TF-3050

SERIES 2 LDP15TQ THICK FILM CHIP TRIMMER

A New Generation Platform for Trim and Test Thick Film Chip Components

- Capability to trim from milli-ohms (mΩ) to Mega-ohms (MΩ)
- Ability to trim substrates with resistors up to size 0.04”X0.02”
- Fully redefined user friendly GUI software
- Theta adjustment for clamping device for precise alignment
- Twin magazines to store additional substrates and reduce machine idle time.

TF-3050 SERIES 2 LDP15TQ THICK FILM CHIP TRIMMER - SPECIFICATIONS

Optical System

- **Beam Positioned:** *Precision high-speed galvanometer*
- **Field Size:** *12 x 90mm*
- **Resolution:** *1.5µm*
- **Repeatability:** *2.5 µm*
- **Spot Size:** *18 - 40 µm (standard 1064nm)*
- **Focus Len:** *125 mm flat telecentric type*

Laser System

- **Laser Type:** *Diode pumped ND: YAG Lasers*
- **Output Power:** *12W (Q-Switched Avg. Power @ 10 KHz)*
- **Wavelength:** *Standard 1064nm*
- **Pulse Width,** *nominal: 150 nsec*
- **Power Measurement:** *Thermal pickup*

X/Y Part Positioning

- **Type:** *Dual carriage system with high speed motor*
- **X Axis:** *Driven by high speed linear motor (carriages) - Resolution: 1um*
- **Travel Speed:** *600 mm/s*
- **Prober & Axis:** *DC brushless servo motor*
- **Theta Control:** *Motorized theta control*
- **Part Transfer:** *AC motor controlled pick and place arms*
- **Part Load/Unload:** *Dual magazines with elevators*

Software

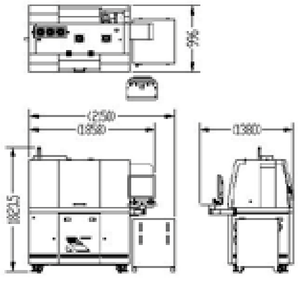
- WinLts 2 Windows XP Application Software

Measurement System

- **Dual Mode:** *Force Current & Force Voltage*
- **Range:** *0.1Ω ~ 30 MΩ, 10 mΩ Optional*
- **Accuracy:** *0.02% Midrange*
- **Repeatability:** *0.01% Midrange*
- **Resolution:** *0.005%*
- **Measurement Time:** *50 µsec*
- **Calibration Standards:** *6 pcs 0.01%*
- **Guard Drive Current:** *100 mA*
- **Guard Offset:** *1 mV*

Physical Characteristics

- **Dimensions:** 2125 mm x 966 mm x 1858 mm
- **Weight:** 1000kg



Utilities Requirements

- **Power:** *220 V AC, single phase, 10A (50/60Hz)*
- **Air:** *80~100 psi / flow rate 10 cfm*
- **Vacuum:** *100 CFM factory vacuum for debris removal and substrates retention*

Note: Laser Power supply not included.

Controller

- Intel Core 2 duo processor for main application (Window)
- Pentium processor for trimmer application and motion control

Special Features

- Dual magazine with two sets of magazines to reduce the machine idle time
- Improved pick up arm for efficient pick up and placing of substrates
- Completely redesigned GUI improves machine productivity

Switching Matrix

- **Pins per Card:** *16*
- **Lines per Pin:** *3 (Force, Sense or Guard)*
- **Cards per System (Standard):** *10 pcs std, 12 pcs maximum*
- **Switch Type:** *Dry Reed Relay*
- **Contact Life:** *1 Billion Cycles*
- **Insulation:** *> 10 GΩ*
- **Switching Time:** *200 µsec*

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