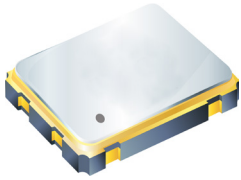


Crystal Oscillator

SMD 3225 (3.2mm × 2.5mm × 1mm)



RoHS
Compliant



Application

Used in Peripherals, Bluetooth, DSC, PC, Mobile phone, PDA, DVC, Telecommunications, NFC, etc.

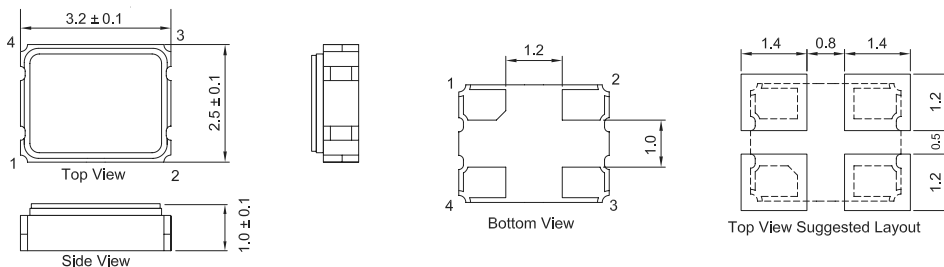
Features

- 3225 size, 1mm high, ultra small SMD seam sealed clock oscillator unit
- Low voltage operation
- Frequency Range: 1MHz to 48MHz
- 3-state function
- Automatic mounting and reflow soldering
- Low current consumption

Electrical Specifications

Output Type	: CMOS
Output Load	: 15pF
Oscillation Mode	: Fundamental / 3rd Overtone
Supply Voltage	: 3.3V
Frequency Range	: 1 ~ 48MHz
Frequency stability	: ±25ppm, ±50ppm
Operating Temperature Range	: -20°C ~ +70°C, -40°C ~ +85°C
Storage Temperature Range	: -55°C ~ +125°C
Voltage Vol (Max.) / Voh (Min.)	: 0.1VDD / 0.9VDD
Rise(Tr) / Fall(Tf) Time	: 8ns Max.
Supply Current	: 15mA Max.
Symmetry	: 45 ~ 55%
Start-up Time	: 5ms Max.
Phase Jitter (12kHz ~ 20MHz)	: 1ps Max.
Aging (at 25°C)	: ±3ppm/Year Max.

Diagram



PAD Function

1. Enable Control
2. GND
3. Out
4. VDD

Dimensions : Millimetres

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Crystal Oscillator

SMD 3225 (3.2mm × 2.5mm × 1mm)



