



FEATURES

- Fundamental to 40 MHz
- Tape and Reel (1,000 pcs. STD)

OPTIONS

- 3.2mm Height Max (C9SD)

| • SPECIFICATIONS | |
|----------------------------------|---|
| PARAMETERS | MAX (unless otherwise noted) |
| Frequency Range | 3.200 ~ 80.000 MHz |
| Frequency Tolerance @ 25°C | ±10 ~ 50 PPM ¹ (see options on page 2) |
| Frequency Stability, ref @ 25°C | ±5 ~ 100 PPM (see options below) |
| Temperature Range | |
| Operating (TOPR) | -55°C ~ +125°C (see options below) |
| Storage (TSTG) | -55°C ~ +125°C |
| Shunt Capacitance (Co) | 7pF |
| Load Capacitance (CL) | 10 pF ~ Series (see options on page 2) |
| Drive Level | 0.5 mW (0.1 mW Typical) |
| Aging per year | ±3 PPM |
| Maximum Soldering Temp / Time | 260°C / 10 Seconds |
| Moisture Sensitivity Level (MSL) | 1 |
| Termination Finish: | Sn/Ag/Cu |
| Seal Method | Resistance Weld |
| Lead (Pb) Free | Yes |
| RoHS Compliant | No Exemptions |

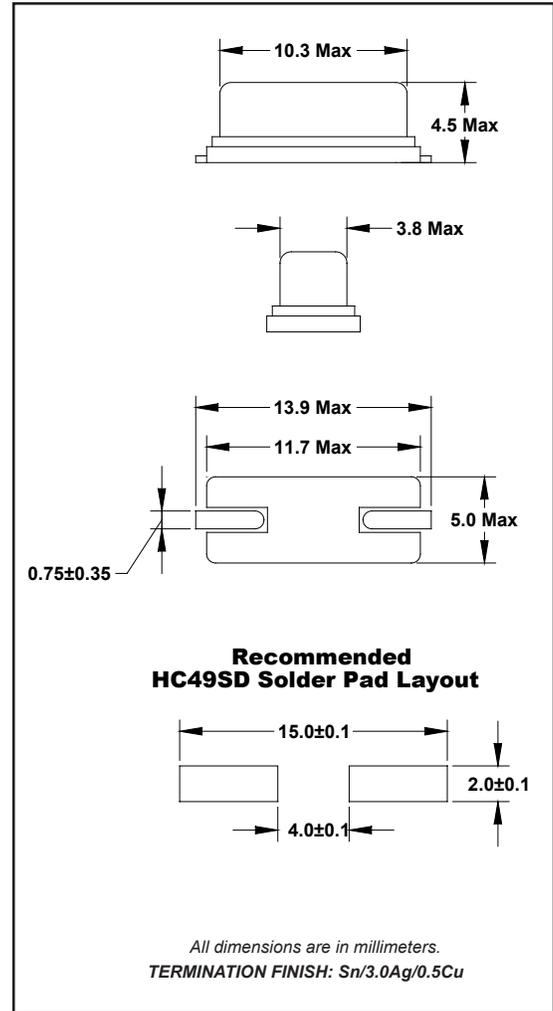
¹ Crystal has a ±30ppm tolerance specification for all standard part numbers.
 Note: Dimensional drawing is for reference to critical specifications defined by size measurements. Certain non-critical visual attributes, such as side castellations, etc. may vary.
 All specifications subject to change without notice.

| Frequency Range (MHz) | Operating Mode | Max ESR Ω |
|-----------------------|----------------|-----------|
| 3.200 ~ 3.500 | Fundamental | 300 |
| 3.500+ ~ 4.000 | Fundamental | 200 |
| 4.000+ ~ 5.000 | Fundamental | 150 |
| 5.000+ ~ 6.000 | Fundamental | 120 |
| 6.000+ ~ 7.000 | Fundamental | 100 |
| 7.000+ ~ 9.000 | Fundamental | 80 |
| 9.000+ ~ 13.000 | Fundamental | 60 |
| 13.000+ ~ 20.000 | Fundamental | 40 |
| 20.000+ ~ 40.000 | Fundamental | 30 |
| 27.000 ~ 70.000 | 3rd OT | 100 |
| 70.000+ ~ 80.000 | 3rd OT | 80 |

•Other Stabilities Available

| Stability Temperature | ±5 PPM | ±10 PPM | ±15 PPM | ±20 PPM | ±30 PPM | ±50 PPM | ±100 PPM |
|-----------------------|--------|---------|---------|---------|---------|---------|----------|
| -10 to +60°C | O | O | O | O | O | O | O |
| -20 to +70°C | Δ | O | O | O | O | O | O |
| -40 to +85°C | X | X | O | O | O | O | O |
| -40 to +105°C | X | X | X | X | X | Δ | O |
| -40 to +125°C | X | X | X | X | X | X | O |
| -55 to +125°C | X | X | X | X | X | X | O |

Key: O=Available, X=Not Available, Δ=Consult Fox Technical Support





Resistance Weld SMD Crystal

C4SD
(former HC49SDF)
DATASHEET

| • TAPE SPECIFICATIONS (millimeters) | | | | | | | | • REEL SPECIFICATIONS (millimeters) | | | | | | | |
|-------------------------------------|------|-----|------|------|------|-----|--------------|-------------------------------------|-----|-----|-----|-----|------|------|-----|
| MODEL | A | B | C | D | E | F | STD Reel QTY | MODEL | G | H | I | J | K | L | M |
| C4SD | ∅1.5 | 4.0 | 12.0 | 11.5 | 24.0 | 4.8 | 1,000 | C4SD | 2.0 | ∅13 | ∅21 | ∅80 | ∅330 | 25.5 | 2.0 |

**Available Options & Part Identification for
Crystal Model Number C4SD**

F C4SD C B M M 3.6864

| | | | | | | |
|-----------------|-----------------------------|---|---|--|---|----------------------------|
| F FOX | C4SD Model Number | C Tolerance B=50ppm C=30ppm E=20ppm F=15ppm H=10ppm L= 5ppm | B Stability A=100PPM B=50ppm C=30ppm E=20ppm F=15ppm H=10ppm L= 5ppm | M Load Capacitance A=Series E=10pF G=12pF J=15pF K=16pF L=18pF M=20pF N=22pF Q=30pF R=32pF | M Operating Temperature D=-10~+ 60°C F=-20~+70°C M=-40~+85°C P=-40~+105°C I=-40~+125°C T=-55~+125°C | 3.6864 Frequency |
|-----------------|-----------------------------|---|---|--|---|----------------------------|



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