

# MINIATURE HIGH FREQUENCY PRECISION LOW PHASE NOISE OCXO MV269

### Features:

- **Small package size 21x13x9.5 mm (DIL 14)**
- **Low Phase Noise <-170 dBc/Hz @ 100 kHz offset**
- **Frequency range: 60 – 120 MHz**

| Power Supply | Output signal |
|--------------|---------------|
| 5 V          | SIN           |
| 3.3 V        | HCMOS         |

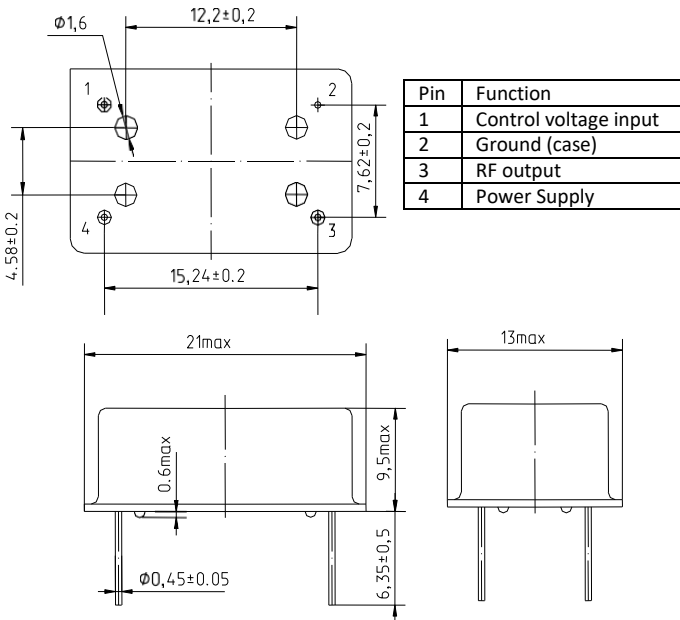
## ORDERING GUIDE: MV269- C 100 J - 5V- SIN - 2 - 100MHz

| Availability of certain stability vs. operating temperature range | Stability vs. temperature range |                      |                      |                        |                      |                        |
|---|---------------------------------|----------------------|----------------------|------------------------|----------------------|------------------------|
|   | ± 5x10 <sup>-7</sup>            | ± 3x10 <sup>-7</sup> | ± 1x10 <sup>-7</sup> | ± 7.5x10 <sup>-8</sup> | ± 5x10 <sup>-8</sup> | ± 1.5x10 <sup>-8</sup> |
| A 0...+55 °C  | A                               | A                    | A                    | A                      | A                    | A                      |
| B -10...+60 °C  | A                               | A                    | A                    | A                      | C                    | C                      |
| C -20...+70 °C  | A                               | A                    | A                    | C                      | NA                   | NA                     |
| D -40...+70 °C  | A                               | A                    | C                    | C                      | NA                   | NA                     |
| EX -40...+85 °C   | A                               | C                    | C                    | N                      | NA                   | NA                     |

| Aging |                            |
|-------|----------------------------|
| J     | ±5x10 <sup>-7</sup> / year |
| I     | ±3x10 <sup>-7</sup> / year |
| H     | ±2x10 <sup>-7</sup> / year |
| G     | ±1x10 <sup>-7</sup> / year |

| Phase Noise dBc/Hz (for 80-100 MHz) |       |         |       |       |       |
|-------------------------------------|-------|---------|-------|-------|-------|
| Option                              | 1     | 2       | 3     | 4     | 5     |
| Power Supply, V                     | 3.3   | 3.3-5.0 | 5.0   | 5.0   | 5.0   |
| 10 Hz                               | <-80  | <-85    | <-90  | <-92  | <-95  |
| 100 Hz                              | <-115 | <-120   | <-125 | <-127 | <-127 |
| 1 kHz                               | <-140 | <-145   | <-150 | <-152 | <-153 |
| 10 kHz                              | <-150 | <-155   | <-162 | <-165 | <-167 |
| 100 kHz                             | <-160 | <-163   | <-165 | <-168 | <-170 |

| Phase Noise dBc/Hz (for 100-120 MHz) |       |         |       |       |       |
|--------------------------------------|-------|---------|-------|-------|-------|
| Option                               | 1     | 2       | 3     | 4     | 5     |
| Power Supply, V                      | 3.3   | 3.3-5.0 | 5.0   | 5.0   | 5.0   |
| 10 Hz                                | <-80  | <-85    | <-90  | <-92  | <-95  |
| 100 Hz                               | <-115 | <-120   | <-125 | <-127 | <-127 |
| 1 kHz                                | <-140 | <-145   | <-150 | <-152 | <-153 |
| 10 kHz                               | <-150 | <-155   | <-162 | <-165 | <-167 |
| 100 kHz                              | <-160 | <-163   | <-165 | <-168 | <-170 |



| Shock:                     |              |
|----------------------------|--------------|
| -Acceleration              | 100 g        |
| -Storage temperature range | -55...+85 °C |

| Vibrations:     |            |
|-----------------|------------|
| Frequency range | 10-2000 Hz |
| Acceleration    | 5 g        |

| Power supply (Us)   | 3.3 V±0,15V            | 5.0 V±0,2V              |
|---|------------------------|-------------------------|
| Steady state current consumption @ 25°C   | < 250 mA               | < 180 mA                |
| Peak current consumption during warm-up @ 25°C  | < 500 mA               | < 500 mA                |
| Frequency pulling range   | >±2.0x10 <sup>-6</sup> | ≥±2,5 x10 <sup>-6</sup> |
| Frequency stability vs. power supply changes  | <±2x10 <sup>-8</sup>   |                         |
| Warm-up time within accuracy of <±2x10 <sup>-7</sup> @ 25°C ±2x10 <sup>-7</sup> , min | < 2                    |                         |
| Output  | H                      | SIN                     |
| -Logical «1», V   | ≥ 3.6                  | >500mV                  |
| -Logical «0», V   | ≤ 0.4                  | >500mV                  |
| Load  | 10kOmh/15pF            | 50 Omh                  |
| Harmonics   | -                      | >20dB                   |

| A   | B   | C   | D   | E   | F   | G   | H   | J | K   | L   | M   | N   | P   | Q   | R   | S   | T   | U   | W   | X   |
|-----|-----|-----|-----|-----|-----|-----|-----|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| -60 | -55 | -50 | -45 | -40 | -30 | -20 | -10 | 0 | +10 | +30 | +40 | +45 | +50 | +55 | +60 | +65 | +70 | +75 | +80 | +85 |

