

TF-3050

SERIES 2 J40 THICK FILM CHIP TRIMMER



A New Generation Platform for Trim and Test Thick Film Chip Components Size of 0201 and Circuits

- Advanced vision and motion subsystems provide dramatically improved positioning and alignment
- capability Capability to trim from milli-ohms (Ω) to Mega-ohms ($M\Omega$)
- Built-in pattern necognition for auto compensation & precise alignment
- Ability to trim substrates with resistors up to size 0.04"X0.02" and 0201 (0.02" x 0.01")
- User friendly GUI software
- Theta adjustment for clamping device for precise alignment
- Intelligent sensors to detect and isolate part defects
- Twin magazines to store additional substrates and reduce machine idle time.

TF-3050 SERIES 2 J40 THICK FILM CHIP TRIMMER

- SPECIFICATIONS

Optical System

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

Laser System

- **Laser Type:** Diode pumped Q-switched
- **Output Power:** 6W (Average @ 10 KHz)
- **Wavelength:** Standard 1064nm
- **Pulse Width, nominal:** 30 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: 1 μ m
- **Travel Speed:** 600 mm/s
- **Prober & Y 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

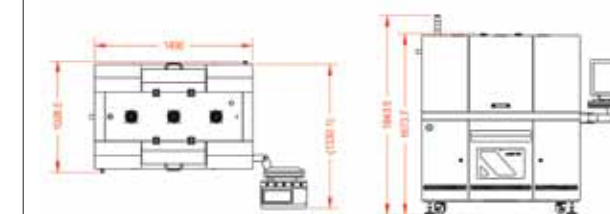
- WinLts 2 Windows XP Application Software

Measurement System

- **Dual Mode:** Force Current & Force Voltage
- **Range:** 0.1 Ω ~ 30 $M\Omega$, 10 m Ω Optional
- **Accuracy:** 0.02% Midrange
- **Repeatability:** 0.01% Midrange
- **Resolution:** 0.005%
- **Measurement Time:** 50 μ sec
- **Calibration Standards:** 6 pcs 0.01%
- **Guard Drive Current:** 100 mA
- **Guard Offset:** 1 mV

Physical Characteristics

- **Dimensions:** 1490 mm x 1028 mm x 1843.5 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

Controller

- Intel Core 2 duo processor for main application (Windows)
- 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 G Ω
- **Switching Time:** 200 μ sec

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