



# UMS202

## Features

- Better additional short-term stability, up to  $2.0E-14/1s$
- Ultra low phase noise  $\leq -130dBc/Hz@1Hz$ ,  $\leq -171dBc/Hz@1kHz$
- Low spurious  $\leq -100dBc$

## Applications

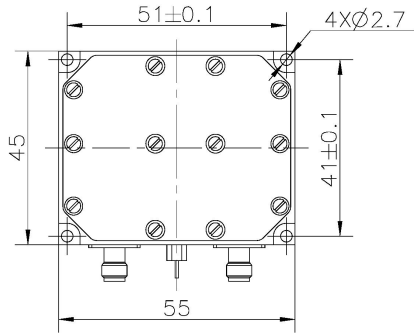
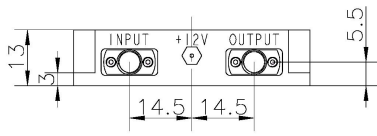
- Frequency standards and sources
- Measuring and calibration equipment
- Navigation

## Technical Specifications

|   |                         |                  |
|---|-------------------------|------------------|
| <b>Input Sign specifications</b>              |                         |                  |
| Frequency range                               | 100MHz $\pm$ 100Hz      |                  |
| Wave form                                     | Sine wave               |                  |
| Power   | 10 $\pm$ 2 dBm          |                  |
| Harmonics                                     | $\leq -30$ dBc          |                  |
| Spurious                                      | $\leq -70$ dBc          |                  |
| Load  | 50 $\Omega$ $\pm$ 5%    |                  |
| <b>Output Sign specifications</b>             |                         |                  |
| Frequency range                               | 200MHz $\pm$ 200Hz      |                  |
| Wave form                                     | Sine wave               |                  |
| Power   | 10 $\pm$ 3 dBm          |                  |
| Harmonics                                     | $\leq -40$ dBc          |                  |
| Spurious                                      | $\leq -80$ dBc          | $\leq -100$ dBc  |
| Load  | 50 $\Omega$ $\pm$ 5%    |                  |
| Powe stability vs Temperature (-40°C to 70°C) | $\leq 2.0$ dB           |                  |
| <b>Additional short-term stability</b>        |                         |                  |
| $\leq 2 \times 10^{-14}/1s$                   |                         |                  |
| <b>Phase Noise ( dBc/Hz)</b>                  | <b>Option: S</b>        | <b>Option: U</b> |
| 1 Hz  | -125                    | -130             |
| 10 Hz   | -140                    | -145             |
| 100 Hz  | -155                    | -160             |
| 1 KHz   | -166                    | -171             |
| 10 KHz  | -166                    | -171             |
| <b>Input voltage range</b>                    |                         |                  |
| 12 VDC $\pm$ 5%                               |                         |                  |
| Power consumption (at 25°C)                   | 2W                      |                  |
| Vibration                                     | MIL-STD-202G            |                  |
| <b>Size (L×W×H)</b>                           | 55×45×13mm <sup>3</sup> |                  |



**Outline drawing and Electrical connections (mm)**



INPUT: 100MHz (SMA-F)  
OUTPUT: 200MHz (SMA-F)  
+12V: DC +12v

