

Low Frequency - Low power SMD Oscillator 700kHz to 2.1MHz

FEATURES

- Low current consumption, low frequency from 700kHz
- Low profile, miniature SMD package
- Full military testing available
- MIL testing to MIL-PRF-55310 available

DESCRIPTION

LSM series oscillators are precision surface mount oscillators with a frequency range from 700kHz to 2.1MHz. The part comprises of a hermetically sealed crystal with a hybrid circuit sealed in a ceramic package with a Kovar lid. Full MIL testing is available.

SPECIFICATION

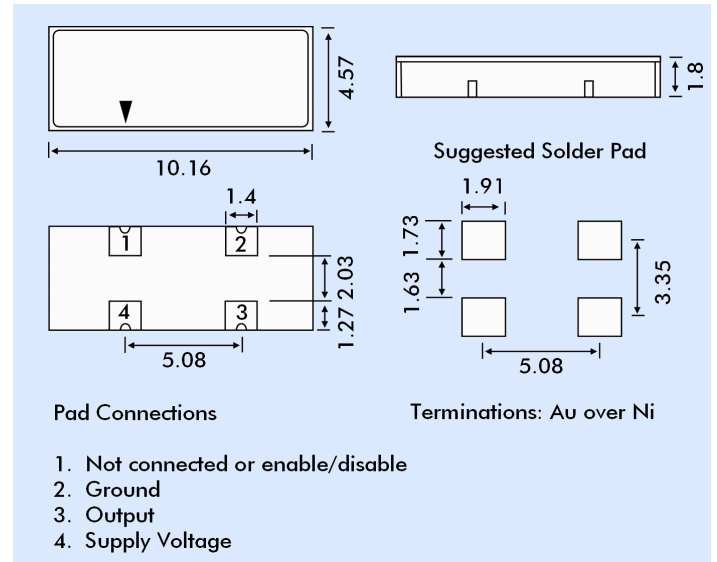
| | |
|--|---|
| Frequency Range: | 700kHz to 2.1MHz 2.0MHz standard**** |
| Supply Voltage*: | 3.3 or 5.0 Volts $\pm 10\%$ |
| Calibration Tolerance** | |
| Code A: | $\pm 0.01\%$ (± 100 ppm) |
| Code B: | $\pm 0.03\%$ |
| Code C: | $\pm 0.1\%$ |
| Frequency Stability*** | |
| 0° to +70°C: | -0.12% typical -0.017% maximum |
| Voltage Coefficient: | ± 5 ppm/V maximum |
| Ageing: | ± 10 ppm/year maximum |
| Shock: | 750g, 0.3ms, 1/2 sine, ± 3 ppm max. |
| Vibration: | 10g rms, 10-2000Hz, ± 3 ppm max. |
| Frequency Change vs. 10% Output Load Change: | ± 1 ppm maximum |
| Operating Temperature: | -10° to +70°C Commercial -40° to +85°C Industrial -55° to +125°C Military |
| Output Voltage (5.0V supply) | |
| HIGH: | 4.8V minimum, 4.95V typical |
| LOW: | 0.2V maximum, 0.05V typical |
| Rise/Fall Times: | 12ns typical |
| Symmetry: | 40/60% maximum, 45/55% typical |
| Supply Current | |
| 5.0V supply: | 400 μ A max., 300 μ A typical |
| 3.3V supply: | 300 μ A max., 200 μ A typical |
| Packaging: | Tray pack (standard) 16mm tape, 17.8cm or 33cm reels |
| Start-up Time: | 20ms typical |

Notes:

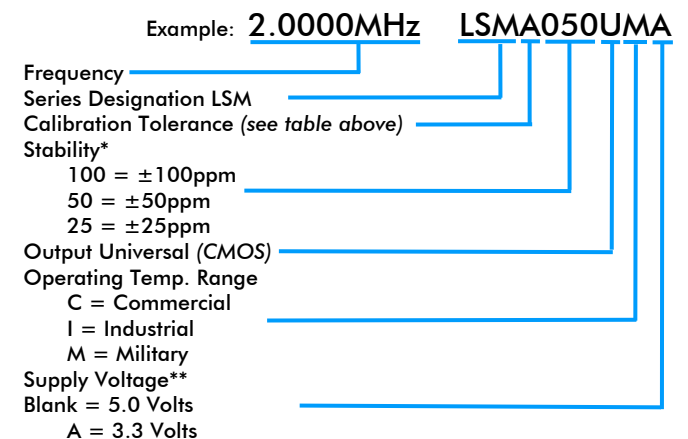
- * Contact factory for lower supply voltages
- ** Tighter tolerances available
- *** Does not include calibration tolerance. Positive variations are much smaller.
- **** Contact factory for other frequencies



OUTLINE & DIMENSIONS



PART NUMBERING



- * For other stability requirements enter figure required.
- ** For other supply voltage enter required voltage.