

HYBOND

Soft Touch™

MODEL 616B-005

DIGITAL THERMOSONIC PEG BONDER

For 0.5 - 2.0 mil (12.5 - 50 micron) dia. insulated wire, 0.5 - 3.0 mil (12.5 - 75 micron) dia. bare wire and up to 1 x 20 mil (25 x 500 micron) gold or aluminum wire, ribbon or gold-plated copper leads



STANDARD FEATURES:

- HYBOND *Soft Touch* bond force system.
- Servo-motor vertical (Z axis) control.
- 0.75in (19mm) vertical bonding window.
- Variable height bonding within 0.75in (19mm).
- Search height adjustable in 0.001in (25um) increments.
- Hi/Lo U/S power selector (PLL generator).
- Digital parameter adjustment in actual units (watts, milliseconds and grams).
- Storage for up to ten bond schedules in non-volatile memory.
- Built-in temperature controller. Bond counter records number of bonds performed and can be reset.
- Dual footswitch control for bond head vertical (up and down) movement.
- Bond head vertical movement can be controlled in fast or slow speeds on manual mode.
- Bond level sensor system stops Z axis movement upon contact with bond surface and activates bond cycle.
- Deep access when using 0.750 inch tool.

HYBOND's Model 616B-005 thermosonic single channel peg bonder is designed for ultrasonic and thermosonic bonding of interconnects in applications that do not require the bonder to feed wire. Applications include "tacking" tuning ribbons, insulated wire bonding, flex lead bonding, pin tab bonding, mesh bonding and ball coining. When fitted with Hybond's OP-47, the 616B-005 becomes a Beam Lead Diode (BLD) Bonder allowing the operator to pick up, place and bond the BLD without pre-positioning.

Partial List of Available Options:

- **OP-06S7E:** Leica S7E Zoom Stereo Microscope.
- **OP-06B:** Nikon SMZ745 Microscope.
- **OP-08A-LED:** Dual Fiber Optic Illuminator.
- **OP-08R1-LED:** White LED Ring Illuminator.
- **OP-12:** Provisions for 240VAC 50/60 Hz power.
- **WST-15A:** Heated Work Stage, 2.125 in. top.
- **WST-15A-WP:** Heated Work Stage, 2.125in top with 2 x 2in Waffle Pack/Tray holder (OP-47).
- **OP-47:** Beam Lead Diode Bonding option.
- **PT-X.X:** Peg Tool as ordered per application.
- **BLD-TxWxL:** Beam Lead Diode Bonding Tool.

Specifications for Model 616B-005:

- Ultrasonic (U/S) System: PLL self tuning 62.5KHz (nominal) system (± 2.5 KHz).
- U/S Power Range: 0-0.2 watt on low setting and 0-4 watts on high setting.
- Bond Time Range: 0mSec. to 900mSec.
- Bond Force Range: 12gr. to 300gr.
- Temperature Control Range: 15 to 250 degrees Centigrade.
- Bondable Wire Diameter: 0.7 to 3.0mil (18 to 76um) and ribbon up to 1 x 20mil (25 x 500um).
- Bond Head Movement: True linear vertical motorized movement with fast and slow speeds in manual mode or search height pause in auto mode
- Bond Actuation: Bond height sensor activates bond cycle upon contact with bond surface/overtravel.
- X-Y Work Platform Motion: Manual, 4:1 ratio between manipulator and X-Y table.
- Input Power Requirements: 120VAC 50/60Hz @ 10A (max.) is standard, order OP-12 for 240VAC 50/60Hz.
- Minimum Bench Space Required: Width: 20 in., Depth: 20 in. (50,8cm x 50,8cm).
- Unit Weight: 45 lbs. (20Kg).
- Shipping Weight (estimated): 135 lbs. (61,2Kg), shipping weight varies with options ordered.
- Industry Standards: CE.

For more information contact us:



330 State Place, Escondido, CA. 92029, USA

Tel. 760-746-7105 Fax. 760-746-1408

e-mail: mailus@hybond.com or visit us online at: www.hybond.com