

Features

- Frequency range : 3.2MHz to 90MHz
- Resistance welded, metal can SMD type
- External dimensions (mm)
L : 12.7 x W : 4.8 x H : 3.8
- RoHS compliant & Pb free

Applications

- TV, STB, Cable modem
- Microprocessor
- Computer peripherals
- Home electronics
- Consumer products

Electrical Characteristics

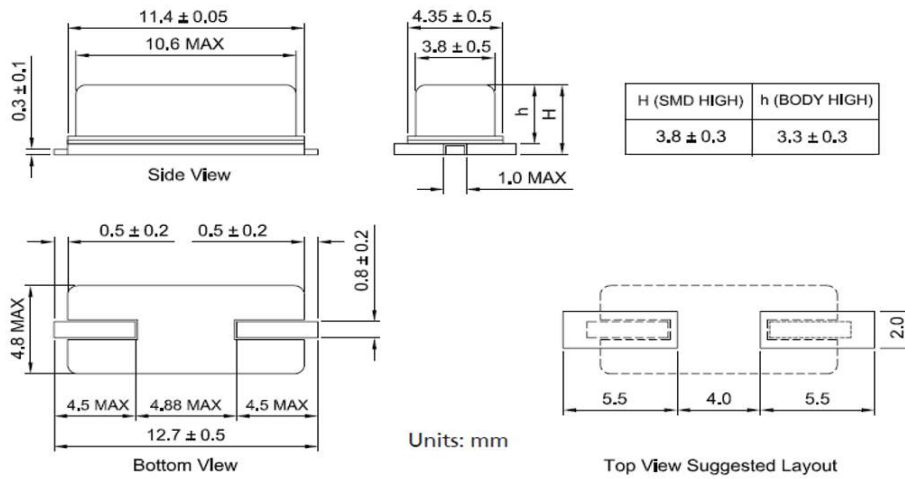
Item		QT49S	Conditions
Frequency Range	F_0	3.2MHz ~ 90MHz	
Frequency Tolerance	F_{tol}	$\pm 50\text{ppm}$, $\pm 30\text{ppm}$, $\pm 20\text{ppm}$, $\pm 10\text{ppm}$	at 25°C
Frequency Stability over Operating Temperature Range (refer to 25°C)	F_{stab}	$\pm 50\text{ ppm}$	-20°C ~ +70°C
		$\pm 30\text{ ppm}$	
		$\pm 20\text{ ppm}$	
		$\pm 10\text{ ppm}$	
		$\pm 30\text{ ppm}$	-40°C ~ +85°C
		$\pm 20\text{ ppm}$	
Operating Temperature Range	T_{OTR}	-20°C ~ +70°C -40°C ~ +85°C	
Shunt Capacitance	C_0	7pF Max.	
Drive Level	D_L	1 ~ 500 μ W (100 μ W Typ.)	
Load Capacitance	C_L	12pF, 16pF, 18pF, 20pF	
Aging	F_{aging}	$\pm 5\text{ ppm Max.}$	at 25°C $\pm 3^\circ\text{C}$, first year
Storage Temperature Range	T_{STR}	-55°C ~ +125°C	

Motional Resistance (ESR)

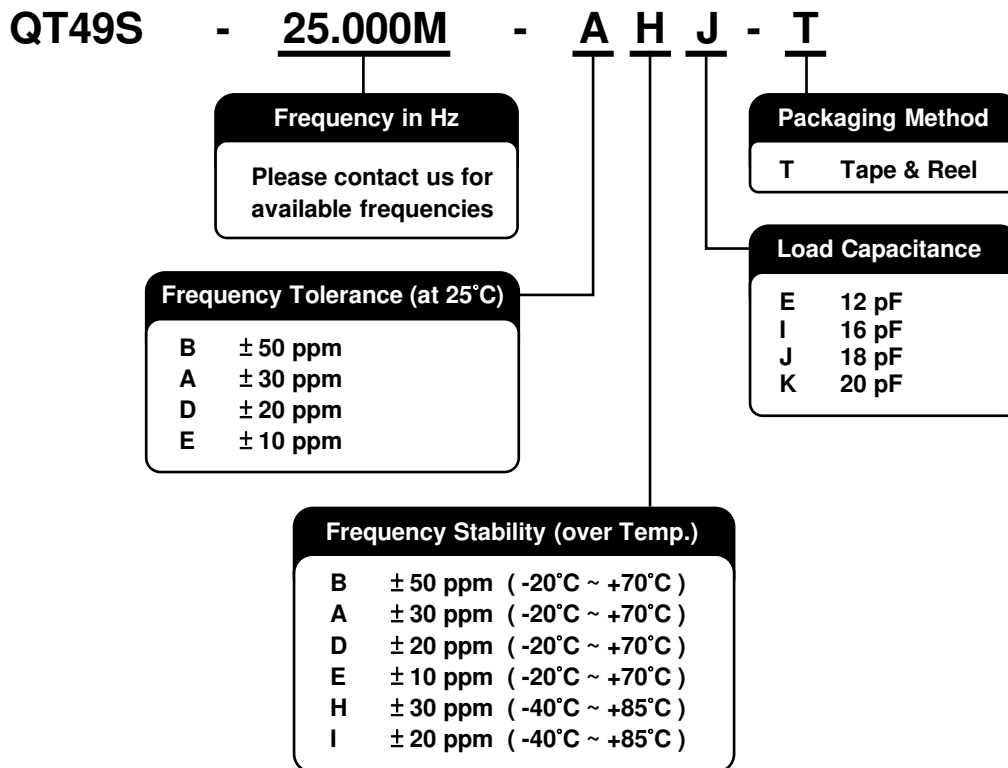
Fundamental	
3.2 ~ 3.686 MHz	200 Ω Max.
3.686 ~ 5 MHz	150 Ω Max.
5 ~ 10 MHz	80 Ω Max.
10 ~ 14 MHz	40 Ω Max.
14 ~ 30 MHz	30 Ω Max.

