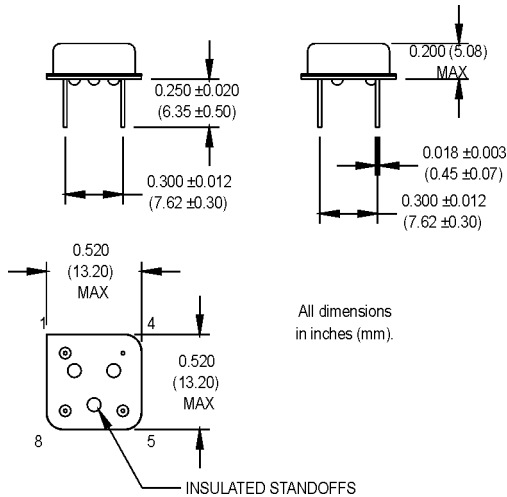


# M3EH Series

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



## Ordering Information

Product Series	Temperature Range	Stability	Output Type	Symmetry/Logic Compatibility	Package/Lead Configurations	RoHS Compliance	Frequency (customer specified)
M3EH	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	1: ±1000 ppm 2: ±500 ppm 3: ±100 ppm 4: ±50 ppm 5: ±35 ppm 6: ±25 ppm *8: ±20 ppm	X: Single Output Z: Dual Output	P: 45/55% PECL Q: 40/60% PECL	A: DIP; Gold Flash Header G: Gull Wng; Nickel Header D: DIP; Nickel Header X: Gull Wing; Gold Flash Header	Blank: non-RoHS compliant part -R: RoHS compliant part	00.0000 MHz

\*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
Frequency Range	F	1.5		155.52	MHz	
Frequency Stability	$\Delta F/F$	(See Ordering Information)				See Note 1
Operating Temperature	T <sub>A</sub>	(See Ordering Information)				
Storage Temperature	T <sub>s</sub>	-55		+125	°C	
Input Voltage	V <sub>cc</sub>	3.15	3.3	3.45	V	
Input Current	I <sub>ee</sub> /I <sub>cc</sub>			100	mA	
Symmetry (Duty Cycle)		(See Ordering Information)				V <sub>cc</sub> -1.3 V level
Load		50 $\Omega$ to V <sub>cc</sub> -2V or Thevenin Equivalent				See Note 2
Rise/Fall Time	T <sub>r</sub> /T <sub>f</sub>			2.5	ns	See Note 3
Logic "1" Level	V <sub>oh</sub>	V <sub>cc</sub> -1.02			V	
Logic "0" Level	V <sub>ol</sub>			V <sub>cc</sub> -1.63	V	
Cycle to Cycle Jitter			13	25	ps RMS	1 Sigma
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 <sup>-8</sup> 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<sub>cc</sub> -1.02 V and V<sub>cc</sub> -1.63 V.

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## MtronPTI Lead Free Solder Profile

