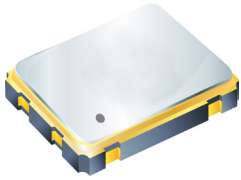


Crystal Oscillator

SMD 3225 (3.2mm × 2.5mm × 1mm)

multicomp PRO

**RoHS
Compliant**



Application

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

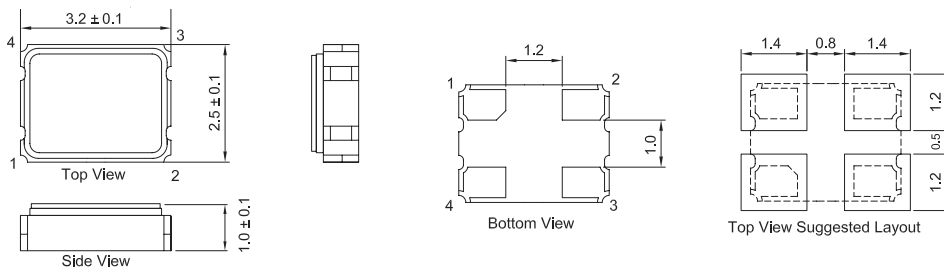
Features

- 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

Newark.com/multicomp-pro
Farnell.com/multicomp-pro
Element14.com/multicomp-pro

multicomp PRO

Crystal Oscillator

SMD 3225 (3.2mm × 2.5mm × 1mm)

multicomp PRO

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

Newark.com/multicomp-pro
Farnell.com/multicomp-pro
Element14.com/multicomp-pro

multicomp PRO

Crystal Oscillator

SMD 3225 (3.2mm × 2.5mm × 1mm)

multicomp PRO

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

Important Notice : This data sheet and its contents (the "Information") belong to the members of the AVNET group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp Pro is the registered trademark of Premier Farnell Limited 2019.

Newark.com/multicomp-pro
Farnell.com/multicomp-pro
Element14.com/multicomp-pro

multicomp PRO