

M1325 Surface Mount Crystal

3.2 x 5 x 0.8 mm



Features:

- Ultra-Miniature Size
- Tape & Reel
- Leadless Ceramic Package - Seam Sealed



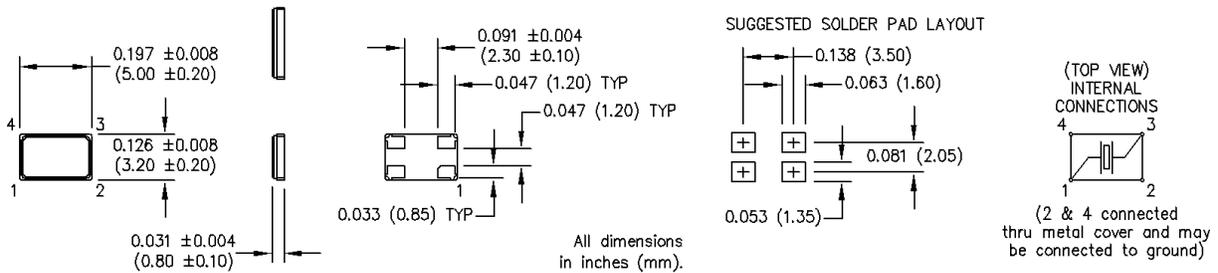
Applications:

- Handheld Electronic Devices
- PDA, GPS, MP3
- Portable Instruments

Ordering Information

M1325	1	J	M	XX	00.0000	MHz
Product Series						
Operating Temperature						
1: 0°C to +70°C		3: -10°C to +60°C				
2: -40°C to +85°C		6: -20°C to +70°C				
Tolerance @ +25°C						
*D: ±10 ppm		J: ±30 ppm (std)				
E: ±15 ppm		M: ±50 ppm				
G: ±20 ppm		P: ±100 ppm				
H: ±25 ppm						
Stability						
*D: ±10 ppm		J: ±30 ppm				
E: ±15 ppm		M: ±50 ppm (std)				
G: ±20 ppm		P: ±100 ppm				
H: ±25 ppm						
Load Capacitance						
Blank: 18 pF (std)						
S: Series Resonant						
XX: Customer Specified 8 pF to 32 pF						
Frequency (customer specified)						

*Consult Factory
M1325Sxxx - Contact factory for datasheet.



	Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions	
Electrical Specifications	Frequency Range	F	12		54	MHz		
	Frequency Tolerance	F/F	See Ordering Information			ppm	+25°C	
	Frequency Stability	F/F	See Ordering Information			ppm	Over Operating Temperature	
	Operating Temperature	T _{opr}	See Ordering Information			°C		
	Storage Temperature	T _{stg}	-55		+125	°C		
	Aging	F _a			±5	ppm/yr	+25°C	
	Load Capacitance	C _L					See Ordering Information	
	Shunt Capacitance	C ₀				7	pF	
	ESR							
	Fundamental AT-Cut Frequencies							
	12.000000 to 19.999999 MHz			80	Ohms	All		
	20.000000 to 29.999999 MHz			70	Ohms	All		
	30.000000 to 54.000000 MHz			50	Ohms	All		
	Drive Level	D _L	10	50	100	μW		
	Insulation Resistance	I _R	500			Megohms	100 VDC	
Environmental	Aging	Internal Specification						168 hrs. at +55°C
	Physical Dimensions	MIL-STD-883, Method 2016						
	Shock	MIL-STD-202, Method 213 Condition C						100 g
	Vibration	MIL-STD-202, Methods 201 & 204						10 g from 10-2000 Hz
	Thermal Cycle	MIL-STD-883, Method 1010, Condition B						-55°C to +125°C
	Gross Leak	MIL-STD-202, Method 112						30 sec. Immersion
	Fine Leak	MIL-STD-202, Method 112						1 x 10 ⁻⁸ atmcc/sec. min.
	Max Soldering Conditions	See solder profile, Figure 1						
Resistance to Solvents	MIL-STD-883, Method 2015						Three 1 minute soaks	

MtronPTI Lead Free Solder Profile

