

## QU1 series

**ROHS Compatible**

### & Feature:

Compact unit for surface mount

Able to by means of a metal case and completely sealed high solution characteristics

Copes with high density mounting and is the optimum for mass production

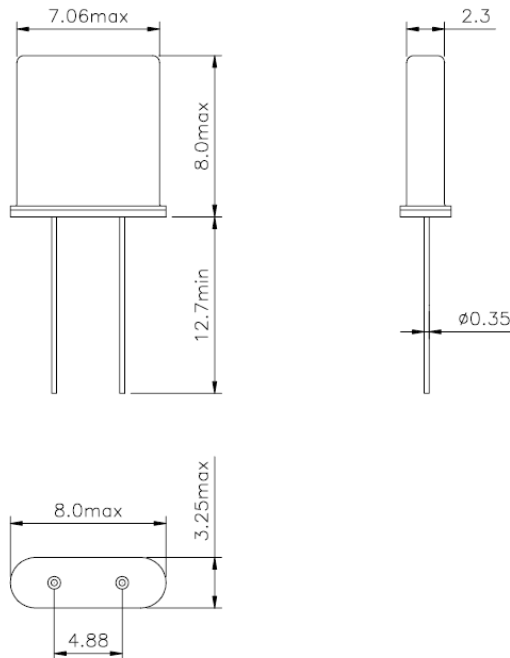
### & Electrical Specifications

|                              |                                                                           |
|------------------------------|---------------------------------------------------------------------------|
| Frequency Range              | 4.000~200.00MHz                                                           |
| Oscillation mode             | Fundamental, 3 <sup>rd</sup> , 5 <sup>th</sup> , 7 <sup>th</sup> overtone |
| Operating temperature range  | -10~+60℃, -20□~+70℃, -40~+85℃                                             |
| Storage temperature range    | -40~+125℃                                                                 |
| Frequency tolerance          | ±5PPM, ±10PPM, ±20PPM, ±30PPM at 25±2□                                    |
| Freq. Temp characteristics   | ±20PPM -20□~+70□ Typical                                                  |
| Load capacitance             | 20pF for specify                                                          |
| Equivalent series resistance | See below table                                                           |
| Parallel capacitance (Co)    | 4.5~7PF Typ.                                                              |
| Drive level                  | 100 μW                                                                    |
| Insulation resistance        | More than 500MΩ AT DC100V                                                 |

### & Frequency/ESR

| Frequency range(MHz) | Max ESR (Ω) Max. | Mode                              |
|----------------------|------------------|-----------------------------------|
| 4.000~6.999          | 100              | Fund                              |
| 7.000~9.999          | 60               | Fund                              |
| 10.000~13.999        | 50               | Fund                              |
| 14.000~19.999        | 40               | Fund                              |
| 20.000~23.999        | 100              | 3 <sup>rd</sup>                   |
| 24.000~34.999        | 30               | 3 <sup>rd</sup>                   |
| 35.000~100.000       | 80               | 3 <sup>rd</sup>                   |
| 100.000~200.000      | 100              | 5 <sup>th</sup> / 7 <sup>th</sup> |

& Dimension:



Part number:

|                     |                                   |                        |                                                   |                |                                                                 |                                                   |
|---------------------|-----------------------------------|------------------------|---------------------------------------------------|----------------|-----------------------------------------------------------------|---------------------------------------------------|
| QU1                 | 12.000                            | 20                     | 50                                                | 40             | A                                                               | 50                                                |
| Model type:<br>UM-1 | Frequency<br>12.000:<br>12.000MHz | Load capa.<br>20: 20pF | Frequency<br>tolerance:<br>50:±50ppm<br>25:±25ppm | ESR:<br>40:40Ω | Temperature<br>range:<br>A:-10~+70□<br>B:-20~+70□<br>C:-40~+85□ | Frequency<br>stability:<br>50:±50ppm<br>25:±25ppm |

|                                                                                                |
|------------------------------------------------------------------------------------------------|
| F                                                                                              |
| Oscillate mode<br>F: Fundamental<br>3: 3 <sup>rd</sup> overtone<br>5: 5 <sup>th</sup> overtone |