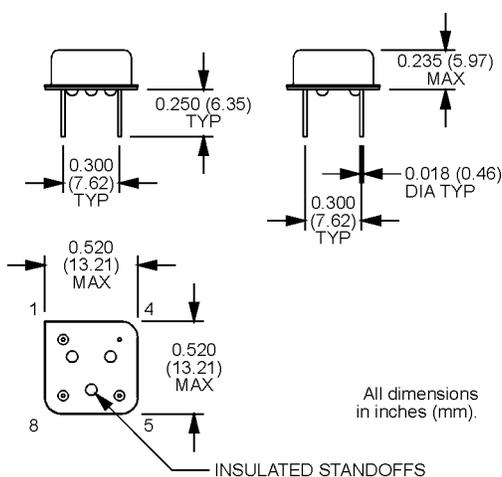


M3A Series Half-Size 3.3 Volt Advanced CMOS/TTL Compatible Oscillators



Features:

- High Frequency Capability
- Tri-state Option
- 3.3V Power Supply



See page 135 for gull wing configuration.

Ordering Information

		M3A	1	3	F	A	D	00.0000	MHz
Product Series									
Temperature Range									
	1: 0°C to +70°C	2: -40°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							
Output Type									
	F: Fixed	T: Tristate							
Symmetry/Logic Compatibility									
	A: 40/60 AC MOS/TTL	B: 45/55 TTL							
	C: 45/55 AC MOS								
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)									

Pin Connections

PIN	FUNCTION
1	N/C or Tri-state
4	Circuit/Case Ground
5	Output
8	+Vdd

Tri-state Control Logic

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

Available Stabilities vs. Temperature

T \ S	1	2	3	4	5	6
1	A	A	S	A	A	A
2	A	A	A	A	C	C
6	A	A	A	A	A	C
7	A	A	A	A	C	C

A = Available
S = Standard
C = Consult Factory

Electrical Specifications

Standard Operating Conditions • 0°C to +70°C; Vdd = 3.3V ±5%							
	TTL Load			ACMOS Load			
PARAMETERS	MIN.	TYP.	MAX.	MIN.	TYP.	MAX.	UNITS
Frequency Range	30.000		133.000	30.000		133.000	MHz
Output Load ¹			50			50	Ω
Symmetry ²	40/60	45/55	60/40	40/60	45/55	40/60	%
Logic "0" Level			0.5			10% Vdd	V
Logic "1" Level	2.4V			90% Vdd			V
Rise/Fall Time ³		1	2.5		1	2.5	nS
Supply Current		30	50		30	50	mA

¹ See load circuit diagram #6 on page 137.

² Symmetry is measured at 1.4 V with TTL load, and at 50% Vdd with ACMOS load.

³ Rise/Fall times are measured between 0.5 V and 2.4 V with TTL load, and between 10% Vdd and 90% Vdd with ACMOS load.
See page 136 for suggested soldering conditions.