Distributor Stocking Part Fox Part Number: FOXSDLF/250FR-20



5.0 Max

LEAD-FREE, RESISTANCE WELD, SMD, CRYSTAL MODEL: HC49SDLF Series (please use FOXSDLF/250FR-20/TR for full, 1k, reels)

RoHS / REACH Compliant / Pb Free

| ParametersFrequency 25.000 MHz Resonance ModeFundamentalFrequency Tolerance @ 25° C $\pm 30 \text{ PPM Max}$ Frequency Stability, ref @ 25° C $\pm 50 \text{ PPM Max}$ Over Operating Temp. Range $\pm 50 \text{ PPM Max}$ Temperature Range -40° C ~ $+85^{\circ}$ COperating (T_{OPR}) -40° C ~ $+125^{\circ}$ CEquivalent Series Resistance (ESR) 30 Ohms Max Shunt Capacitance (C_0) 30 Ohms Max Shunt Capacitance (C_L) 20 pF Drive Level 0.1 mW Max Aging per year $\pm 3 \text{ PPM Max}$ Maximum Soldering Temp / Time 260° C / 10 SecondsTermination Finish (96.5%-3%-0.5%)Sn – Ag – CuMoisture Sensitivity Level (MSL)1Weight (TYP) 649 mg | A. Specifications | | | |
|---|------------------------------------|--------------------|--|--|
| Resonance ModeFundamentalFrequency Tolerance @ 25°C ± 30 PPM MaxFrequency Stability, ref @ 25°C ± 30 PPM MaxTemperature Range ± 50 PPM MaxTemperature Range $-40°C \sim +85°C$ Storage (T _{STG}) $-40°C \sim +125°C$ Equivalent Series Resistance (ESR)30 Ohms MaxShunt Capacitance (C ₀) 7.0 pFLoad Capacitance (C _L)20 pFDrive Level 0.1 mW MaxAging per year ± 3 PPM MaxMaximum Soldering Temp / Time $260°C / 10$ SecondsTermination Finish (96.5%-3%-0.5%)Sn – Ag – CuMoisture Sensitivity Level (MSL)1 | Parameters | | | |
| Frequency Tolerance @ 25°C ± 30 PPM MaxFrequency Stability, ref @ 25°C ± 50 PPM MaxOver Operating Temp. Range ± 50 PPM MaxTemperature Range $-40°C \sim +85°C$ Operating (T_{OPR}) $-40°C \sim +125°C$ Storage (T_{STG}) $-40°C \sim +125°C$ Equivalent Series Resistance (ESR)30 Ohms MaxShunt Capacitance (C_0) 20 pFLoad Capacitance (C_L) 20 pFDrive Level 0.1 mW MaxAging per year ± 3 PPM MaxMaximum Soldering Temp / Time $260°C / 10$ SecondsTermination Finish (96.5%-3%-0.5%)Sn – Ag – CuMoisture Sensitivity Level (MSL)1 | Frequency | 25.000 MHz | | |
| Frequency Stability, ref @ 25° C Over Operating Temp. Range ± 50 PPM MaxTemperature Range Operating (T_{OPR}) Storage (T_{STG}) -40° C ~ $+85^{\circ}$ C -40° C ~ $+125^{\circ}$ CEquivalent Series Resistance (ESR)30 Ohms MaxShunt Capacitance (C_0) Absolute Maximum7.0 pFLoad Capacitance (C_L)20 pFDrive Level0.1 mW MaxAging per year ± 3 PPM MaxMaximum Soldering Temp / Time260°C / 10 SecondsTermination Finish (96.5%-3%-0.5%)Sn – Ag – CuMoisture Sensitivity Level (MSL)1 | Resonance Mode | Fundamental | | |
| $\begin{array}{c c c c c c c c c c c c c c c c c c c $ | Frequency Tolerance @ 25°C | ±30 PPM Max | | |
| $\begin{array}{c c} Operating (T_{OPR}) & -40^{\circ}C \sim +85^{\circ}C \\ Storage (T_{STG}) & -40^{\circ}C \sim +125^{\circ}C \\ \hline Equivalent Series Resistance (ESR) & 30 Ohms Max \\ \hline Shunt Capacitance (C_0) & & \\ Absolute Maximum & 7.0 pF \\ \hline Load Capacitance (C_L) & 20 pF \\ \hline Drive Level & 0.1 mW Max \\ \hline Aging per year & \pm 3 PPM Max \\ \hline Maximum Soldering Temp / Time & 260^{\circ}C / 10 Seconds \\ \hline Termination Finish (96.5\%-3\%-0.5\%) & Sn - Ag - Cu \\ \hline Moisture Sensitivity Level (MSL) & 1 \\ \hline \end{array}$ | | ±50 PPM Max | | |
| Shunt Capacitance (Co) Absolute Maximum7.0 pFLoad Capacitance (CL)20 pFDrive Level0.1 mW MaxAging per year±3 PPM MaxMaximum Soldering Temp / Time260°C / 10 SecondsTermination Finish (96.5%-3%-0.5%)Sn – Ag – CuMoisture Sensitivity Level (MSL)1 | Operating (T _{OPR}) | | | |
| $\begin{tabular}{ c c c c } \hline Absolute Maximum & 7.0 pF \\ \hline Load Capacitance (C_L) & 20 pF \\ \hline Drive Level & 0.1 mW Max \\ \hline Aging per year & \pm 3 PPM Max \\ \hline Maximum Soldering Temp / Time & 260°C / 10 Seconds \\ \hline Termination Finish (96.5%-3%-0.5\%) & Sn - Ag - Cu \\ \hline Moisture Sensitivity Level (MSL) & 1 \\ \hline \end{tabular}$ | Equivalent Series Resistance (ESR) | 30 Ohms Max | | |
| Drive Level0.1 mW MaxAging per year±3 PPM MaxMaximum Soldering Temp / Time260°C / 10 SecondsTermination Finish(96.5%-3%-0.5%)Sn – Ag – CuMoisture Sensitivity Level (MSL)1 | | 7.0 pF | | |
| Aging per year±3 PPM MaxMaximum Soldering Temp / Time260°C / 10 SecondsTermination Finish (96.5%-3%-0.5%)Sn – Ag – CuMoisture Sensitivity Level (MSL)1 | Load Capacitance (CL) | 20 pF | | |
| Maximum Soldering Temp / Time260°C / 10 SecondsTermination Finish(96.5%-3%-0.5%)Sn – Ag – CuMoisture Sensitivity Level (MSL)1 | Drive Level | 0.1 mW Max | | |
| Termination Finish(96.5%-3%-0.5%)Sn – Ag – CuMoisture Sensitivity Level (MSL)1 | Aging per year | ±3 PPM Max | | |
| Moisture Sensitivity Level (MSL) 1 | Maximum Soldering Temp / Time | 260°C / 10 Seconds | | |
| | Termination Finish (96.5%-3%-0.5%) | Sn – Ag – Cu | | |
| Weight (TYP) 649 mg | Moisture Sensitivity Level (MSL) | 1 | | |
| | Weight (TYP) | 649 mg | | |