3rd Overtone	
27 ~ 30 MHz	100 Ω Max.
30 ~ 50 MHz	80 Ω Max.
50 ~ 90 MHz	60 Ω Max.

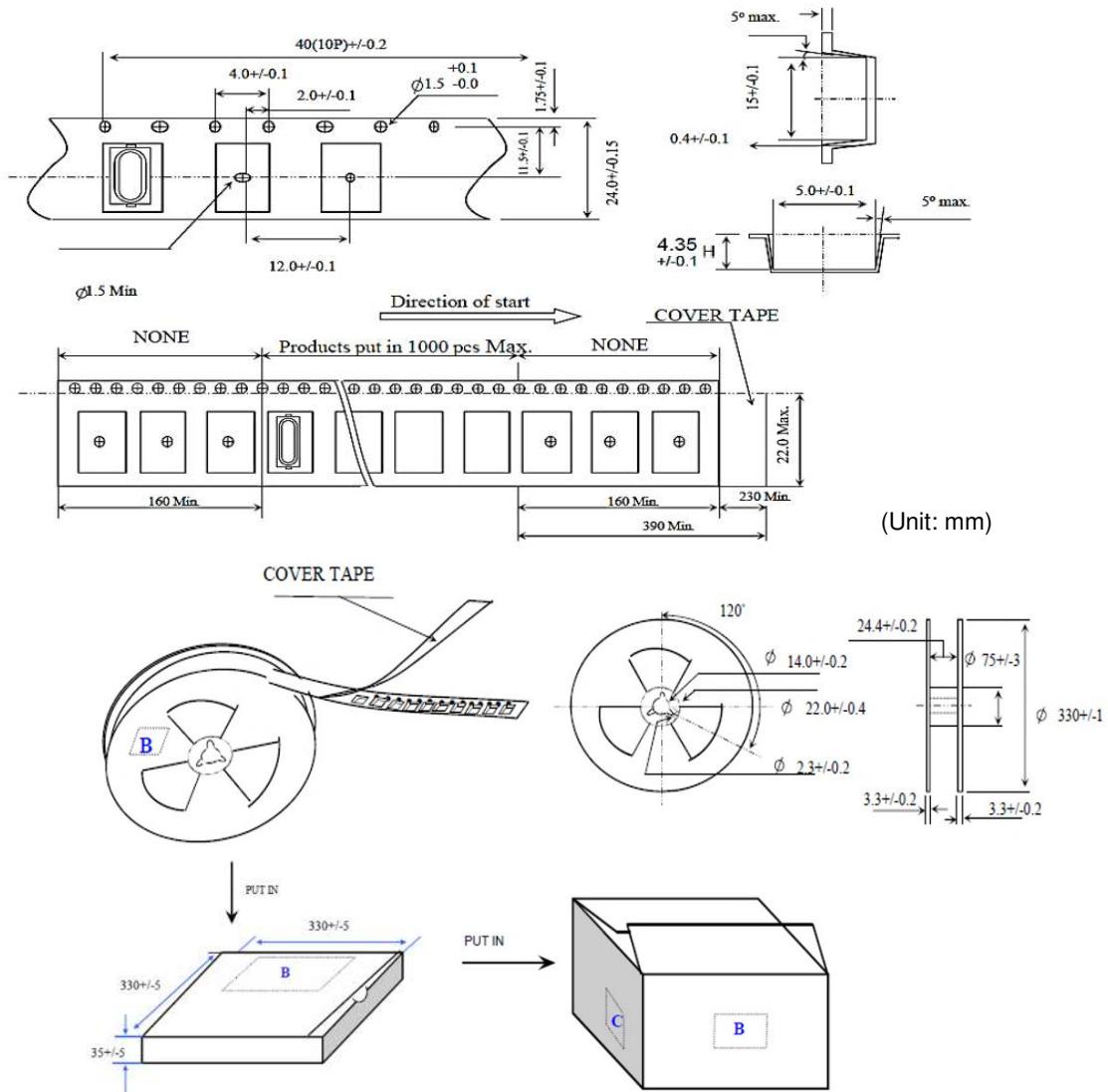
Dimensions



Ordering Information



Packing



Reflow Profile

Solder melting point : $220^\circ\text{C} \pm 10^\circ\text{C}$, 60 sec. Min.

Peak temperature : $260^\circ\text{C} \pm 5^\circ\text{C}$, 10 sec. Min.

