

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



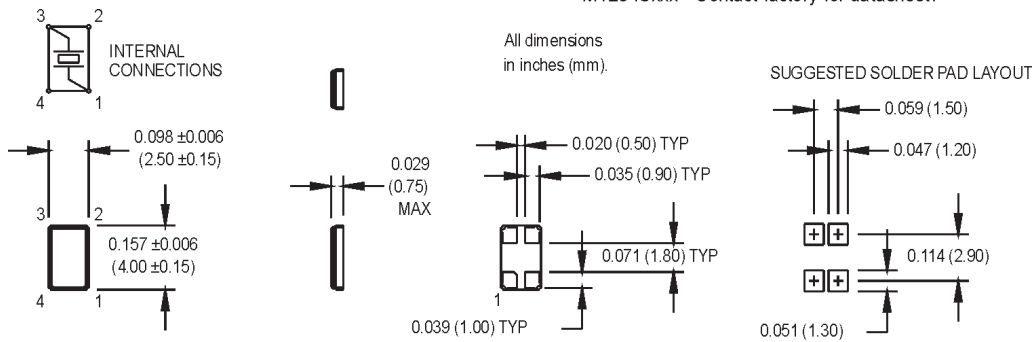
Applications:

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

Ordering Information

	M1254	6	J	M	XX	00.0000 MHz
Product Series						
Operating Temperature						
1: -10°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 10 pF to 32 pF						
Frequency (customer specified)						

* Consult Factory
M1254Sxxx - Contact factory for datasheet.



	Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions	
Electrical Specifications	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	
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.
	Resistance to Solvents	MIL-STD-883, Method 2015						Three 1 minute soaks
Maximum Soldering Conditions	See solder profiles, Figure 1							

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:7-18-08

MtronPTI Lead Free Solder Profile

