

### STANDARD SPECIFICATIONS

Frequency Range	6 MHz to 150 MHz
Frequency Tolerance (25 °C)	± 50 ppm Standard (see Crystal Part Number Guide for more details)
Resonance	Parallel @ 18pF Standard (see Crystal Part Number Guide for more details)
Shunt Capacitance (Co)	7pF max
Aging	±5 ppm max per year
Frequency Stability over Operating Temperature	± 100 ppm Standard (see Crystal Part Number Guide for more details)
Drive Level	100µW to 500µW
Operating Temperature Range	0 °C ~+70 °C Standard (see Crystal Part Number Guide for more details)
Storage Temperature Range	-40 °C ~+85 °C

### EQUIVALENT SERIES RESISTANCE (E.S.R.)

Frequency Range	Mode of Oscillation	ESR Max. (Ω)
6MHz~7.99MHz	Fundamental	100
8MHz~9.99MHz	Fundamental	60
10MHz~13.99MHz	Fundamental	50
14MHz~19.99MHz	Fundamental	40
20MHz~40MHz	Fundamental	30
30MHz~150MHz	3 <sup>rd</sup> OT	80

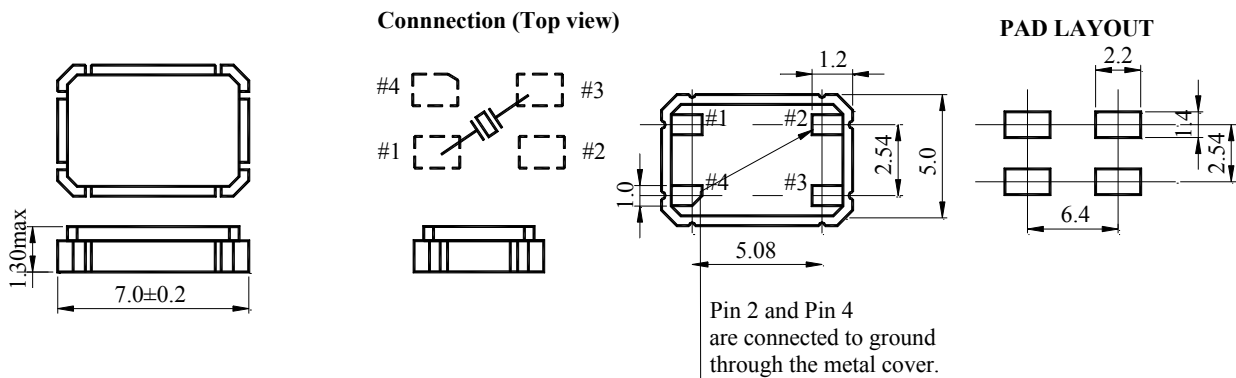
### Ordering Instructions (see Crystal Part Number Guide for more details)

**Example: QVS Part # = QCM25-21AFT18-24.000**

QCM25 -	±50ppm(@ 25°)	±100ppm(Over Temp)	-30°C~+80°C	Fundamental	Load Cap.	Freq.
	2	1	A	F	18pF	-24.000MHz

\* See Engineering-Technical Info for Solder Re-flow and Tape and Reel Specs.

### DIMENSIONS (Unit:mm)



### QVS TECH INC

6965 El Camino Real, Ste 105 Carlsbad, CA 92009 Phone: 760-929-8677 Fax: 760-929-8077 email: [sales@qvstech.com](mailto:sales@qvstech.com)

Specifications subject to change without notice (Rev C)