Part Number Table

Description	Part Number
Crystal Oscillator, 3225, 1.8432MHz, 3.3V, ±25ppm, -20 ~ +70°C, 15pF	MCSJK-3N-1.8432-3.3-25-B
Crystal Oscillator, 3225, 1.8432MHz, 3.3V, ±25ppm, -40 ~ +85°C, 15pF	MCSJK-3N-1.8432-3.3-25-C
Crystal Oscillator, 3225, 1.8432MHz, 3.3V, ±50ppm, -20 ~ +70°C, 15pF	MCSJK-3N-1.8432-3.3-50-B
Crystal Oscillator, 3225, 1.8432MHz, 3.3V, ±50ppm, -40 ~ +85°C, 15pF	MCSJK-3N-1.8432-3.3-50-C
Crystal Oscillator, 3225, 4MHz, 3.3V, ±25ppm, -20 ~ +70°C, 15pF	MCSJK-3N-4.00-3.3-25-B
Crystal Oscillator, 3225, 4MHz, 3.3V, ±25ppm, -40 ~ +85°C, 15pF	MCSJK-3N-4.00-3.3-25-C
Crystal Oscillator, 3225, 4MHz, 3.3V, ±50ppm, -20 ~ +70°C, 15pF	MCSJK-3N-4.00-3.3-50-B
Crystal Oscillator, 3225, 4MHz, 3.3V, ±50ppm, -40 ~ +85°C, 15pF	MCSJK-3N-4.00-3.3-50-C
Crystal Oscillator, 3225, 8MHz, 3.3V, ±25ppm, -20 ~ +70°C, 15pF	MCSJK-3N-8.00-3.3-25-B
Crystal Oscillator, 3225, 8MHz, 3.3V, ±25ppm, -40 ~ +85°C, 15pF	MCSJK-3N-8.00-3.3-25-C
Crystal Oscillator, 3225, 8MHz, 3.3V, ±50ppm, -20 ~ +70°C, 15pF	MCSJK-3N-8.00-3.3-50-B
Crystal Oscillator, 3225, 8MHz, 3.3V, ±50ppm, -40 ~ +85°C, 15pF	MCSJK-3N-8.00-3.3-50-C
Crystal Oscillator, 3225, 12MHz, 3.3V, ±25ppm, -20 ~ +70°C, 15pF	MCSJK-3N-12.00-3.3-25-B
Crystal Oscillator, 3225, 12MHz, 3.3V, ±25ppm, -40 ~ +85°C, 15pF	MCSJK-3N-12.00-3.3-25-C
Crystal Oscillator, 3225, 12MHz, 3.3V, ±50ppm, -20 ~ +70°C, 15pF	MCSJK-3N-12.00-3.3-50-B
Crystal Oscillator, 3225, 12MHz, 3.3V, ±50ppm, -40 ~ +85°C, 15pF	MCSJK-3N-12.00-3.3-50-C
Crystal Oscillator, 3225, 12.288MHz, 3.3V, ±25ppm, -20 ~ +70°C, 15pF	MCSJK-3N-12.288-3.3-25-B
Crystal Oscillator, 3225, 12.288MHz, 3.3V, ±25ppm, -40 ~ +85°C, 15pF	MCSJK-3N-12.288-3.3-25-C
Crystal Oscillator, 3225, 12.288MHz, 3.3V, ±50ppm, -20 ~ +70°C, 15pF	MCSJK-3N-12.288-3.3-50-B
