

## Product Features

1. 4 pad seam sealing crystal
2. Extremely small SMD type crystal units
3. Application for smart phone , sip module , variety of compact portable consumer products reference clocks
4. High precision and frequency stability
5. High reliable environmental performance
6. RoHS and REACH Compliant , Pb-free , Halogen-free
7. Industry Standard Package :  
1.6\*1.2\*0.33mm (9Q Series)

### Application :

- Wearable devices
- Wi-Fi and BT or other wireless module
- IoT devices
- Smart phone
- Space limited application



Test condition

Ambient temperature :  $25 \pm 5^{\circ}\text{C}$

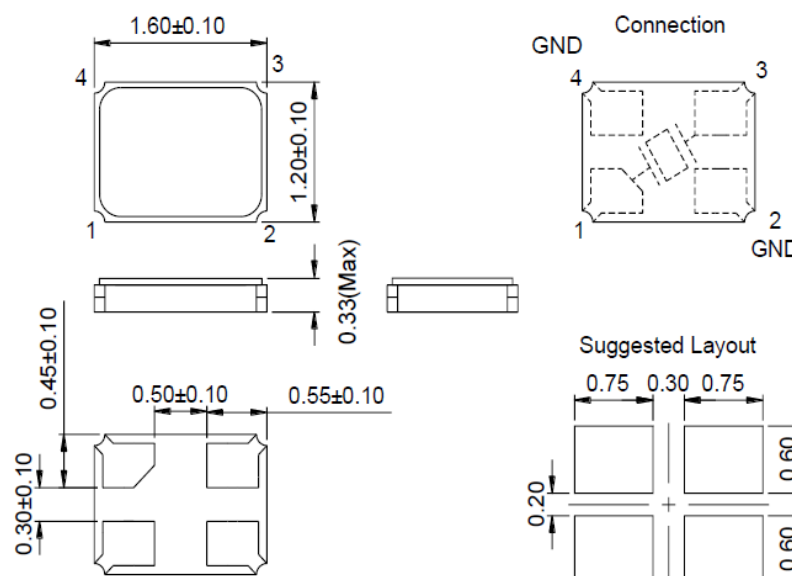
Relative humidity : 40% ~ 70%

### ● Table 1 . Electrical Specifications

Parameters	Symbol	Min.	Typ.	Max.	Units	Notes
Nominal Frequency	F	24 ~ 60			MHz	
Frequency Tolerance	FT	$\pm 10$			ppm	@ $25^{\circ}\text{C} \pm 3^{\circ}\text{C}$
Frequency Stability Over Operating Temp. Range (Reference $25^{\circ}\text{C}$ )	ST	$\pm 10$			ppm	@ $-30 \sim 85^{\circ}\text{C}$
		$\pm 15$				@ $-40 \sim 85^{\circ}\text{C}$
		$\pm 30$				@ $-40 \sim 105^{\circ}\text{C}$
Operating Temperature	Topr	-40	25	105	$^{\circ}\text{C}$	
Load Capacitance	CL	8 , 10 , 12 or specify			pF	
Drive Level	DL	-	100	200	$\mu\text{W}$	
Equivalent Series Resistance	ESR	-	-	60	Ohm	24~38.4MHz
		-	-	40		38.4~48MHz
		-	-	30		>48MHz
Aging	-	$\pm 3$			ppm	1st Year

Note : The table shows common spec. if you have special spec. requirement , please feel free to contact our salesperson.

### ● Dimensions



(Unit : mm)