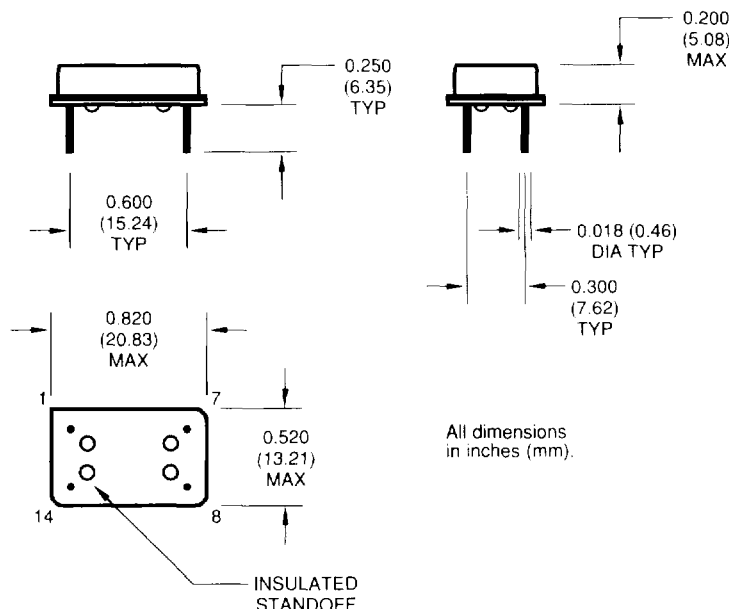


Competitively Priced HCMOS/TTL Compatible Oscillators



Part Marking and Numbering	MHO	1	3	F	A	D
Product Series	MHO					
Temperature Range						
1: 0°C to +70°C	2: -40°C to +85°C					
1: -55°C to +105°C	4: -55°C to +125°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					
7: + 0/-200 ppm						
Output Type						
F: Fixed	E: Enable/Disable					
C: Dual Complementary						
Symmetry/Logic Compatibility						
A: 40/60	B: 45/55 TTL *					
C: 45/55 CMOS*	D: 45/55 both *					
Package/Lead Configurations						
D: DIP; Nickel Header	G: Gull Wing; Nickel Header					

*Call factory regarding availability of symmetry codes B, C, or D.

Pin Connections

PIN	FUNCTION
1	N/C, Enable/Disable, or $\bar{O}$
7	Circuit/Case Ground
8	Output
14	+V _{dd}

ENABLE/DISABLE

Pin 1 high or floating: clock signal output
Pin 1 low: output disables to logic "1"

Available Stabilities vs Temperature

T	S	1	2	3	4	5	6	7
1	A	A	S	A	A	A	A	A
2	A	A	A	A	A	A	A	A
3	A	A	A	A	N	N	N	A
4	A	A	A	N	N	N	N	A
5	A	A	A	A	A	A	A	A
6	A	A	A	A	A	A	A	A
7	A	A	A	A	A	A	A	A

A = AVAILABLE S = STANDARD
N = NOT AVAILABLE

Electrical Specifications

(Standard Operating Conditions 0°C to +70°C; V_{dd} = 5.0 ±10% V DC)

PARAMETERS	TTL Load			HCMOS Load			UNITS
	MIN.	TYP.	MAX.	MIN.	TYP.	MAX.	
Frequency Range	3.000		25.000	3.000		25.000	MHz
Output Load			10 TTL ¹			50 pF ²	
Symmetry*	40/60	45/55	60/40	40/60	45/55	60/40	%
Logic "0" Level			0.5		0.1	.1 x V _{dd}	V
Logic "1" Level	V _{dd} - 0.5	V _{dd}		.9 x V _{dd}			V
Rise/Fall Time**		5	10		5	10	ns
Supply Current		15	25		15	25	mA

1- See load circuit # 1 on page 32. 2- See load circuit #2 on page 32.

*Symmetry is measured at 1.4 V with TTL load, and at V_{dd}/2 with HCMOS load.

**Rise/fall times are measured between 0.5 V and 2.4 V with TTL load, and between 10% V_{dd} and 90% V_{dd} with HCMOS load.

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