Crystal Oscillator, 3225, 12.288MHz, 3.3V, ±50ppm, -40 ~ +85°C, 15pF	MCSJK-3N-12.288-3.3-50-C
Crystal Oscillator, 3225, 14.31818MHz, 3.3V, ±25ppm, -20 ~ +70°C, 15pF	MCSJK-3N-14.31818-3.3-25-B
Crystal Oscillator, 3225, 14.31818MHz, 3.3V, ±25ppm, -40 ~ +85°C, 15pF	MCSJK-3N-14.31818-3.3-25-C
Crystal Oscillator, 3225, 14.31818MHz, 3.3V, ±50ppm, -20 ~ +70°C, 15pF	MCSJK-3N-14.31818-3.3-50-B
Crystal Oscillator, 3225, 14.31818MHz, 3.3V, ±50ppm, -40 ~ +85°C, 15pF	MCSJK-3N-14.31818-3.3-50-C
Crystal Oscillator, 3225, 14.7456MHz, 3.3V, ±25ppm, -20 ~ +70°C, 15pF	MCSJK-3N-14.7456-3.3-25-B
Crystal Oscillator, 3225, 14.7456MHz, 3.3V, ±25ppm, -40 ~ +85°C, 15pF	MCSJK-3N-14.7456-3.3-25-C
Crystal Oscillator, 3225, 14.7456MHz, 3.3V, ±50ppm, -20 ~ +70°C, 15pF	MCSJK-3N-14.7456-3.3-50-B
Crystal Oscillator, 3225, 14.7456MHz, 3.3V, ±50ppm, -40 ~ +85°C, 15pF	MCSJK-3N-14.7456-3.3-50-C
Crystal Oscillator, 3225, 16MHz, 3.3V, ±25ppm, -20 ~ +70°C, 15pF	MCSJK-3N-16.00-3.3-25-B
Crystal Oscillator, 3225, 16MHz, 3.3V, ±25ppm, -40 ~ +85°C, 15pF	MCSJK-3N-16.00-3.3-25-C
Crystal Oscillator, 3225, 16MHz, 3.3V, ±50ppm, -20 ~ +70°C, 15pF	MCSJK-3N-16.00-3.3-50-B
Crystal Oscillator, 3225, 16MHz, 3.3V, ±50ppm, -40 ~ +85°C, 15pF	MCSJK-3N-16.00-3.3-50-C
Crystal Oscillator, 3225, 18.432MHz, 3.3V, ±25ppm, -20 ~ +70°C, 15pF	MCSJK-3N-18.432-3.3-25-B
Crystal Oscillator, 3225, 18.432MHz, 3.3V, ±25ppm, -40 ~ +85°C, 15pF	MCSJK-3N-18.432-3.3-25-C
Crystal Oscillator, 3225, 18.432MHz, 3.3V, ±50ppm, -20 ~ +70°C, 15pF	MCSJK-3N-18.432-3.3-50-B
Crystal Oscillator, 3225, 18.432MHz, 3.3V, ±50ppm, -40 ~ +85°C, 15pF	MCSJK-3N-18.432-3.3-50-C
Crystal Oscillator, 3225, 20MHz, 3.3V, ±25ppm, -20 ~ +70°C, 15pF	MCSJK-3N-20.00-3.3-25-B
Crystal Oscillator, 3225, 20MHz, 3.3V, ±25ppm, -40 ~ +85°C, 15pF	MCSJK-3N-20.00-3.3-25-C

