

### Features

- Frequency range : 16MHz to 66MHz
- Ceramic SMD package
- Seam sealing
- External dimensions (mm)  
L : 2.0 x W : 1.6 x H : 0.5
- RoHS compliant & Pb free

### Applications

- Bluetooth, Wireless LAN
- Microprocessor
- Mobile phone, Computer, Modem
- Audio, Video
- Consumer products

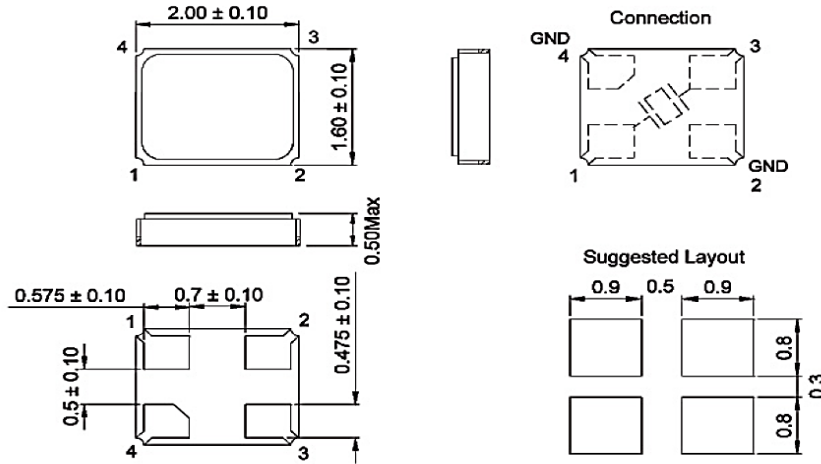
### Electrical Characteristics

Item		QT216S	Conditions
Frequency Range	$F_0$	16MHz ~ 66MHz	
Frequency Tolerance	$F_{tol}$	$\pm 30\text{ppm}$ , $\pm 20\text{ppm}$ , $\pm 10\text{ppm}$	at 25°C
Frequency Stability over Operating Temperature Range (refer to 25°C)	$F_{stab}$	$\pm 30\text{ ppm}$	-20°C ~ +70°C
		$\pm 20\text{ ppm}$	
		$\pm 10\text{ ppm}$	
		$\pm 10\text{ ppm}$	-30°C ~ +85°C
		$\pm 30\text{ ppm}$	-40°C ~ +85°C
		$\pm 20\text{ ppm}$	
		$\pm 60\text{ ppm}$	-40°C ~ +125°C
Operating Temperature Range	$T_{OTR}$	-20°C ~ +70°C	
		-40°C ~ +85°C	
		-40°C ~ +125°C	
Shunt Capacitance	$C_0$	3pF Max.	
Drive Level	$D_L$	1 ~ 200 $\mu$ W (50 $\mu$ W Typ.)	
Load Capacitance	$C_L$	6pF, 8pF, 10pF, 12pF	
Aging	$F_{aging}$	$\pm 3\text{ ppm Max.}$	at 25°C $\pm 3^\circ\text{C}$ , first year
Storage Temperature Range	$T_{STR}$	-55°C ~ +125°C	

### Motional Resistance (ESR)

Fundamental	
16 ~ 19.2 MHz	200 $\Omega$ Max.
19.2 ~ 30 MHz	100 $\Omega$ Max.
30 ~ 66 MHz	80 $\Omega$ Max.

## Dimensions



## Ordering Information

**QT216S - 24.000M A H E - T**

**Frequency in Hz**

Please contact us for available frequencies

**Frequency Tolerance (at 25°C)**

A  $\pm 30$  ppm  
 D  $\pm 20$  ppm  
 E  $\pm 10$  ppm

**Packaging Method**

T Tape & Reel

**Load Capacitance**

B 6 pF  
 V 8 pF  
 Q 10 pF  
 E 12 pF

**Frequency Stability (over Temp.)**

A  $\pm 30$  ppm (-20°C ~ +70°C)  
 D  $\pm 20$  ppm (-20°C ~ +70°C)  
 E  $\pm 10$  ppm (-20°C ~ +70°C)  
 T  $\pm 10$  ppm (-30°C ~ +85°C)  
 H  $\pm 30$  ppm (-40°C ~ +85°C)  
 I  $\pm 20$  ppm (-40°C ~ +85°C)  
 K  $\pm 60$  ppm (-40°C ~ +125°C)

