

# Quickturn Oscillators

4 Industry Standard Packages

**MMD**  
COMPONENTS



- **2-3 Day Delivery**
- **Thru-Hole and SMD Packages**
- **CMOS/TTL Output**
- **Stability to  $\pm 20\text{ppm}$**
- **Wide Frequency Range**

## Electrical Specifications

Frequency Range		1.000MHz to 150.000MHz
Frequency Stability		$\pm 100\text{ppm}$ to $\pm 20\text{ppm}$
Operating Temperature Range		$0^{\circ}\text{C}$ - $70^{\circ}\text{C}$ to $-40^{\circ}\text{C}$ - $85^{\circ}\text{C}$
Storage Temperature Range		$-55^{\circ}\text{C}$ - $125^{\circ}\text{C}$
Aging (@ $25^{\circ}\text{C}$ )		$\pm 5\text{ppm}$ / year maximum
Supply Voltage (Vdd)		5.0Vdc $\pm 10\%$ or 3.3Vdc $\pm 10\%$
Supply Current (unloaded)	5V	45mA
	3.3V	25mA
Output Voltage Logic High	TTL	2.4V min
	CMOS	Vdd - 0.4V min
Output Voltage Logic Low		0.4V max
Load Drive Capability (TTL)	5V, 1 - 40MHz	50pF max
	5V, 40 - 133MHz	25pF max
Load Drive Capability (CMOS)	5V, 1 - 66.6MHz	50pF max
	5V, 66.6 - 133MHz	25pF max
	3.3V, 1 - 40MHz	30pF max
	3.3V, 40 - 100MHz	15pF max
Duty Cycle (1.4Vdc-TTL, 50% waveform-HCMOS)	1 - 66MHz	45/55
	66MHz and above	40/60
Rise / Fall Time		4nSec max
Start Up Time		10mSec max
Jitter	5V, 1 - 33MHz	50pSec max* (RMS)
	5V, above 33.000MHz	30pSec max* (RMS)
	3.3V, 1 - 33MHz	50pSec max* (RMS)
	3.3V, above 33.000MHz	40pSec max* (RMS)

\*Please contact your MMD representative for up-to-date typical jitter information

Notes



[www.mmdcomp.com](http://www.mmdcomp.com)

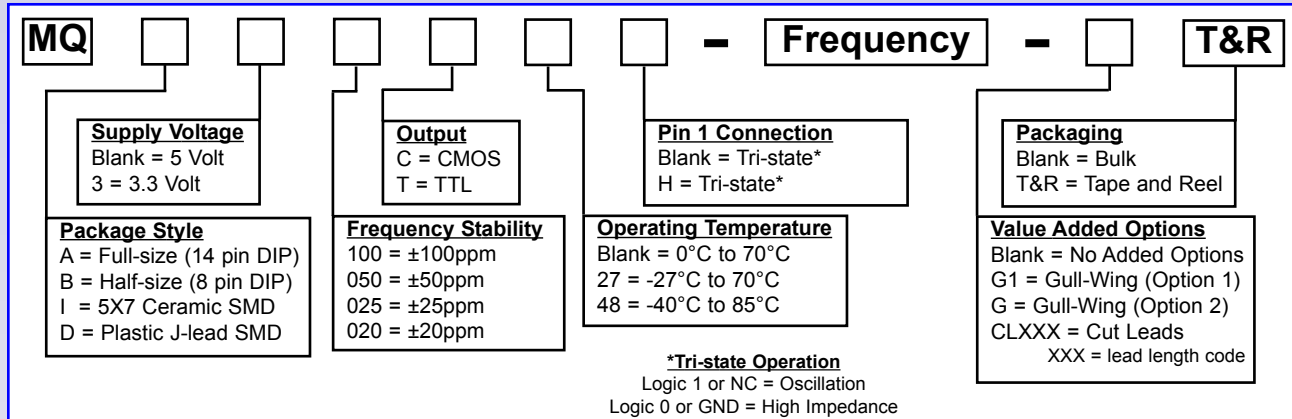
Toll Free 1-877-663-2667 / Fax: 949-753-5889

MQ01

Specifications subject to change without notice

Revision: 9/23/02 B

## Part Numbering Guide



### Environmental / Mechanical

Shock: MIL-STD-883, Method 2002, Condition B  
Solderability: MIL-STD-883, Method 2003  
Solvent Resistance: MIL-STD-202, Method 215  
Vibration: MIL-STD-883, Method 2007, Condition A  
Gross Leak Test: MIL-STD-883, Method 1014, Condition C  
Fine Leak Test: MIL-STD-883, Method 1014, Condition A2

### Value Added Options

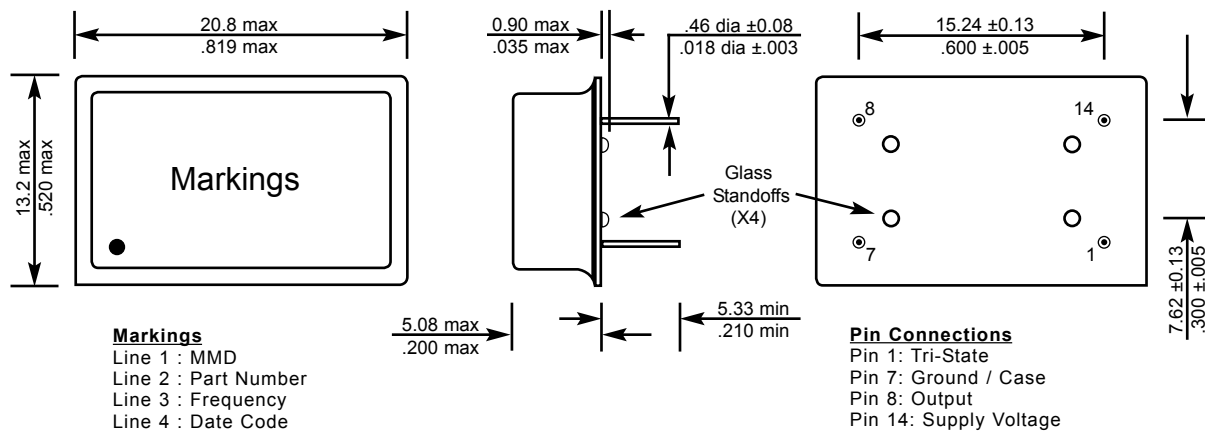
**Gull-Wing (G1 option) -**  
For specification details refer to page VA3

