

# TF-3050G

## SERIES 2 BL8S THIN FILM CHIP TRIMMER



### A New Generation Platform for Trim and Test Thin Film Chip Components

- Capability to trim from ohms ( $\Omega$ ) to Mega-ohms ( $M\Omega$ )
- Ability to trim substrates with resistors up to size 0.04"X0.02"
- Substrate size available for 50mmX60mm,60mmX70mm
- Theta adjustment for clamping device for precise alignment
- Twin magazines to store additional substrates and reduce machine idle time.

### TF-3050G SERIES 2 BL8S THIN FILM CHIP TRIMMER - SPECIFICATIONS

#### Optical System

- **Beam Positioned:** Precision high-speed galvanometer
- **Field Size:** 12 x 75mm
- **Resolution:** 1.5 $\mu$ m
- **Repeatability:** 2.5  $\mu$ m
- **Spot Size:** 8-10  $\mu$ m (standard 532nm)
- **Focus Len:** 102 mm flat telecentric type

#### Laser System

- **Laser Type:** Diode pumped Q-switched
- **Output Power:** 1.5W (Average @ 20 KHz)
- **Wavelength:** Standard 532nm
- **Model:** TEM<sub>00</sub>
- **Frequency Range:** 1-100KHz
- **Pulse width, nominal:** 7 nsec
- **Power Measurement:** Thermal pickup

#### X/Y Part Positioning

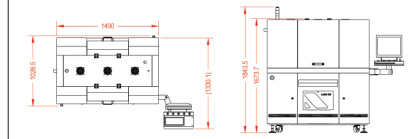
- **Type:** Dual carriage mounted on independent air cooled brushless DC servo motor stages
- **X Axis:** Driven by high speed linear motor (carriages) - XY Resolution: 1  $\mu$ m
- **Travel Speed:** 600 mm/s
- **Prober:** High speed linear motor with pneumatic counter balance and motorized theta
- **Theta Control:** Motorized theta control
- **Part Transfer:** Pneumatically controlled pick and place arms
- **Part Load/Unload:** Dual magazines with elevators

#### Measurement System

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

#### Physical Characteristics

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



#### 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

- 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

#### Software

- DOS Application Software

#### 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 $\Omega$
- **Switching Time:** 200  $\mu$ sec

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