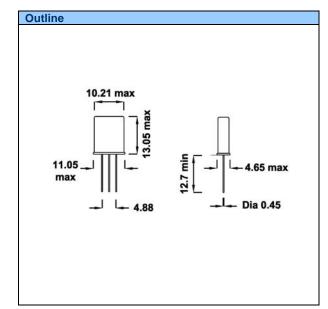




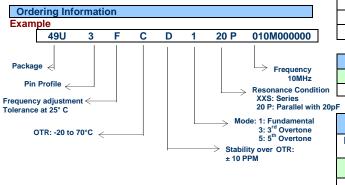
QUARTZ CRYSTAL - HC-49/U - 3 LEAD

FEATURE

- All metal welded package
- Wide frequency range from 3.000 MHz upto 150 MHz
- RoHS Compliant Standard



▲ All dimensions are in mm.



| Frequency Range | 3.000 MHz to 150 MHz | |
|--|---|--|
| Frequency Adjustment Tolerance at 25° C | Select from table below | |
| Operating Temperature Range | Select from table below | |
| Frequency Stability | Select from table below | |
| ESR | Select from table below | |
| Drive level | 100 μ Watts Typical (or specify) | |
| Shunt Capacitance C0 | 7.0 pF max. | |
| Resonance Condition | XXS – series, XXP – Parallel with xx pF (for parallel please specify the xx value in pF) | |
| Ageing | Resistance Weld: ±3 PPM / Year | |

| Operating Temperature Range | | |
|--------------------------------|----------------|--|
| Code | Range | |
| Α | 0 to +50 °C | |
| В | 0 to +60 °C | |
| F | 0 to +70 °C | |
| D | -10 to +60 °C | |
| Е | -10 to +70 °C | |
| С | -20 to +70 °C | |
| G | -30 to +80 °C | |
| Н | -30 to +85 °C | |
| | -40 to +85 °C | |
| J | -40 to +90 °C | |
| K | -55 to +105 °C | |
| L | -55 to +125 °C | |

| Frequency Adjustment Tolerance at 25°C/Stability Over OTR | | | |
|--|-----------|--|--|
| Code | Stability | | |
| R | ±3 PPM | | |
| В | ±5 PPM | | |
| С | ±7.5 PPM | | |
| D | ±10 PPM | | |
| E | ±15 PPM | | |
| F | ±20 PPM | | |
| G | ±25 PPM | | |
| Н | ±30 PPM | | |
| М | ±50 PPM | | |
| К | ±100 PPM | | |

| Frequency Range By Mode of Oscillation | | | | |
|--|----------------|---------------|--|--|
| Fundamental | 3rd Overtone | 5th Overtone | | |
| 3.0 to 36.864 MHz | 20.0 to 85 MHz | 60 to 150 MHz | | |

| Max Equivalent Series Resistance Table | | | | | |
|--|-------|---|------------------------|-------------|--|
| Frequency Range MHz | ESR | | Frequency Range MHz | ESR | |
| Fundamental | | | 3rd Ove | ertone | |
| 3.0 to ≤3.5 | 150 Ω | | 20.0 to ≤30.0 | 35 Ω | |
| 3.5 to ≤4.5 | 100 Ω |] | 30.0 to ≤85.0 | 30 Ω | |
| 4.5 to ≤5.0 | 20 08 |] | 5th Ove | ertone | |
| 5.0 to ≤7.0 | 60 Ω | | 60.0 to ≤100.0 | 70 Ω | |
| 7.0 to ≤9.0 | 45 Ω |] | 100.0 to ≤150.0 | 80 Ω | |
| 9.0 to ≤12.0 | 30 Ω |] | | | |
| 12.0 to ≤20.0 | 25 Ω |] | | | |

| Pin Profile | Code |
|----------------|------|
| 3 Pin Straight | 3 |

20 Ω

20.0 to ≤36.864

Specifications subject to change without notice Revision No. 12b of May 2008

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