

# ***KH-5303***

## ***SMD Crystal Pi-network In-process Tester***

### ***( Pallet Type)***



**More Control on  
DLD  
in your process**

The ***KH5303 Pallet Type Pi-network In-process Crystal Tester*** is designed to be used with a pallet type final frequency adjustment system, such as Kolinker KH6800.

The semi-finished crystal before and after partial plating (final frequency adjustment ) process are often prone to foul or break if measured by hand. With KH5303, you can test all crystals automatically right after final frequency adjustment , auto screen out the bad crystals so as to save welding and aging process time and minimize production loss.

The built-in ***KH1120 / KH1240 Pi-network Crystal Measurement System*** gives excellent absolute measurement accuracy when compared to other in-process checker. It uses the IEC444-5 and IEC444-6 international standard for crystal measurement. Testing specifications include all crystal parameters such as Fs, FL, Rs, C0, C1, L1, Q, Ts, DLD, DLD-gamma, Spurious Scan ...

Special DLD measurement algorithm to avoid waking up sleeping crystal.

After measurement, automatically pick out the failure crystals into 4 bins which are:

1. Over Frequency Limit
2. Below Frequency Limit
3. Rr fail
4. Others

For detail measurement data, the operator can view on the monitor screen or print the whole report to the printer.

KH5303 provides programmable step size for different types of pallet.



#### **Kolinker Industrial Equipments Limited**

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## Specifications

- Frequency Range : KH1120 : 1 - 120 MHz  
KH1240 : 1 - 240 MHz
- Crystal Measurement : Built-in KH1120 / KH1240 Pi-network Crystal Measurement System provides absolute measurement accuracy.
- Measurement Method : High accuracy IEC444-5 and IEC444-6 pi-network crystal measurement algorithm.
- Drive Level : 10nW – 1mW into 25 ohm.
- Supported Parameters : Fs, Fr, FL, Rs, Rr, RL, CL, C0, C1, L1, Q, Ts, C0/C1, DF1, DF2, DLD, DLD- $\gamma$ , FL1, FL2, Spurious Scan....
- Automatic spurious response measurement.
- Automatic drive level dependence (DLD) measurement.
- Microsoft Windows<sup>®</sup> operation allows high quality graph and report printout.
- High speed PASS/FAIL measurements.
- All parameter limits are individually programmable by operator.
- User friendly system operation including menu driven, mouse operation and easy system calibration.
- Flexible data storage and printing features.
- Optional multi-language software for using in different countries ( Chinese, English).
- Repeatability : Fs  $\leq \pm$  Time base error  $\pm 1$  ppm.  
FL  $\leq \pm$  Time base error  $\pm 1$  ppm  $\pm (0.2\text{pF} \times \text{Ts of crystal})$ .  
Rs  $\leq \pm 8\% \pm 1\Omega$ .
- Time Base error : exfactory calibration  $\leq 1$  ppm.  
aging for 1st year  $\leq 2$  ppm.  
aging for 2nd year and thereafter  $\leq 1$  ppm.
- Calibration Method : With standard resistor ( provided with machine ).
- LEGEND Computer (or compatible) with Windows<sup>®</sup>98.
- Dimensions : 540(W) x 820(D) x 1600(H) (Not include Signal Pole)

## Optional

- Optional Windows Compatible Printer.
- KH5602 High Driver Options

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