M3L & M5L Series 3.2x5 mm, 3.3 or 5.0 Volt, HCMOS, Clock Oscillator





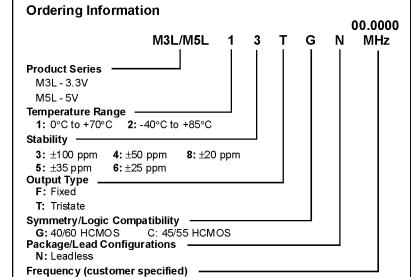


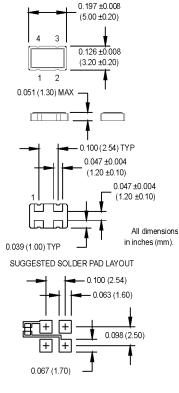
- Ultra-miniature size
- Ideal for PCMCIA cards, laptop/palmtop computers, wireless handsets, portable instrumentation

Specifications

ectrical

Environmental





Pin Connections

PIN	FUNCTION			
1	Tristate			
2	Ground			
3	Output			
4	+Vcc			

PARAMETER	Symbol	Min.	Тур.	Max	Units	Condition		
Frequency Range	F	1.544	199.	125	MHz	See Note 1		
Operating Temperature	T _A				°C	See ordering information		
Storage Temperature	Ts	-55		+125	°C			
Frequency Stability	ΔF/F		ring inform		ppm			
Aging		(see ordering information			ppin			
1 st year		-5		+5	ppm			
Thereafter (per year)		-4		+4	ppm			
Input Voltage	Vdd	3.0	3.3	3.6	V	M3L		
input voltage	Vuu	4.5	5.0	5.5	v	M5L		
Input Current	ldd	4.5	5.0	5.5		NISE		
Frequencies up to 50 MHz				35	mA			
50.001 – 67.000 MHz				45	mA			
67.001 – 125.000 MHz				55	mA			
Output Type						HCMOS		
Load				15	F	See Note 2		
Symmetry (Duty Cycle)		(see ordering information)				50% Vdd reference level		
Logic "1" Level	Voh				v			
Logic "0" Level	Vol	0070 Vuu		10%	v			
Output Current	101			±4	mA	M3L		
Supar Sulten				±12	mA	M5L		
Rise/Fall Time	Tr/Tf			12	111/2	10% to 90% Vdd		
frequencies up to 50 MHz	11/11			7	ns	10 % 10 90 % Vaa		
50.001 – 67.000 MHz				4	ns			
67.001 – 125.000 MHz			_	3	ns			
Tristate Function		Input Log	ic "1" or flo	-				
matter unetfoli		Input Logic "1" or floating: output active Input Logic "0": output to high-Z						
Start up Time		input Log		10	 ms	1		
Random Jitter	Rj		5	15	ps RMS	1-sigma		
	- ' '		Ŭ	10	portino	roigina		
Mechanical Shock	Per MIL-S	TD-202 Me	thod 213	Condition	C (100 a's 6	mS duration 1/2 sinewave)		
Vibration	Per MIL-STD-202, Method 213, Condition C (100 g's, 6 mS duration, ½ sinewave) Per MIL-STD-202, Method 201 & 204 (10 g's from 10-2000 Hz)							
Hermeticity	Per MIL-STD-202, Method 112, (1x10-8 atm. cc/s of Helium)							
Thermal Cycle	Per MIL-STD-883, Method 1010, Condition B (-55°C to +125°C, 15 min. dwell, 10 cycles)							
Solderability	Per EIAJ-STD-002							
concertability		0.0.002						

1. Because this product is based on AT-strip technology, not all frequencies in the range stated are available. Contact the factory for availability of specific frequencies.

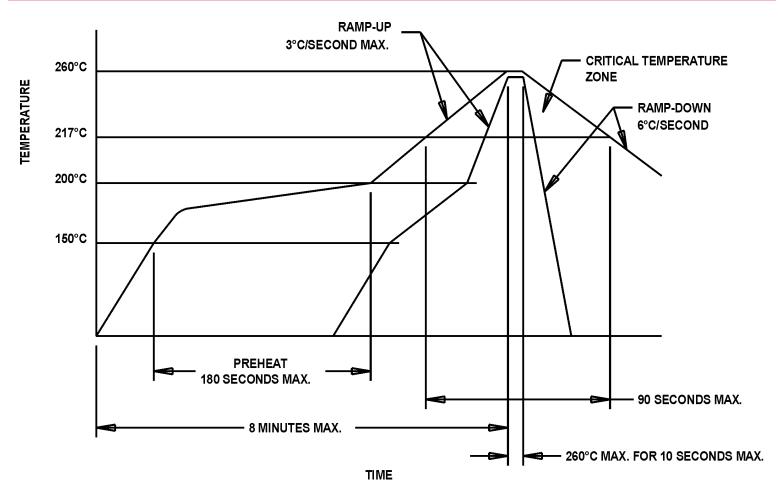
2. CMOS load - See load circuit diagram #2.

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.

MtronPTI[®]

MtronPTI Lead Free Solder Profile



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.