Marking Format Frequency (Mhz)

FS25.00P

P = Parallel Resonance

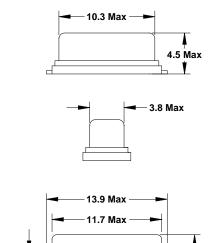
(Blank = Series)

HC49SLF

or HC49SDLF

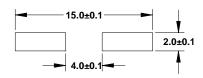
Fox

B. Mechanical / Dimensions (millimeters):

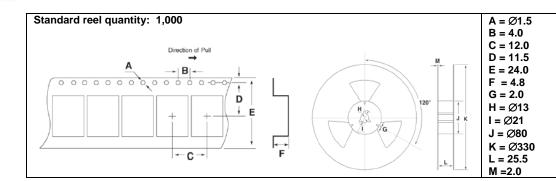




Recommended HC49SD Solder Pad Layout



Tape and Reel Specification (mm)



<u>NOTE</u>: The above specifications, having been carefully prepared and checked, is believed to be accurate at the time of publication; however, no responsibility is assumed by Fox Electronics for inaccuracies.

| Reference / Comments | Title / Description: Product Specifications | | | |
|----------------------|---|-----------|-------------|------------------|
| Initial release | Drawing Number: DOC101002 Rev: 1 | | Size: A | |
| | Part Number: FOXSDLF/250FR-20 Cage: 61429 | | Cage: 61429 | |
| | Draftsperson: AR | Approved: | GB | Date: 05-20-2014 |
| Page 1 of 1 | | | | |