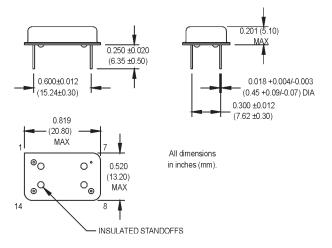# ME Series
14 pin DIP, 5.0 Volt, ECL, PECL, Clock Oscillator
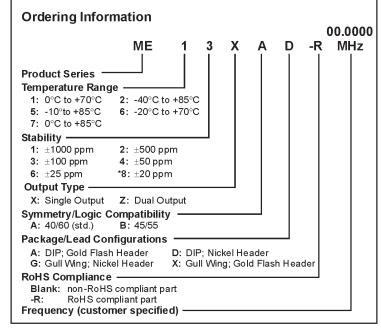
MtronPTI®

ME Series ECL/PECL Clock Oscillators, 10 KH Compatible with Optional Complementary Outputs

0.250 ±0.020 (6.35 ±0.50)

0.600±0.012 (15.24±0.30)

0.201 (5.10) MAX

0.018 +0.004/-0.003 (0.45 +0.09/-0.07) DIA

0.300 ±0.012 (7.62 ±0.30)

0.819 (20.80) MAX

0.520 (13.20) MAX

All dimensions in inches (mm).

INSULATED STANDOFFS

Ordering Information

00.0000

ME 1 3 X A D -R MHz

Product Series

Temperature Range
- **1:** 0°C to +70°C
- **2:** -40°C to +85°C
- **5:** -10°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
- **6:** ±25 ppm
- ***8:** ±20 ppm

Output Type
- **X:** Single Output
- **Z:** Dual Output

Symmetry/Logic Compatibility
- **A:** 40/60 (std.)
- **B:** 45/55

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
7	-Vee, Ground
8	Output #1
14	+Vcc

	PARAMETER	Symbol	Min.	Typ.	Max.	Units	Condition
Electrical Specifications	Frequency Range	F	19.44		155.52	MHz	
	Frequency Stability	∆F/F	(See Ordering Information)				
	Operating Temperature	T$_A$	(See Ordering Information)				
	Storage Temperature	Ts	-55		+125	°C	
	Input Voltage	Vcc	4.75	5.0	5.25	V	
	Input Current	Iee/Icc		35	60	mA	
	Symmetry (Duty Cycle)		(See Ordering Information)				Vcc -1.3 V level
	Load		130 Ω to Vcc -2V or Thevenin Equivalent				See Note 1
	Rise/Fall Time	Tr/Tf			2.5	ns	See Note 2
	Logic "1" Level	Voh	Vcc -0.98			V	
	Logic "0" Level	Vol			Vcc -1.63	V	
	Cycle to Cycle Jitter			11	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 secs. Max.					
	Hermeticity	Per MIL-STD-202, Method 112 (1 x 10^{-8} atm.cc/s of helium)					
	Solderability	Per EIAJ-STD-002					

1. Internally terminated outputs. See load circuit diagram #4.
2. Rise/Fall times are measured between Vcc -0.98 V and Vcc -1.63 V.

Please see **www.mtronpti.com** for our complete offering and detailed datasheets. Contact us for your application specific requirements: MtronPTI **1-800-762-8800.**

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