

Surface Mount Crystal

- SR1-43/HC-49 SM4PD (12.5 x 5 x 4.5 mm)
- SR1-49/HC-49 SSM4PD (12.5 x 5 x 4.5 mm)

NKG

Factory
Direct to
the USA

Electrical Specifications

SMD Crystal - SR1-43 / HC-49 SM4PD SR1-49 / HC-49 SSM4PD

| 49 SMD W/ BLACK STANDOFF | | SR1-43 / HC-49 SM4PD | SR1-49 / HC-49 SSM4PD |
|------------------------------------|------------------|--------------------------|--------------------------|
| PARAMETER | CONDITION | | |
| FREQUENCY RANGE | FUNDAMENTAL | 3.2 MHz to 32 MHz | 3.2 MHz to 32 MHz |
| | 3rd O.T. | 30 MHz to 67 MHz | 30 MHz to 67 MHz |
| DIMENSIONS | | 12.5 x 5.0 x 5.0 mm | 12.5 x 5.0 x 4.5 mm |
| LOAD CAPACITANCE (CL) | | 6 TO 32 pF & SERIES | 6 TO 32 pF & SERIES |
| STATIC CAPACITANCE (Co) | | 5 pF MAX | 5 pF MAX |
| EQUIVALENT SERIES RESISTANCE (ESR) | | SEE TABLE 1 BELOW | SEE TABLE 1 BELOW |
| MODE | | SEE TABLE 1 BELOW | SEE TABLE 1 BELOW |
| DRIVE LEVEL | | 10 µW typ., 500 µW MAX | 10 µW typ., 500 µW MAX |
| FREQ. TOLERANCE AT +25C | STANDARD | +/-30 PPM | +/-30 PPM |
| | OPTIONAL | +/-10 PPM to +/-100 PPM | +/-10 PPM to +/-100 PPM |
| STABILITY VS. TEMP. | STANDARD | +/-50 PPM | +/-50 PPM |
| | OPTIONAL | +/-10 PPM to +/-100 PPM | +/-10 PPM to +/-100 PPM |
| OPERATING TEMP. RANGE | STANDARD | -20°C to +70°C | -20°C to +70°C |
| | OPTIONAL | SEE TABLE 2 BELOW | SEE TABLE 2 BELOW |
| STORAGE TEMP. RANGE | | -40°C to +85°C | -40°C to +85°C |
| AGING | FIRST YEAR | 5 PPM | 5 PPM |
| HERMETIC SEALED | | YES, RESISTANCE WELD | YES, RESISTANCE WELD |
| INSULATION RESISTANCE | | 500 MΩ Min | 500 MΩ Min |
| SOLDER PADS | QTY: | 4 (X1=1, X2=4, GND =2&3) | 4 (X1=1, X2=4, GND =2&3) |
| DLD TESTED | RLD, DLD, FLD | YES, 100% | YES, 100% |
| RoHS STATUS | | FULLY COMPLIANT | FULLY COMPLIANT |
| LEGACY P/N | | CR1-43 | CR1-49 |

TABLE 1A - MAXIMUM ESR & CRYSTAL MODE

| FREQUENCY RANGE | MAX ESR | MODE |
|--------------------|----------|------|
| 3.200 to 3.499 MHz | 150 Ohms | FUND |
| 3.500 to 3.999 MHz | 120 Ohms | FUND |
| 4.000 to 5.999 MHz | 100 Ohms | FUND |
| 6.000 to 6.999 MHz | 70 Ohms | FUND |
| 7.000 to 8.999 MHz | 60 Ohms | FUND |

TABLE 1B - MAXIMUM ESR & CRYSTAL MODE

| FREQUENCY RANGE | MAX ESR | MODE |
|----------------------|---------|----------|
| 9.000 to 9.999 MHz | 50 Ohms | FUND |
| 10.000 to 12.999 MHz | 40 Ohms | FUND |
| 13.000 to 19.999 MHz | 30 Ohms | FUND |
| 20.000 to 32.000 MHz | 20 Ohms | FUND |
| 30.000 to 67.000 MHz | 80 Ohms | 3rd O.T. |

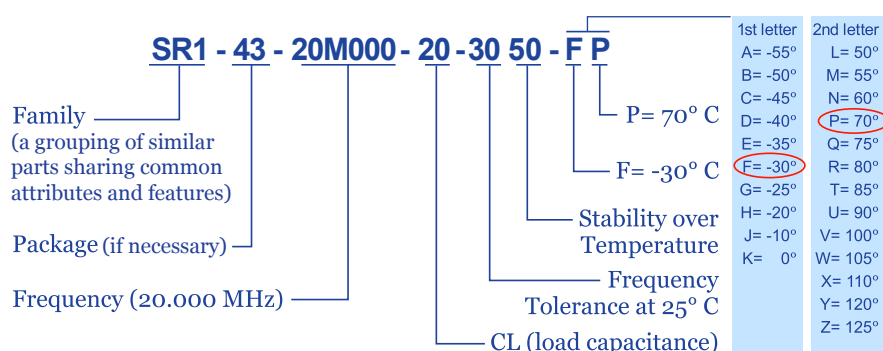
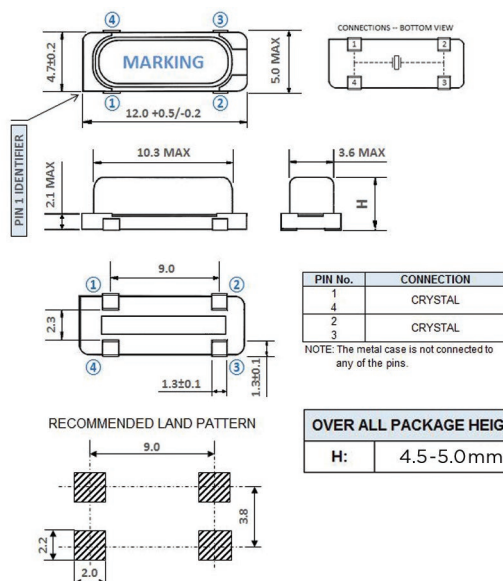
TABLE 2 - OPTIONAL TEMPERATURE RANGES

| POPULAR TEMPERATURE RANGES |
|----------------------------|
| -10°C / +60°C |
| -20°C / +70°C |
| -40°C / +85°C |

OTHER TEMPERATURE RANGES AVAILABLE - CONSULT FACTORY

Dimensions (Unit:mm)

*NKG Crystal Part Example Key



*NOT TO SCALE

Contact
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