

LOW PHASE NOISE PRECISION OCXO MV267

Features:

- Ultra low phase noise
- High stability vs. temperature - up to $\pm 5 \times 10^{-10}$
- 12V power supply
- Output frequency 5,0; 10 MHz

ORDERING GUIDE: MV267 - C 1 F - 5 MHz - LN

| Availability of certain stability vs. operating temperature range (5 MHz) | | $\pm 3 \times 10^{-9}$ | $\pm 2 \times 10^{-9}$ | $\pm 1 \times 10^{-9}$ | $\pm 5 \times 10^{-10}$ |
|---|---------------|------------------------|------------------------|------------------------|-------------------------|
| | | 3 | 2 | 1 | 05 |
| A | 0...+55 °C | A | A | A | A |
| B | - 10...+60 °C | A | A | A | A |
| C | - 20...+70 °C | A | A | A | C |
| D | - 40...+70 °C | A | A | C | C |
| EX | - 40...+85 °C | A | C | C | NA |

A – available, NA – not available, C – consult factory

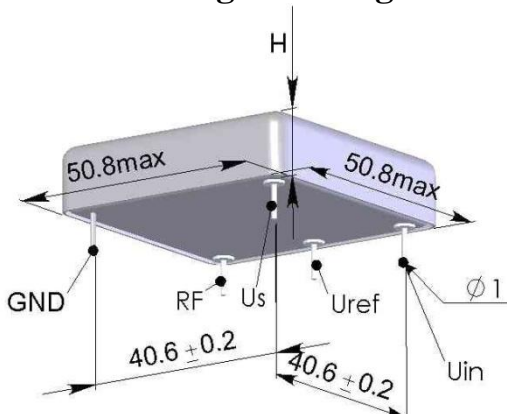
For other temperature ranges see designation at the end of Data Sheet.

| Availability of certain aging values for certain frequencies | Standard frequency | Standard frequency | |
|--|------------------------------|--------------------|--------|
| | | 5 MHz | 10 MHz |
| F | $\pm 5 \times 10^{-8}$ /year | A | A |
| E | $\pm 3 \times 10^{-8}$ /year | A | A |
| D | $\pm 2 \times 10^{-8}$ /year | A | A |
| C | $\pm 1 \times 10^{-8}$ /year | C | C |

A – available, NA – not available, C – consult factory

| Phase noise, dBc/Hz | 5 MHz | | | 10 MHz | | |
|---------------------|-------|-------|-------|--------|-------|-------|
| | - | LN | ULN | - | LN | ULN |
| 1 Hz | <-110 | <-115 | <-118 | <-102 | <-107 | <-112 |
| 10 Hz | <-140 | <-145 | <-148 | <-130 | <-134 | <-138 |
| 100 Hz | <-150 | <-153 | <-155 | <-135 | <-140 | <-145 |
| 1000 Hz | <-158 | <-160 | <-160 | <-145 | <-145 | <-150 |
| 10000 Hz | <-160 | <-161 | <-161 | <-145 | <-145 | <-150 |

Package drawing:



H=16 mm

| | |
|---|---------------------------|
| Short-term stability (Allan deviation) per 1 s | < 2×10^{-12} |
| Optional: | < 7×10^{-13} |
| Frequency stability vs. load changes | < $\pm 2 \times 10^{-10}$ |
| Frequency stability vs. power supply changes | < $\pm 2 \times 10^{-10}$ |
| Warm-up time within accuracy of $< \pm 2 \times 10^{-8}$ @ 25°C | <5 min |
| Power supply (Us) | 12V±5% |
| Steady state current consumption @ 25°C | <250mA |
| Peak current consumption during warm-up | <550mA |
| Frequency pulling range | > $\pm 3 \times 10^{-7}$ |
| with external voltage range (Uin) | 0...5V |
| Reference voltage (Uref) | +5 V |

| | |
|---------------------------|--------------|
| Vibrations: | |
| Frequency range | 10-200 Hz |
| Acceleration | 5g |
| Shock: | |
| Acceleration | 75 g |
| Duration | 3±1 ms |
| Storage temperature range | -55...+85 °C |

| | |
|----------------------|-----------|
| Output | SIN |
| Level | >500 mV |
| Load | 50 Ohm±5% |
| Harmonic suppression | >30dBc |

Additional notes:

- For non standard operating temperature ranges please use the following two letters designations (first letter for the lower limit, second letter for the upper limit), °C:

| | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 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 |