TF-2010G SERIES 2 Y70 LASER TRIMMER - SPECIFICATIONS

A New Generation Platform for Trim and Test Thick Film Components Size of 0201 / 01005 and Circuits

- Advanced vision and motion subsystems provide dramatically improved positioning and alignment capability
- Capability to trim from ohms (Ω) to Mega-ohms (MΩ)
- Built-in pattern recognition for auto compensation & precise alignment
- Ability to trim substrates with resistors sizes of 0201 (0.02"×0.01") and 01005 (0.01" × 0.005")
- 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.

Optical System
- Beam Positioned: Precision high-speed galvanometer
- Field Size: 12 x 75mm
- Resolution: 1.5μm
- Repeatability: ±2.5μm
- Spot Size: 11 - 25μm (standard 532nm)
- Focus Len: 102 mm flat telecentric type

Physical Characteristics
- Dimensions: 1820 mm x 1070 mm x 2050 mm

Laser System
- Laser Type: Diode pumped Q-switched Nd: YAG laser
- Output Power: 3W (Average @ 7.5 KHz)
- Wavelength: Standard 532nm
- Mode: TEM₀₀
- Frequency Range: 1-100KHz
- Pulse Width: 70ns (nominal) @ 1KHz
- Power Measurement: Thermal pickup
- Vacuum: 100 csm factory vacuum for debris removal and substrates retention
- Pattern recognition based alignment

Utilities Requirements
- Power: 220 V AC, single phase, 10A (50/60Hz)
- Air: 80~100 psi / flow rate 10 cfm
- Rotation control with two sets of magazines to reduce the machine idle time

Controller
- Intel Core 2 duo processor for main application
- Pentium processor for trimmer application
- Twain control 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.

Software
- LTS2010 software with an easy-to-use interface running in Windows XP

Measurement System
- Dual Mode: Force Current & Force Voltage
- Range: 0.1Ω - 30 MΩ, 10 mΩ Optional
- Accuracy: ±0.2% Midrange
- Repeatability: ±0.1% Midrange
- Resolution: 0.005Ω
- Measurement Time: 50 μsec
- Calibration Standards: 6 pcs 0.01% ±1
- Guard Drive Current: 100 mA
- Guard Offset: 1 mV

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