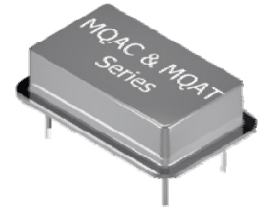


MQAC & MQAT Series



- Same Day Shipping Available
- Full-Size (14Pin Dip)
- CMOS/TTL Output
- Wide Frequency Range



Frequency	1.000MHZ to 150.000MHZ			
Frequency Stability (Inclusive of Temperature, Load & Voltage)	See Part Number Guide			
Aging @ +25°C	±5 ppm per year max			
Operating Temperature Range	See Part Number Guide			
Storage Temperature Range	-55°C to +125°C			
Output Waveform	TTL		CMOS	
Supply Voltage (Vdd)	+3.3 VDC ±10%	+5.0 VDC ±10%	+3.3 VDC ±10%	+5.0 VDC ±10%
Supply Current (unloaded)	25mA	45mA	25mA	45mA
Load	5TTL or 30pF	10 TTL or 50pF	15pF	30pF
Logic "0"	0.4V max		0.4V max	
Logic "1"	2.4 V min		Vdd-0.4V min	
Rise/Fall Time	4nSec max			
Start Up Time	10mSec max			
Duty Cycle	1.000MHZ to 66.000MHZ	45%/55% (TTL @ 1.4V Level / CMOS @ 50% Waveform)		
	66.000MHZ and above	40%/60% (TTL @ 1.4V Level / CMOS @ 50% Waveform)		
Jitter	1.000MHZ to 33.000MHZ	50pSec max (RMS)		50pSec max (RMS)
	33.000MHZ and above	30pSec max (RMS)		40pSec max (RMS)
Tri-State Operation	Voh = 70% of Vdd min or No Connection to Enable Output Vol = 30% of Vdd max or grounded to Disable Output (High Impedance)			

Environmental & Mechanical Detail

Shock	MIL-STD-883, Method 2002 Cond B
Solderability	MIL-STD-883, Method 2003
Solvent Resistance	MIL-STD-202, Method 215
Vibration	MIL-STD-883, Method 2007, Cond A
Gross Leak Test	MIL-STD-883, Method 1014, Cond C

Marking Detail

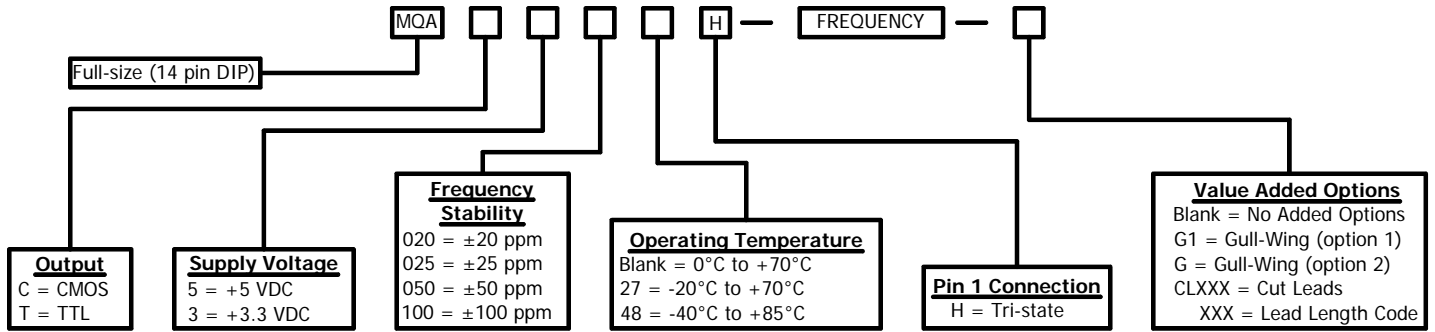
Line 1 = MXXXXX		
M	=	MMD
XXXXX	=	Frequency in MHZ
Line 2 = SYWWL		
S	=	Internal Code
YYWW	=	4 Numerical Digit Date Code (Year / Week)
L	=	Denotes RoHS Compliant
Line 3 = XXXXX		
Internal use only		
May vary with lots		
Pin 1 Designator		



MMD Monitor/Quartztek
 30400 Esperanza, Rancho Santa Margarita, CA, 92688
 Phone: (949) 709-5075, Fax: (949) 709-3536, www.mmdcomp.com
 Sales@mmdcomp.com

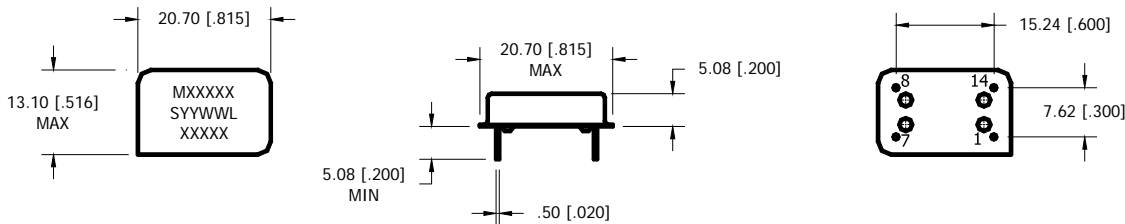


Part Number Guide



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

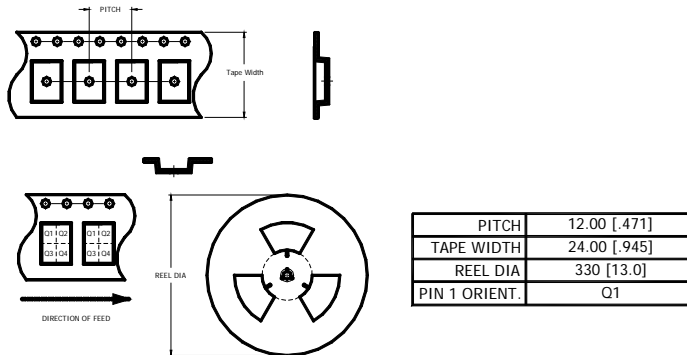
Mechanical Details



PIN CONNECTIONS	
PIN 1	TRI-STATE
PIN 7	GROUND
PIN 8	OUTPUT
PIN 14	SUPPLY VOLTAGE

DIMENSIONS IN BRACKET ARE IN INCHES
EXTERNAL BYPASS CAPACITOR RECOMMENDED

Tape & Reel Dimensions



NOTES: UNLESS OTHERWISE SPECIFIED

1. Applicable Standards / Specifications
ANSI Y14.5M, Dimensions and Tolerances
EIA-481-B, 8 mm through 200mm Embossed Carrier Taping and 8 mm and 12 mm Punched Carrier Taping of Surface Mount Components for Automatic Handling.
2. Dimensions are in millimeters [inch].
3. Tolerances are ±0.1 [.004] mm unless otherwise specified.
4. Do not scale drawing.



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