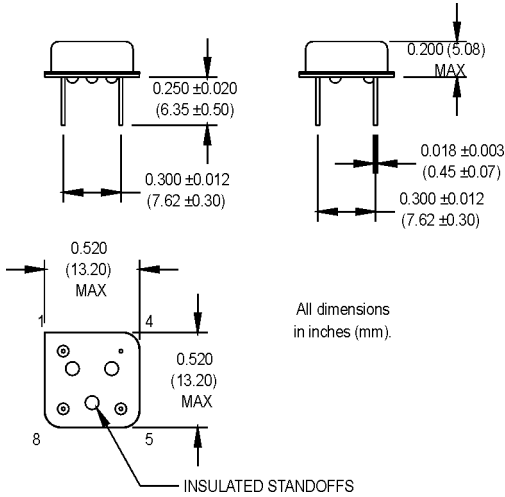


M3EH Series

8 pin DIP, 3.3 Volt, ECL/PECL, Clock Oscillator



Ordering Information

M3EH 1 3 X Q D -R 00.0000 MHz

Product Series _____

Temperature Range _____
 1: 0°C to +70°C 2: -40°C to +85°C
 5: -10°C to +85°C 6: -20°C to +70°C
 7: 0°C to +85°C

Stability _____
 1: ±1000 ppm 2: ±500 ppm
 3: ±100 ppm 4: ±50 ppm
 5: ±35 ppm 6: ±25 ppm
 *8: ±20 ppm

Output Type _____
 X: Single Output Z: Dual Output

Symmetry/Logic Compatibility _____
 P: 45/55% PECL Q: 40/60% PECL

Package/Lead Configurations _____
 A: DIP; Gold Flash Header D: DIP; Nickel Header
 G: Gull Wing; Nickel Header X: Gull Wing; Gold Flash Header

RoHS Compliance _____
 Blank: non-RoHS compliant part
 -R: RoHS compliant part

Frequency (customer specified) _____

*Contact factory for availability.

Pin Connections

PIN	FUNCTION(S) (Model Dependent)
1	N/C, Output #2
4	-Vee, Ground
5	Output #1
8	+Vcc

	PARAMETER	Symbol	Min.	Typ.	Max.	Units	Condition
Electrical Specifications	Frequency Range	F	1.5		155.52	MHz	
	Frequency Stability	$\Delta F/F$	(See Ordering Information)				See Note 1
	Operating Temperature	T _A	(See Ordering Information)				
	Storage Temperature	T _s	-55		+125	°C	
	Input Voltage	V _{cc}	3.15	3.3	3.45	V	
	Input Current	I _{ee} /I _{cc}			100	mA	
	Symmetry (Duty Cycle)		(See Ordering Information)				V _{cc} -1.3 V level
	Load		50 Ω to V _{cc} -2V or Thevenin Equivalent				See Note 2
	Rise/Fall Time	T _r /T _f			2.5	ns	See Note 3
	Logic "1" Level	V _{oh}	V _{cc} -1.02			V	
	Logic "0" Level	V _{ol}			V _{cc} -1.63	V	
	Cycle to Cycle Jitter			13	25	ps RMS	1 Sigma
Environmental	Mechanical Shock	Per MIL-STD-202, Method 213, Condition C					
	Vibration	Per MIL-STD-202, Method 201 & 204					
	Wave Solder Conditions	260°C for 10 s max.					
	Hermeticity	Per MIL-STD-202, Method 112 (1 x 10 ⁻⁸ atm.cc/s of helium)					
	Solderability	Per EIAJ-STD-002					

1. Calibration, deviation over temperature, shock, vibration, and aging.
2. Internally terminated outputs. See load circuit diagram #5.
3. Rise/Fall times are measured between V_{cc} -1.02 V and V_{cc} -1.63 V.

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.