

KH-1200-TS

Quartz Crystals Temperature Test System Upgrade

with
PI - network Measurement



New State of the Art Features

- True Multi-Tasking operation in Microsoft Windows® allows testing in background while generating reports and graphs by operator
- Test limits such as Temperature range and ppm can be changed after actual testing, this gives better reports and graphs presentation for customers
- Microsoft Windows® operation allows high quality graph printout
- User Programmable Drive Level : 10nW - 1mW (max and min power depends on Rr of crystal)
- Crystal Measurement through passive π network techniques with KH1120 / KH1240 / KH1200 network analyser
- Multiple crystal types may be accommodated in the same temperature run
- Automatic C0 cancellation for high frequencies
- User friendly system operation including menu driven, mouse operation and easy system calibration
- Perform pass/fail testing to user specified limits
- Dual row test wheel can hold up to 254 crystals per chamber (depends on crystal type)
- Measures : Fs, FL, Rs, CL, C0, C1, L1, Q, Ts, C0/C1, DF, Fs/T, and FL/T
- Optional Chinese operating software
- Frequency Range : KH1120 : 1 - 120 MHz
KH1240 : 1 - 240 MHz
KH1200 : 1 - 250 MHz

Standard System Configuration

The KH1200-TS Temperature Test Upgrade Package for Single Chamber operation includes :

- KH1120 or KH1240 or KH1200 Crystal passive π Network Analyser subsystem
- KH1200-TS System Operating Software & System Cabling
- KM5900 Relay Controller



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The following hardware is required and to be provided by user :

- Chamber - KH7220 (from Kolinker) or
 - 4220MR
 - 6200
- Chamber fixture, including Dual Row π network test head and 4 inch cover
- Dual row test wheel
- Minimum Pentium III 300MHz, 3.25" floppy, 64MB RAM, 20M hard disk space, Windows[®] 95, mouse, 800 x 600 SVGA display adaptor min PCI Slot with 3.3V and 5V power supply (**Pentium III 800MHz or better with Windows 98 is strongly recommended for optimum performance**).
- Windows[®] compatible graphic printer

System Options

- Dual Chamber
- Chinese Language Support

Software Capabilities

Easy Test Set up and Operation

- The user friendly Windows[®] environment eliminates the need of remembering how to operate or program a test.
- Other Standard Reports
- Printout of Crystal Failures
- Printout of Crystal Measurements
- Printout of Frequency and Resistance vs. Temperature
- Plot of Frequency and Resistance vs. Temperature
- Tabular Printout of the Curve-fit Data
- Data Transfer to other standard applications, such as dBase, Lotus etc. for further analysis

The collage displays typical report formats from the KH-1200-TS Automatic Crystal Temperature Tester. It includes three report screenshots and a graph.

Report 1 (Left): KH-1200-TS Automatic Crystal Temperature Tester (SN:TS-0013). Test on: 07/23/1997 12:58. Data file: 0723 []. Print for: xtal A1 to A20, all tested temperature point. Setup description: 3.1872999 MHz, SERIES HC-49U, CL: SERIES, Power: 100.0 μ W into 70.0 ohm. Xtal: Failed On. Results: A2 dRs, A3 dRs, A5 dRs, A6 dRs. Total 6 xtal(s), 4 xtal(s) fail.

Report 2 (Middle): KH-1200-TS Automatic Crystal Temperature Tester (SN:TS-0013). Test on: 07/23/1997 12:58. Data file: 0723 []. Print for: xtal A1 to A20, all tested temperature point. Setup description: 3.1872999 MHz, SERIES HC-49U, CL: SERIES, Power: 100.0 μ W into 70.0 ohm. Xtal: Failed On. Results: A1 Unstable at -40.0°C, A2 Fe at -40.0°C, A3 Open at -40.0°C, A4 Open at +40.0°C, A5 Unstable at -40.0°C, A6 Open at -40.0°C. Total 10 xtal(s), 7 xtal(s) fail.

Report 3 (Right): KH-1200-TS Automatic Crystal Temperature Tester (SN:TS-0013). Test on: 07/23/1997 12:58. Data file: 0723 []. Print for: xtal A1 to A6, all tested temperature point. Reference Temperature: 25.0°C. Setup description: 3.1872999 MHz, SERIES HC-49U, CL: SERIES, Power: 100.0 μ W into 70.0 ohm. Xtal A1 Freq: 3.187294 MHz, Xtal A2 Freq: 3.187154 MHz. Tables show Temp., df, df comp, df Err, R, and ohm for both crystals.

Graph: Temperature Characteristic Graph for Xtal A1. Shows Frequency (MHz) and Resistance (ohm) vs. Temperature (°C). Includes curve fit coefficients and turning points.

Typical Report Format

Specifications are subject to change without prior notice. Photo shown is for reference only.

Windows is a registered trademark of Microsoft Corp. 4220MR is a product of Saunders & Associates Inc. 6200 is a product of PRA Inc.



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