



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-1	UM-4	UM-5
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-1 UM-4 UM-5	■	■	■	
<b>Frequency range:</b> 3.579 ~ 300MHz 10.0 ~ 300MHz	■	■	■	
<b>Calibration tolerance:</b> ±5ppm ±7.5ppm ±10ppm ±20ppm ±30ppm Other values (±3ppm ~ ±100ppm)	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	L M 1 2 3 specify
<b>Temperature stability:</b> ±5ppm ±7.5ppm ±10ppm ±20ppm ±30ppm Other values (±3ppm ~ ±100ppm)	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	L M 1 2 3 specify
<b>Operating temperature range:</b> 0 to +50°C -10 to +60°C -20 to +70°C -30 to +80°C -40 to +85°C Other values	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	0 1 2 3 4 specify
<b>Circuit condition:</b> 12pF 16pF 20pF 30pF Series resonant Other values	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	B D F J S specify
<b>Oscillation mode:</b> Fundamental 3rd overtone 5th overtone 7th overtone	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	F 3 5 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.