MHO+ Series 14 pin DIP, 5.0 Volt, HCMOS/TTL, Clock Oscillator

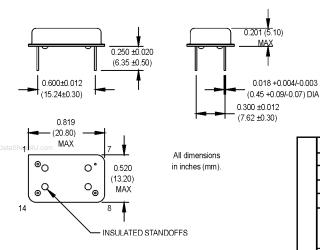






Features:

- Standard 14 DIP Package
- RoHS Compliant Version Available (-R)
- Tristate Option
- Wide Operating Temperature Range



Pin Connections

PIN	FUNCTION					
1	N/C or Tristate					
7	Circuit/Case Ground					
8	Output					
14	+Vdd					

Available Symmetry

FREQUENCY RANGE	STD.	OPTIONS
0.732 kHz to 50 MHz	Α	B, C, D
50.001 to 60 MHz	Α	B, C
60.001 to 67 MHz	Α	С
67.001 to 80 MHz	F,G	С

	MHO+	1	3	F	Α	D	-1	00. RN	/H:
Product Series Temperature Range 1: 0°C to +70°C 2: -4									
3: -55°C to +105°C 4: -5 5: -10°C to +85°C 6: -2 7: 0°C to +85°C	5°C to +12	5°C							
Stability 2: ±500 1: ±1000 ppm 2: ±500 4: ±50 ppm 5: ±35 pl 7: +0/-200 ppm *8: ±20 pl	pm 6:								
Output Type F: Fixed T: Tr	ristate (1.00	0 to 80	.000	 MHz)					
Symmetry/Logic Compatibility A: 40/60 HCMOS/TTL B: 49 D: 45/55 HCMOS/TTL F: 40	(See Table 5/55 TTL 0/60 TTL	Belov C:45	/) — 5/55 ⊢	ICMO					
Package/Lead Configurations D: DIP; Nickel Header		G : G	ull Wi	ng; Ni	ckel H	eader			
RoHS Compliance									
Blank: non-RoHS compliant -R: RoHS compliant part	part								

*Contact factory for availability

	Symbol	Min	Tun	Max	Unite	Condition/Notes
	-				See Note 1	
. , ,					IVITIZ	See Note 1
1 0 1		· · · · · ·		°C		
\$ 1				0		
		(See Ordering Information)				
0 0						
,						
		4.5	5.0		-	
Input Current	ldd					.732 kHz to 2.999 MHz
						3.000 to 25.999 MHz
				60	mA	26.000 to 80.000 MHz
						HCMOS/TTL
Load						See Note 2
		•			.732 kHz to 2.999 MHz	
						3.000 to 67.000 MHz
						67.001 to 80.000 MHz
		(See Ordering Information)				See Note 3
Logic "1" Level	Voh	90% Vdd				HCMOS Load
		Vdd -0.5			V	TTL Load
Logic "0" Level	Vol			10% Vdd	V	HCMOS Load
				0.5	V	TTL Load
Output Current				±8	mA	0.732 kHz to 2.999 MHz
				±16	mA	3.000 to 80.000 MHz
Rise/Fall Time	Tr/Tf					See Note 4
				20	ns	.732 kHz to 2.999 MHz
				10	ns	3.000 to 80.000 MHz
Tristate Function						
Start up Time			5		ms	
Random Jitter	Rj		5	12	ps RMS	1-Sigma
	Rise/Fall Time Tristate Function Start up Time	Frequency Range F Operating Temperature TA Storage Temperature Ts Frequency Stability △F/F Aging Input Voltage Input Voltage Vdd Input Voltage Vdd Input Current Idd Symmetry (Duty Cycle) Input Voltage Load Vol Symmetry Current Vol Cutput Current Vol Inse/Fall Time Tr/Tf Tristate Function Start up Time	Frequency Range F .732 kHz Operating Temperature TA (See Order Storage Temperature Ts -55 Frequency Stability △F/F (See Order Aging 1st Year - Thereafter (per year) - - Input Voltage Vdd 4.5 Input Current Idd - Load - 5 TTL or 5(10 TTL	Frequency Range F .732 kHz Operating Temperature TA (See Ordering Inform Storage Temperature Ts -55 Frequency Stability ΔF/F (See Ordering Inform Aging ±3 ±1 1st Year ±2 Input Voltage Vdd 4.5 5.0 Input Voltage Vdd 4.5 5.0 Input Current Idd	Frequency Range F .732 kHz 80 Operating Temperature TA (See Ordering Information) 15 Storage Temperature Ts -55 +125 Frequency Stability ΔF/F (See Ordering Information) 15 Aging ±3 +125 +125 Input Star ±3 +12 -10 Input Voltage Vdd 4.5 5.0 5.5 Input Current Idd - 15 25 Load 5 TTL or 50 pF 60 60 Output Type - 5 TTL or 50 pF 10 TTL or 15 pF Symmetry (Duty Cycle) (See Ordering Information) 10% Vdd Load - 10 TTL or 50 pF 10% Vdd Logic "0" Level Voh 90% Vdd - Logic "0" Level Voh 90% Vdd - Logic "0" Level Voh 90% Vdd ±8 ±16 - 10% Vdd - Rise/Fall Time Tr/Tf 20 10	Frequency Range F .732 kHz 80 Mhz Operating Temperature TA (See Ordering Information) ************************************

1. Consult factory for availability of higher frequencies.

2. TTL load - See load circuit diagram #1. HCMOS load - See load circuit diagram #2.

Symmetry is measured at 1.4 V with TTL load, and at 50% Vdd with HCMOS load.
Rise/Fall times are measured between 0.5 V and 2.4 V with TTL load, and between 10% Vdd and 90% Vdd with HCMOS load.

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.