

M1254 Surface Mount Crystal

2.5 x 4.0 x 0.75 mm



Features:

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

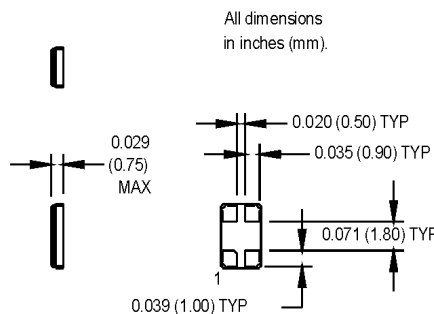
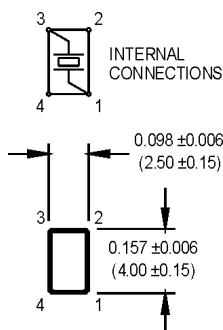


Applications:

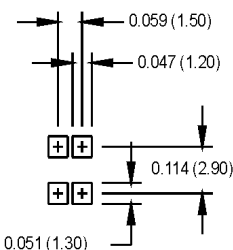
- Handheld Electronic Devices
- PDA, GPS, MP3
- Portable Instruments
- PCMCIA Cards

Ordering Information

	M1254	6	J	M	XX	00.0000 MHz
Product Series						
Operating Temperature						
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 10 pF to 32 pF						
Frequency (customer specified)						



SUGGESTED SOLDER PAD LAYOUT



Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions
Frequency Range	F	12		32	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			±2	ppm/yr	+25°C
Load Capacitance	C _L					See Ordering Information
Shunt Capacitance	C ₀			3	pF	
ESR						
Fundamental AT-Cut Frequencies						
12.000000 to 19.999999 MHz				80	Ohms	All
20.000000 to 25.999999 MHz				70	Ohms	All
26.000000 to 32.000000 MHz				50	Ohms	All
Drive Level	D _L	10	100	300	μW	
Insulation Resistance	I _R	500			Megohms	100 VDC
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.
Resistance to Solvents	MIL-STD-883, Method 2015					Three 1 minute soaks
Maximum Soldering Conditions	MIL-STD-202, Method 210, Condition C					Pb Free = +260°C for 10 secs. max

MtronPTI reserves the right to make changes to the product(s) and service(s) described herein without notice. No liability is assumed as a result of their use or application.

Please see www.mtronpti.com for our complete offering and detailed datasheets. Contact us for your application specific requirements: MtronPTI 1-800-762-8800.

Revision: 03-08-07

MtronPTI Lead Free Solder Profile