**Gull-Wing (G option) -**  
For specification details refer to page VA3

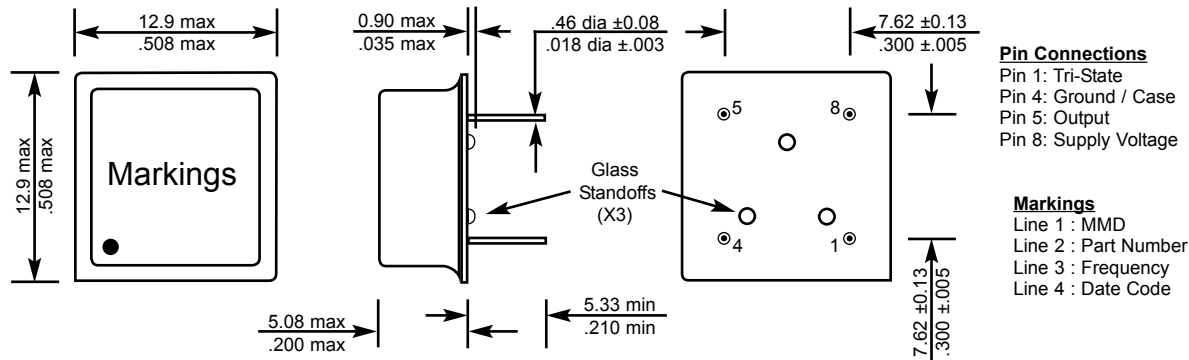
**Cut Leads (CLXXX option) -**  
For specification details refer to page VA1

### Mechanical Dimensions

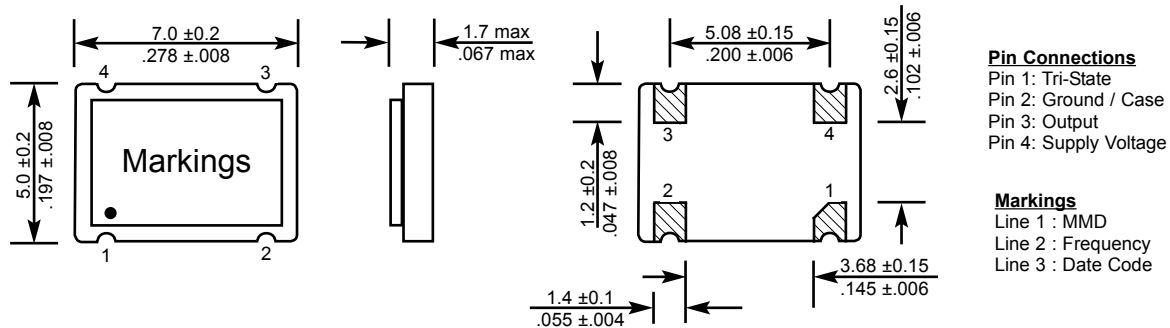
#### Package Style A / Full-size (14 pin DIP)



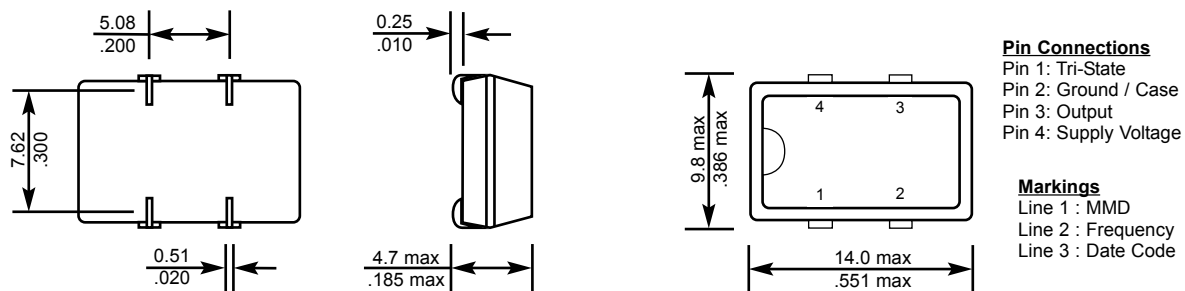
### Package Style B / Half-size (8 pin DIP)



### Package Style I / 5X7 Ceramic SMD

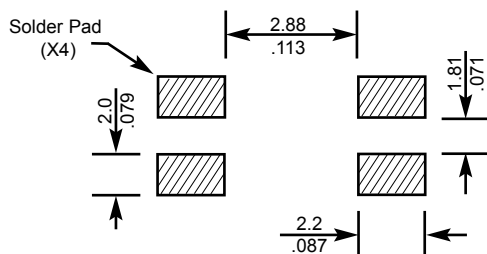


### Package Style D / Plastic J-Lead SMD



### Suggested Solder Pad Layout

#### Package Style I / 5X7 Ceramic SMD



#### Package Style D / Plastic J-Lead SMD

