M3H & MH Series

8 pin DIP, 3.3 or 5.0 Volt, HCMOS/TTL Clock Oscillator

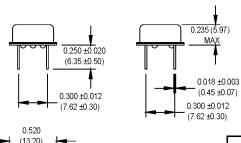


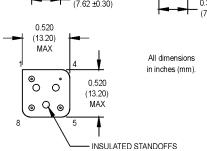






- 3.3 or 5.0 Volt Versions
- RoHs Compliant Version available
- Low Jitter





Pin Connections

PIN	FUNCTION						
1	N/C or Tristate						
4	Circuit/Case Ground						
5	Output						
8	+Vdd						

Ordering Information	M3H / MH	1	3	F	А	D	-R	00.0000 MHz
Product Series M3H = 3.3 Volt MH = 5.0 Volt Temperature Range 1: 0°C to +70°C 2: 3: -55°C to +105°C 4: 5: -10°C to +85°C 6: 7: 0°C to +85°C	-55°C to +125°C							
Stability 1: ±1000 ppm 2: 3: ±100 ppm 4: 5: ±35 ppm 6: 7: +0/-200 ppm *8:	±50 ppm ±25 ppm							
Output Type F: Fixed Symmetry/Logic Compatit A: 40/60 HCMOS/TTL C: 45/55 HCMOS	B: 45/55 TTL (M	H seri	es only	y) 50 M	Hz only	,		
Package/Lead Configuration D: DIP; Nickel Header RoHS Compliance	ons					<u>. </u>		
Blank: non-RoHS comp -R: RoHS compliant Frequency (customer spec	part						-	

*Contact factory for availability

	PARAMETER	Symbol	Min.	Тур.	Max.	Units	Condition/Notes		
	Frequency Range	F	1.5		100	MHz	МЗН		
			1.0		80	MHz	MH See Note 1		
	Operating Temperature	TA	(See Order	ing Inforr	nation)				
	Storage Temperature	Ts	-55		+125	°C			
	Frequency Stability	∆F/F	(See Order	ing Inforn	nation)				
	Aging								
	1st Year			±3		ppm			
	Thereafter (per year)			±2		ppm			
	Input Voltage	Vdd	3.135	3.3	3.465	٧	мзн		
ns			4.5	5.0	5.5	٧	MH		
Electrical Specifications	Input Current (M3H)	ldd			25	mA	1.500 to 50.000 MHz		
j≟					35	mA	50.001 to 67.000 MHz		
be					55	mA	67.001 to 100.000 MHz		
S	Input Current (MH)	ldd			40	mA	1.000 to 40.000 MHz		
rics					60	mA	40.001 to 80.000 MHz		
lect	Output Type						HCMOS/TTL		
ш	Load		2 TTL or 15 pF				M3H MH See Note 2		
	Symmetry (Duty Cycle)		10 TTL or 50 pF (See Ordering Information)				See Note 3		
	Symmetry (Duty Cycle) Logic "1" Level	Voh	90% Vdd	Ing mion	lation)	V	HCMOS Load		
	Logic i Levei	VOII	Vdd -0.5			ľ	TTL Load		
	Logic "0" Level	Vol	Vuu -0.0		10% Vdd	V	HCMOS Load		
		10.			0.5	V	TTL Load		
	Output Current				±4	mA	мзн		
	-				±16	mA	МН		
	Rise/Fall Time	Tr/Tf			10	ns	See Note 4		
	Tristate Function		Input Logic "1" or floating; output active Input Logic "0"; output disables to high-Z						
	Start up Time			5		ms			
'	Random Jitter	Rj		5	12	ps RMS	1-Sigma		

- Contact the factory for availability of higher frequencies.
 TTL load See load circuit diagram #1. HCMOS load See load circuit diagram #2.
 Symmetry is measured at 1.4 V with TTL load, and at 50% Vdd with HCMOS load.
 Rise/Fall times are measured between 0.4 V and 2.4 V with TTL load, and between 10% Vdd and 90% Vdd with HCMOS load.

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.