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Crystal Oscillator

SMD 3225 (3.2mm × 2.5mm × 1mm)



Description	Part Number
Crystal Oscillator, 3225, 20MHz, 3.3V, ± 50ppm, -20 ~ +70°C, 15pF	MCSJK-3N-20.00-3.3-50-B
Crystal Oscillator, 3225, 20MHz, 3.3V, ± 50ppm, -40 ~ +85°C, 15pF	MCSJK-3N-20.00-3.3-50-C
Crystal Oscillator, 3225, 24MHz, 3.3V, ± 25ppm, -20 ~ +70°C, 15pF	MCSJK-3N-24.00-3.3-25-B
Crystal Oscillator, 3225, 24MHz, 3.3V, ± 25ppm, -40 ~ +85°C, 15pF	MCSJK-3N-24.00-3.3-25-C
Crystal Oscillator, 3225, 24MHz, 3.3V, ± 50ppm, -20 ~ +70°C, 15pF	MCSJK-3N-24.00-3.3-50-B
Crystal Oscillator, 3225, 24MHz, 3.3V, ± 50ppm, -40 ~ +85°C, 15pF	MCSJK-3N-24.00-3.3-50-C
Crystal Oscillator, 3225, 24.576MHz, 3.3V, ± 25ppm, -20 ~ +70°C, 15pF	MCSJK-3N-24.576-3.3-25-B
Crystal Oscillator, 3225, 24.576MHz, 3.3V, ± 25ppm, -40 ~ +85°C, 15pF	MCSJK-3N-24.576-3.3-25-C
Crystal Oscillator, 3225, 24.576MHz, 3.3V, ± 50ppm, -20 ~ +70°C, 15pF	MCSJK-3N-24.576-3.3-50-B
Crystal Oscillator, 3225, 24.576MHz, 3.3V, ± 50ppm, -40 ~ +85°C, 15pF	MCSJK-3N-24.576-3.3-50-C
Crystal Oscillator, 3225, 25MHz, 3.3V, ± 25ppm, -20 ~ +70°C, 15pF	MCSJK-3N-25.00-3.3-25-B
Crystal Oscillator, 3225, 25MHz, 3.3V, ± 25ppm, -40 ~ +85°C, 15pF	MCSJK-3N-25.00-3.3-25-C
Crystal Oscillator, 3225, 25MHz, 3.3V, ± 50ppm, -20 ~ +70°C, 15pF	MCSJK-3N-25.00-3.3-50-B
Crystal Oscillator, 3225, 25MHz, 3.3V, ± 50ppm, -40 ~ +85°C, 15pF	MCSJK-3N-25.00-3.3-50-C
Crystal Oscillator, 3225, 26MHz, 3.3V, ± 25ppm, -20 ~ +70°C, 15pF	MCSJK-3N-26.00-3.3-25-B
Crystal Oscillator, 3225, 26MHz, 3.3V, ± 25ppm, -40 ~ +85°C, 15pF	MCSJK-3N-26.00-3.3-25-C
Crystal Oscillator, 3225, 26MHz, 3.3V, ± 50ppm, -20 ~ +70°C, 15pF	MCSJK-3N-26.00-3.3-50-B
Crystal Oscillator, 3225, 26MHz, 3.3V, ± 50ppm, -40 ~ +85°C, 15pF	MCSJK-3N-26.00-3.3-50-C
Crystal Oscillator, 3225, 30MHz, 3.3V, ± 25ppm, -20 ~ +70°C, 15pF	MCSJK-3N-30.00-3.3-25-B
Crystal Oscillator, 3225, 30MHz, 3.3V, ± 25ppm, -40 ~ +85°C, 15pF	MCSJK-3N-30.00-3.3-25-C
Crystal Oscillator, 3225, 30MHz, 3.3V, ± 50ppm, -20 ~ +70°C, 15pF	MCSJK-3N-30.00-3.3-50-B
Crystal Oscillator, 3225, 30MHz, 3.3V, ± 50ppm, -40 ~ +85°C, 15pF	MCSJK-3N-30.00-3.3-50-C
Crystal Oscillator, 3225, 32MHz, 3.3V, ± 25ppm, -20 ~ +70°C, 15pF	MCSJK-3N-32.00-3.3-25-B
Crystal Oscillator, 3225, 32MHz, 3.3V, ± 25ppm, -40 ~ +85°C, 15pF	MCSJK-3N-32.00-3.3-25-C
Crystal Oscillator, 3225, 32MHz, 3.3V, ± 50ppm, -20 ~ +70°C, 15pF	MCSJK-3N-32.00-3.3-50-B
Crystal Oscillator, 3225, 32MHz, 3.3V, ± 50ppm, -40 ~ +85°C, 15pF	MCSJK-3N-32.00-3.3-50-C
Crystal Oscillator, 3225, 40MHz, 3.3V, ± 25ppm, -20 ~ +70°C, 15pF	MCSJK-3N-40.00-3.3-25-B
Crystal Oscillator, 3225, 40MHz, 3.3V, ± 25ppm, -40 ~ +85°C, 15pF	MCSJK-3N-40.00-3.3-25-C
Crystal Oscillator, 3225, 40MHz, 3.3V, ± 50ppm, -20 ~ +70°C, 15pF	MCSJK-3N-40.00-3.3-50-B
Crystal Oscillator, 3225, 40MHz, 3.3V, ± 50ppm, -40 ~ +85°C, 15pF	MCSJK-3N-40.00-3.3-50-C
Crystal Oscillator, 3225, 48MHz, 3.3V, ± 25ppm, -20 ~ +70°C, 15pF	MCSJK-3N-48.00-3.3-25-B
Crystal Oscillator, 3225, 48MHz, 3.3V, ± 25ppm, -40 ~ +85°C, 15pF	MCSJK-3N-48.00-3.3-25-C
Crystal Oscillator, 3225, 48MHz, 3.3V, ± 50ppm, -20 ~ +70°C, 15pF	MCSJK-3N-48.00-3.3-50-B
Crystal Oscillator, 3225, 48MHz, 3.3V, ± 50ppm, -40 ~ +85°C, 15pF	MCSJK-3N-48.00-3.3-50-C

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