 2.5 mm

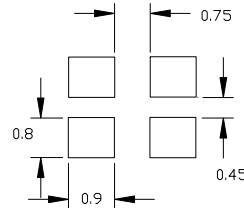
ISM95 Series

Frequency	1.000 MHz to 60.000 MHz	
Output Level	TTL	HC-MOS
Level	'0' = 0.4 VDC Max., '1' = 2.4 VDC Min.	'0' = 0.1 Vcc Max., '1' = 0.9 Vcc Min.
Duty Cycle	Specify 50% ± 10% or ± 5%, See Table	
Rise / Fall Time	5 nS Max. **	
Output Load	3 TTL	15 pF
Frequency Stability	See Frequency Stability Table (Includes room temperature tolerance and stability over operating temperature)	
Start-up Time	10 mS Max.	
Enable / Disable Time	250 nS Max.	
Supply Voltage	See Input Voltage Table, tolerance ± 5 %	
Current	25 mA Max. **	
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	

Preliminary Data Sheet  
Advance Information



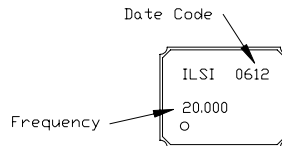
Pad Layout



Tri-State Function	
Pin 1 Open	Enable
Pin 1 ≥ 70% Vdd	Enable
Pin 1 ≤ 30% Vdd	Disable

Pin	Connection
1	Enable
2	GND
3	Output
4	Vcc

Dimension Units: mm



Marking Diagram

Part Number Guide		Sample Part Number: ISM95 - 3251BH - 20.000					
Package	Input Voltage	Operating Temperature	Symmetry (Duty Cycle)	Output	Stability (in ppm)	Enable / Disable	Frequency
ISM95 -	5 = 5.0 V	1 = 0° C to +70° C	5 = 45 / 55 Max.	1 = 3 TTL / 15 pF HC-MOS	A = ±25*	H = Enable	- 20.000 MHz
	3 = 3.3 V	8 = -10° C to +60° C	6 = 40 / 60 Max.	2 = 3 TTL	B = ±50		
	7 = 3.0 V	3 = -20° C to +70° C		3 = 15 pF	C = ±100		
	2 = 2.7 V	4 = -30° C to +75° C		4 = AC-MOS			
	6 = 2.5 V	2 = -40° C to +85° C					
	1 = 1.8 V*						

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.