

Features

- Frequency range : 20MHz 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

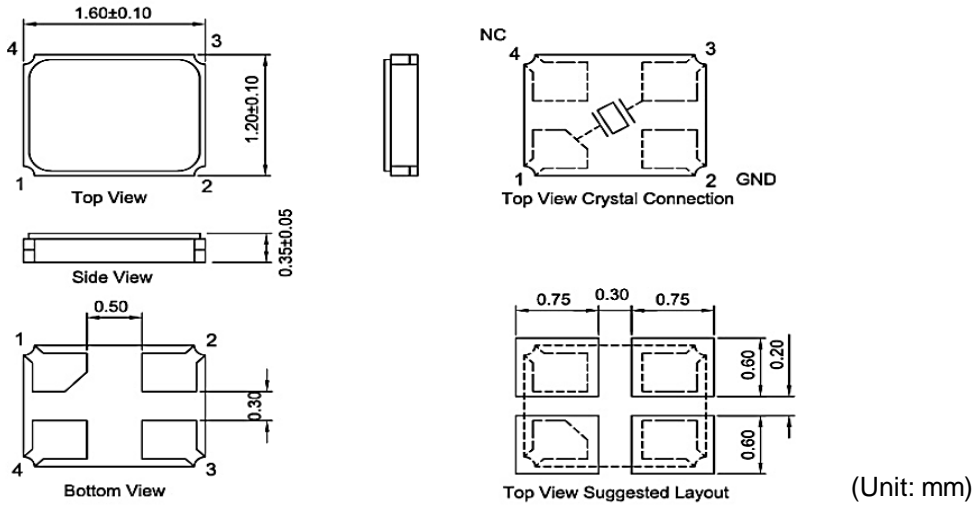
Electrical Characteristics

| Item | | QT161S | Conditions |
|--|-------------|--|--|
| Frequency Range | F_0 | 20MHz ~ 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, 7pF, 8pF, 9pF, 10pF, 12pF, 16pF, 18pF | |
| 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 | |

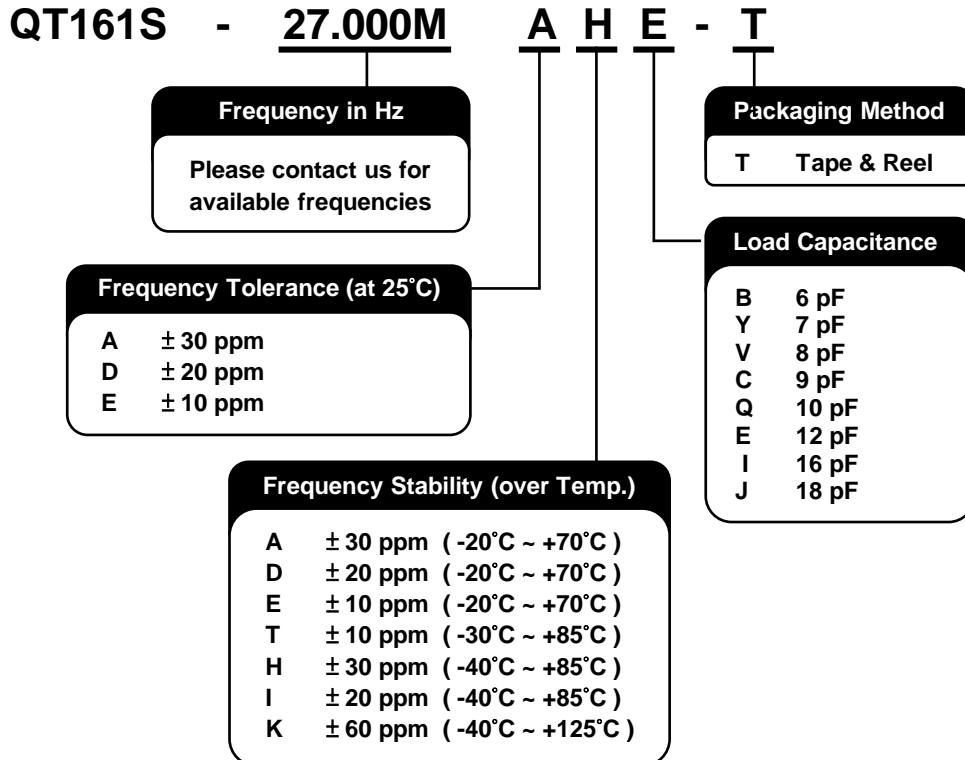
Motional Resistance (ESR)

| Fundamental | |
|-------------|-------------------|
| 20 ~ 30 MHz | 100 Ω Max. |
| 30 ~ 66 MHz | 80 Ω Max. |

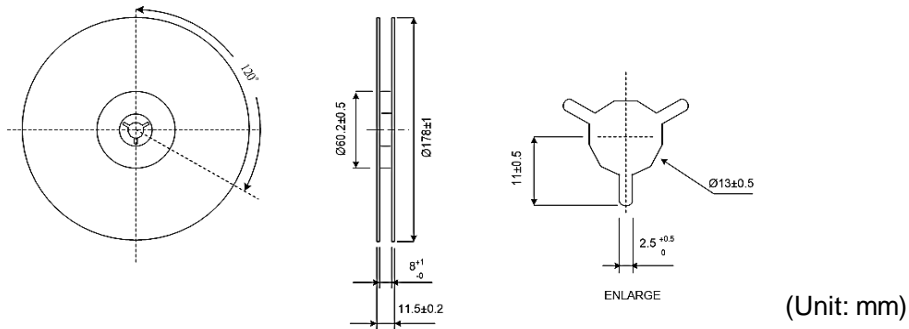
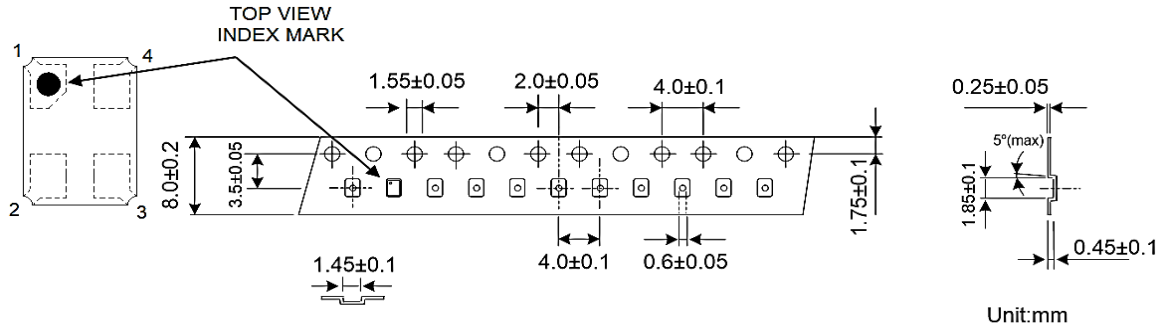
Dimensions



Ordering Information



Packing



Reflow Profile

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

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

