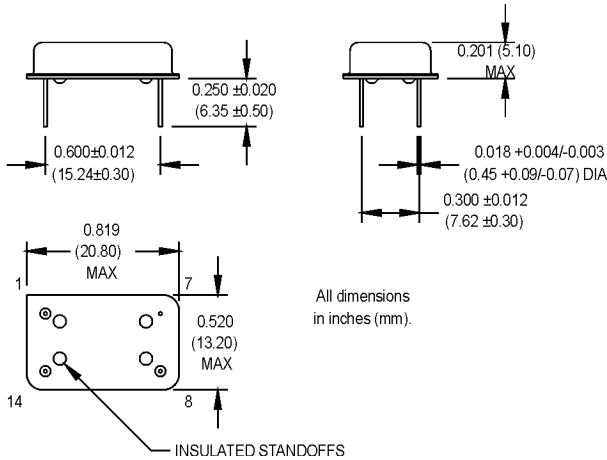


M3E Series

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



Ordering Information

	M3E	1	3	X	Q	D	-R	00.0000	MHz	
Product Series	M3E									
Temperature Range	1 3 X Q D -R									
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 3 X Q D -R									
1: ±1000 ppm	2: ±500 ppm									
3: ±100 ppm	4: ±50 ppm									
5: ±35 ppm	6: ±25 ppm									
*8: ±20 ppm										
Output Type	X Z									
X: Single Output	Z: Dual Output									
Symmetry/Logic Compatibility	P Q									
P: 45/55% PECL	Q: 40/60% PECL									
Package/Lead Configurations	A D G X									
A: DIP; Gold Flash Header	D: DIP; Nickel Header									
G: Gull Wing; Nickel Header	X: Gull Wing; Gold Flash Header									
RoHS Compliance	Blank -R									
Blank: non-RoHS compliant part	-R: RoHS compliant part									
Frequency (customer specified)	00.0000 MHz									

*Contact factory for availability.

Pin Connections

PIN	FUNCTION(S) (Model Dependent)
1	N/C, Output #2
7	-Vee, Ground
8	Output #1
14	+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.