

Features

- ✧ Frequency range : 24MHz to 66MHz
- ✧ Ultra compact and thin
- ✧ AuSn sealing, ceramic SMD package
- ✧ External dimensions (mm)
L : 1.6 x W : 1.2 x H : 0.35
- ✧ RoHS compliant & Pb free

Applications

- ✧ BT, BLE, W-LAN, NFC
- ✧ SiP modules
- ✧ Mobile phone, Wearables
- ✧ Internet of Things (IoT)
- ✧ Portable consumer products

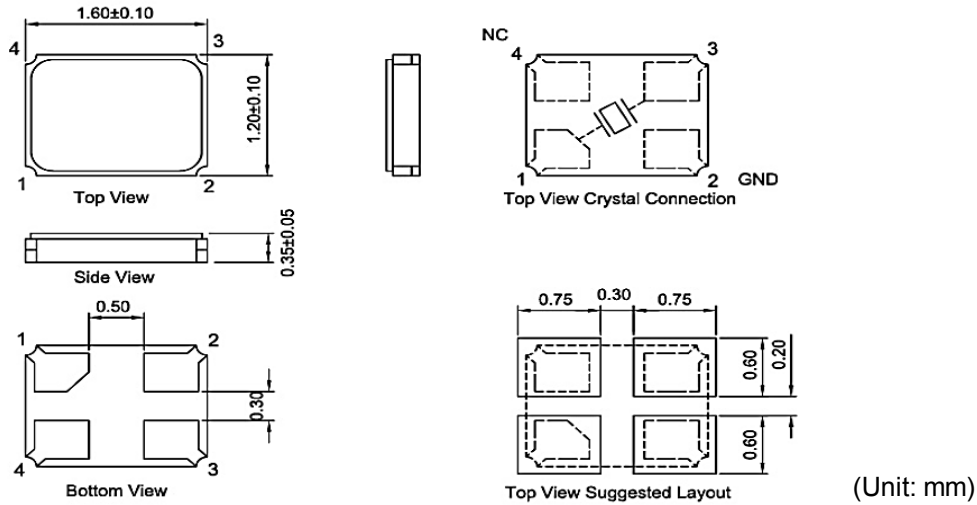
Electrical Characteristics

Item		8Q	Conditions
Frequency Range	F_0	24MHz ~ 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 μ W (50 μ 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	
24 ~ 30 MHz	100 Ω Max.
30 ~ 66 MHz	80 Ω Max.

Dimensions



Ordering Information

8Q - 27.000M A H E - T

Frequency in Hz

Please contact us for available frequencies

Packaging Method

T Tape & Reel
B Bulk

Frequency Tolerance (at 25°C)

A ±30 ppm
B ±50 ppm
C ±100 ppm
D ±20 ppm

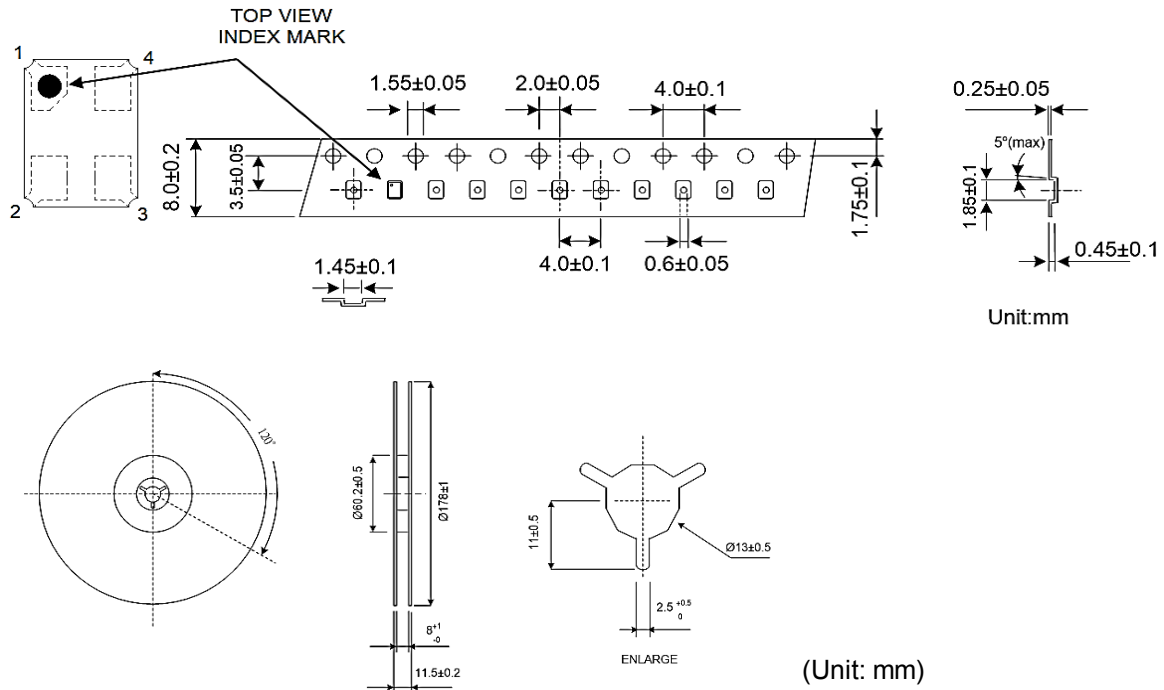
Load Capacitance

B 6 pF
Y 7 pF
V 8 pF
C 9 pF
Q 10 pF
E 12 pF
I 16 pF
J 18 pF
K 20 pF
L 22 pF
S 30 pF
T 32 pF

Frequency Stability (over Temp.)

A ±30 ppm (-20°C ~ +70°C)
B ±50 ppm (-20°C ~ +70°C)
D ±20 ppm (-20°C ~ +70°C)
F ±100 ppm (-40°C ~ +85°C)
G ±50 ppm (-40°C ~ +85°C)
H ±30 ppm (-40°C ~ +85°C)
K ±60 ppm (-40°C ~ +125°C)
X ±50 ppm (-10°C ~ +60°C)
Y ±30 ppm (-10°C ~ +60°C)

Packing



Reflow Profile

Solder melting point : 220°C ± 10°C, 60 sec. Min.

Peak temperature : 260°C ± 10°C, 10 sec. Min.

