

# MAH Series



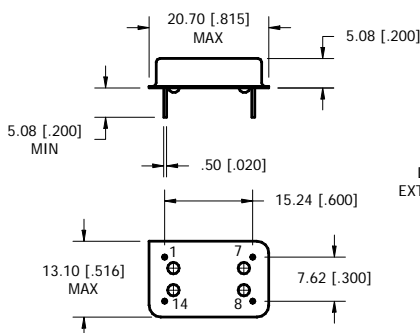
- **Industry Standard Package**
- **RoHS Compliant Available**
- **HCMOS Output**
- **Wide Frequency Range**



## ELECTRICAL SPECIFICATIONS:

Frequency Range	5.000kHz to 200.000MHz		
Frequency Stability (Inclusive of Temperature, Load, Voltage and Aging)	See Part Number Guide		
Operating Temperature	See Part Number Guide		
Storage Temperature	-55°C to +125°C		
Waveform	HCMOS		
Logic "0"	10% Vdd max		
Logic "1"	90% Vdd min		
Duty Cycle 50% OF Waveform	See Part Number Guide		
Load	10 TTL Gates or 50pF max		
Start Up Time	10mSec max		
Rise/Fall Time			
Up to 70.000MHZ	6 nSec max		
Above 70.000MHZ	4 nSec max		
Supply Voltage (VDC $\pm$ 10%) – Supply Current (in mA max)			
	+5.0	+3.3	+2.5/+1.8
5.000kHz to 1.000MHz	35	10	NA
1.001MHz to 24.000MHz	45	25	NA
24.001MHz to 50.000MHz	55	35	NA
50.001MHz to 70.000MHz	60	35	NA
70.001MHz to 200.000MHZ	85	40	NA
24.000MHz to 30.000MHz	NA	NA	20
30.001MHz to 80.000MHz	NA	NA	40

## MECHANICAL DETAILS:



PIN CONNECTIONS	
PIN 1	N/C OR TRI-STATE
PIN 7	CASE GROUND
PIN 8	OUTPUT
PIN 14	SUPPLY VOLTAGE

DIMENSIONS IN BRACKET ARE IN INCHES  
EXTERNAL BYPASS CAPACITOR RECOMMENDED

TRI-STATE OPERATION	
PIN 1	PIN 8
LOGIC "1" OR N/C	OSCILLATION
LOGIC "0" OR GRD	HIGH IMPEDANCE

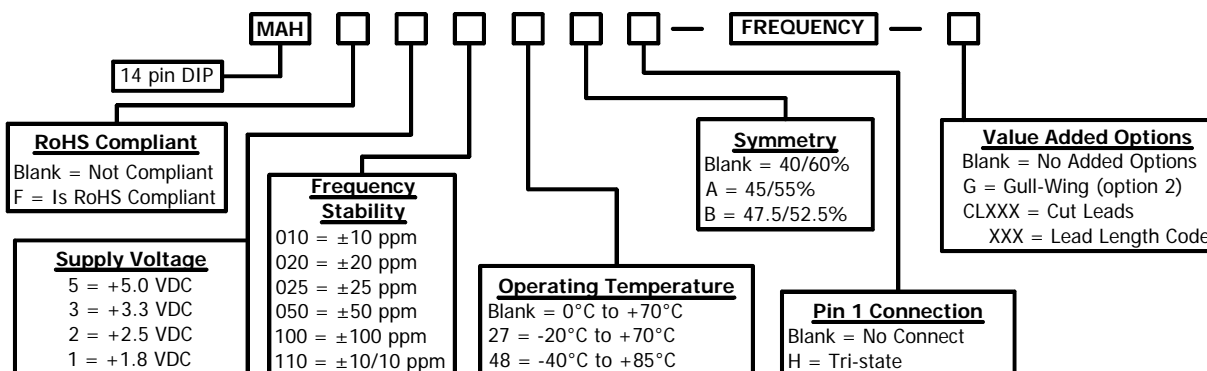
**MARKING:**

Line 1: MXX.XXX  
XX.XXX = Frequency in MHz

Line 2: SYMMML  
S = Internal Code  
YYMM = Date Code (Year/Month)  
L = Denotes RoHS Compliant

Line 3: XXXXX  
Internal Manufacture Code

## PART NUMBER GUIDE:



PLEASE CONSULT WITH MMD SALES DEPARTMENT FOR ANY OTHER PARAMETERS OR OPTIONS

**MMD Components**, 30400 Esperanza, Rancho Santa Margarita, CA, 92688

Phone: (949) 709-5075, Fax: (949) 709-3536, [www.mmdcomp.com](http://www.mmdcomp.com)

Sales@mmdcomp.com