

# UM1MJ SURFACE-MOUNT CRYSTAL

## FEATURES

8.0 x 7.8 x 3.5 mm

- High Precision availability
- Wide Frequency Range
- One day delivery
- Applications: Telecommunication equipment, Pagers,...



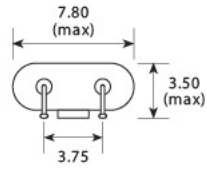
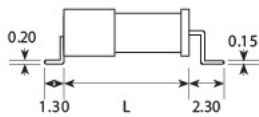
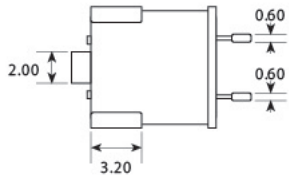
| Parameters                   | Symbol       | Specification                                                                                                                                                                                  |
|------------------------------|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Frequency Range              | Fo           | 4.000 MHz ~ 200 MHz                                                                                                                                                                            |
| Operation Mode               |              | 4.000 MHz + Fundamental (see options)<br>30.0 MHz ~ 100.0 MHz 3rd-overtone (see options)<br>65.0 MHz ~ 200.0 MHz 5th-overtone (see options)<br>80.0 MHz ~ 200.0 MHz 7th-overtone (see options) |
| Operating temperature Range  | To           | 0° to +70°C (see options)                                                                                                                                                                      |
| Frequency Tolerance at 25°C  | $\Delta f/F$ | $\pm 10$ ppm max. (see options)                                                                                                                                                                |
| Temperature Stability        | $\Delta f/F$ | $\pm 10$ ppm max. (see options)                                                                                                                                                                |
| Load Capacitance (CL)        | CL           | series or 5 pF to 100 pF (see options)                                                                                                                                                         |
| Equivalent Series Resistance | ESR          | Frequency dependent, please consult factory                                                                                                                                                    |
| Shunt Capacitance (Co)       | Co           | 7pF Max                                                                                                                                                                                        |
| Insulation Resistance        | Ri           | 500 M $\Omega$ min. (at 100Vdc)                                                                                                                                                                |
| Drive Level                  | DL           | 1mW max.                                                                                                                                                                                       |
| Aging                        | $\Delta f/F$ | $\pm 5$ ppm max (at 25°C, first year)                                                                                                                                                          |
| Packing Unit                 |              | 1000pcs / reel                                                                                                                                                                                 |
| Soldering Condition          |              | 260°C, 10 sec x2 max                                                                                                                                                                           |
|                              |              | <b>Customer specifications on request</b>                                                                                                                                                      |

## OPTIONS & ORDERING INFORMATION

| UM1MJ- | .....             | .....             | .....            | .....                | .....            | ..... MHz          | - .....                     |
|--------|-------------------|-------------------|------------------|----------------------|------------------|--------------------|-----------------------------|
|        | Freq. Tolerance   | Freq. Stability*  | Operating Temp.* | Load Capacitance     | Mode             | Frequency in MHz   | ESR if other than STD       |
|        | 05 = $\pm 05$ ppm | 05 = $\pm 05$ ppm | D = -10° / +60°C | Please specify CL in | F = Fundamental  | Please specify the | Specify a value in $\Omega$ |
|        | 10 = $\pm 10$ ppm | 10 = $\pm 10$ ppm | E = 0° / +70°C   | pF or S for Series   | D = 3rd overtone | frequency in MHz   |                             |
|        | 15 = $\pm 15$ ppm | 15 = $\pm 15$ ppm | F = -20° / +70°C |                      | V = 5th overtone |                    |                             |
|        | 20 = $\pm 20$ ppm | 20 = $\pm 20$ ppm | G = -30° / +75°C |                      | Z = 7th overtone |                    |                             |
|        | 25 = $\pm 25$ ppm | 25 = $\pm 25$ ppm | H = -30° / +85°C |                      |                  |                    |                             |
|        | 30 = $\pm 30$ ppm | 30 = $\pm 30$ ppm | K = -40° / +85°C |                      |                  |                    |                             |
|        | 50 = $\pm 50$ ppm | 50 = $\pm 50$ ppm |                  |                      |                  |                    |                             |

\* Note: Not all combinations are possible, please consult us.

## OUTLINE DIMENSIONS



L=8.0mm