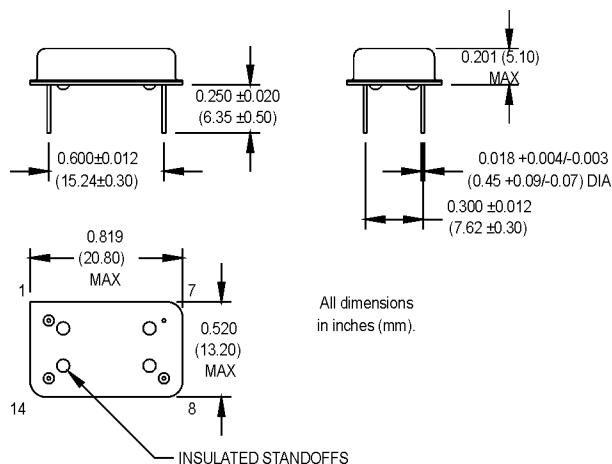


ME Series 5.0 Volt ECL/PECL Compatible Oscillators



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



See page 90 for gull wing configuration.

Ordering Information

	ME	1	3	X	A	D	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							
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							
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	$\Delta F/F$	(See Ordering Information)				
	Operating Temperature	T _A	(See Ordering Information)				
	Storage Temperature	T _s	-55		+125	°C	
	Input Voltage	V _{cc}	4.75	5.0	5.25	V	
	Input Current	I _{ee} /I _{cc}		35	60	mA	
	Symmetry (Duty Cycle)		(See Ordering Information)				V _{cc} -1.3 V level
	Load		130 Ω to V _{cc} -2V or Thevenin Equivalent				See Note 1
	Rise/Fall Time	T _r /T _f			2.5	ns	See Note 2
	Logic "1" Level	V _{oh}	V _{cc} -0.98			V	
	Logic "0" Level	V _{ol}			V _{cc} -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 s 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 on page 92.

2. Rise/Fall times are measured between V_{cc} -0.98 V and V_{cc} -1.63 V.

M-tron 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. No rights under any patent accompany the sale of such product.

M-tron Industries, Inc., PO Box 630, Yankton, SD 57078-0630, USA Phone: 605-665-9321 or 1-800-762-8800 Fax: 605-665-1709 Website: www.mtron.com
M-tron Industries Limited, 1104 Shanghai Industrial Investment Building, 48-62 Hennessy Road, Wanchai, Hong Kong, China Phone: 852-2866-8023 Fax: 852-2529-1822