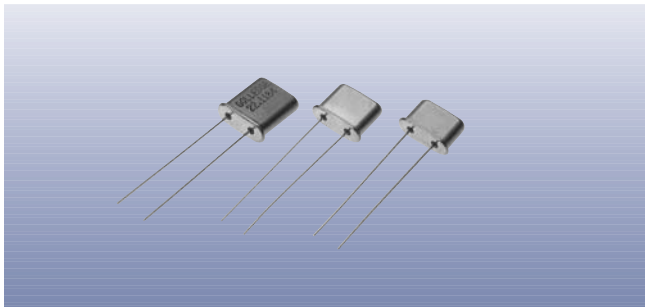


| Package | Height H |
|---------|----------|
| UM-1    | 8.00 max |
| UM-4    | 4.80 max |
| UM-5    | 6.00 max |

Scale 2:1

Slim case (2.6mm thick is available as an option over 20.0MHz. Contact our sales office for details.

## Features

- **Ideal for custom frequencies & specifications**
- **Wide frequency range**
- **Tight specifications available**
- **Fundamental mode up to 55 0MHz**

## ESR Values

The table shows the maximum ESR values in ohms for each package across the available frequency range.

| Frequency   | Mode         | UM-1J | UM-4J | UM-5J |
|-------------|--------------|-------|-------|-------|
| 3.5 ~ 4.99  | Fundamental  | 200   | -     | -     |
| 5.0 ~ 5.99  | Fundamental  | 150   | -     | -     |
| 6.0 ~ 6.99  | Fundamental  | 120   | -     | -     |
| 7.0 ~ 7.99  | Fundamental  | 100   | -     | -     |
| 8.0 ~ 9.99  | Fundamental  | 90    | -     | -     |
| 10.0 ~ 15.9 | Fundamental  | 40    | 60    | 60    |
| 16.0 ~ 55.0 | Fundamental  | 30    | 40    | 40    |
| 30.0 ~ 49.9 | 3rd overtone | 45    | 50    | 50    |
| 50.0 ~ 100  | 3rd overtone | 60    | 60    | 60    |
| 60.0 ~ 150  | 5th overtone | 90    | 120   | 120   |
| 130 ~ 300   | 7th overtone | 150   | 150   | 150   |

## Specifications

**UM-1: 8 0mm maximum height**

**UM-4: 4 8mm maximum height**

**UM-5: 6 0mm maximum height**

| Parameters                                 |                                 | Product |      |      | Option Code |
|--------------------------------------------|---------------------------------|---------|------|------|-------------|
|                                            |                                 | UM-1    | UM-4 | UM-5 |             |
| <b>Package:</b>                            | UM-1J<br>UM-4J<br>UM-5J         | ■       | ■    | ■    |             |
| <b>Frequency range:</b>                    | 3.579 ~ 300MHz<br>10.0 ~ 300MHz | ■       | ■    | ■    |             |
| <b>Calibration tolerance:</b>              | ±5ppm                           | □       | □    | □    | L           |
|                                            | ±7.5ppm                         | □       | □    | □    | M           |
|                                            | ±10ppm                          | □       | □    | □    | 1           |
|                                            | ±20ppm                          | ■       | ■    | ■    | 2           |
|                                            | ±30ppm                          | □       | □    | □    | 3           |
| Other values (±3ppm ~ ±100ppm)             |                                 | □       | □    | □    | specify     |
| <b>Temperature stability:</b>              | ±5ppm                           | □       | □    | □    | L           |
|                                            | ±7.5ppm                         | □       | □    | □    | M           |
|                                            | ±10ppm                          | □       | □    | □    | 1           |
|                                            | ±20ppm                          | □       | □    | □    | 2           |
|                                            | ±30ppm                          | ■       | ■    | ■    | 3           |
| Other values (±3ppm ~ ±100ppm)             |                                 | □       | □    | □    | specify     |
| <b>Operating temperature range:</b>        | 0 to +50°C                      | □       | □    | □    | 0           |
|                                            | -10 to +60°C                    | ■       | ■    | ■    | 1           |
|                                            | -20 to +70°C                    | □       | □    | □    | 2           |
|                                            | -30 to +80°C                    | □       | □    | □    | 3           |
|                                            | -40 to +85°C                    | □       | □    | □    | 4           |
|                                            | Other values                    | □       | □    | □    | specify     |
| <b>Circuit condition:</b>                  | 12pF                            | □       | □    | □    | B           |
|                                            | 16pF                            | □       | □    | □    | D           |
|                                            | 20pF                            | □       | □    | □    | F           |
|                                            | 30pF                            | □       | □    | □    | J           |
|                                            | Series resonant                 | □       | □    | □    | S           |
|                                            | Other values                    | □       | □    | □    | specify     |
| <b>Oscillation mode:</b>                   | Fundamental                     | □       | □    | □    | F           |
|                                            | 3rd overtone                    | □       | □    | □    | 3           |
|                                            | 5th overtone                    | □       | □    | □    | 5           |
|                                            | 7th overtone                    | □       | □    | □    | 7           |
| <b>Static capacitance (C<sub>0</sub>):</b> | 7pF max                         | ■       | ■    | ■    |             |
| <b>Equivalent series resistance (max):</b> | see table                       | ■       | ■    | ■    |             |
| <b>Ageing:</b>                             | ±3ppm max first year            | ■       | ■    | ■    |             |
| <b>Test drive level:</b>                   | 100μW                           | ■       | ■    | ■    |             |

■ Standard. □ Optional - Please specify required code(s) when ordering

## Ordering Information

Product name + option codes + frequency  
eg: **UM-1/231JF 24 576MHz** 20/30/10/30-F

- ◆ Insulating washers and mounting clips available. See our website for details.
- ◆ Some combinations of stability and temperature range may not be available. Please check with us before ordering.