

HYBOND

Soft Touch™

MODEL 522A-40

DEEP ACCESS/LONG REACH THERMOSONIC BALL BONDER

For 0.7 mil (18µm) to 2.0 mil (50µm) Gold Wire



STANDARD FEATURES:

- ! HYBOND *Soft Touch™* energy system.
- ! Independent control of first and second bond.
- ! 1-2-2 stitch capability standard.
- ! Long horizontal reach of 6.5 inches.
- ! Deep vertical access of 0.53 inch.
- ! 0.5 and 2 inch spool mounts.
- ! Loop height control adjustment.
- ! Electronic ball size control.
- ! Independent lever for Z axis control of bond head.
- ! Swing away clamp assembly.
- ! Motorized vertical wire feed system.
- ! High and low EFO power standard.
- ! Front panel ultrasonic test button.
- ! Fits 10 x 10in. module or substrate.
- ! Multiple angle mounting for microscope.
- ! LED readout for setting and monitoring work stage temperature.
- ! Tail length is adjustable in 0.003 inch increments by a front panel control.
- ! Audio and visual bond sequence fault indicators.
- ! 10 x 12 inch work plate supports various heated work stages.

Model 522A-40 is a Deep Access, Long Reach, Thermosonic Ball Bonder for wires from 0.7mil (18µm) to 2.0mil (50µm) in diameter featuring HYBOND's exclusive *Soft Touch™* force ramping system. Imitated but never duplicated, the *Soft Touch™* system bonds effectively with less trauma to sensitive materials like GaAs and InP. Wire control is provided by a motorized feed system which features front panel adjustment for tail length and a swing away clamp assembly which makes threading wire easier. Front panel controls include independent 1st and 2nd bond dials for U/S, Time & Force as well as a built in workstage temperature controller. The 522A-40 has a proven track record of safe and effective wire bonding worldwide.

Partial List of Available Options:

- ! OP-06S6 Leica Stereo Zoom Microscope.
- ! OP-06A Nikon SMZ660 Microscope.
- ! OP-08A Dual Fiber Optic Illuminator.
- ! OP-12 240VAC 50/60Hz Input Wiring.
- ! OP-13 Board For Bump Bonding.

- ! OP-30A 8:1 X-Y Manipulator.
- ! OP-44 High & Low Ultrasonic Power.
- ! WST-15A Heated Workstage, 2.125 in. Top.
- ! WST-19B Heated Workstage, 4 x 4 in. Top.
- ! WST-65 Heated Workstage, 10 x 6 in. Top.

Specifications for Model 522A-40:

- ! Ultrasonic (U/S) System: PLL self tuning 62.5 KHz (nominal) system (± 2.5 KHz).
- ! U/S Power Range: 0-1 Watt on low setting (default), 0-2Watts on high with OP-44.
- ! Bond Time Range: 10mSec. to 400mSec.
- ! Bond Force Range: 15gr. to 150gr.
- ! Temperature Control Range: Ambient to 250 EC.
- ! Bondable Wire Diameters: 0.7 to 2.0 mils (18 to 50 μ m).
- ! Bondable Wire Materials: Gold wire.
- ! Bonding Capillary used: 0.750in. length capillary.
- ! Bond Head Movement: Manual.
- ! Bond Actuation: Switch at fixed height activated by lever.
- ! Z Travel: 0.5"(1.27cm) maximum bond head travel.
- ! Vertical Bonding Window: 60-100mils (152-254 μ m) maximum height difference between 1st & 2nd bond height for proper bonding.
- ! Table Motion: 4:1, manual.
- ! Input Power Requirements: 120 VAC 50/60 Hz @ 10A max. (Standard). For 240VAC, bonder must have OP-12.
- ! Minimum Bench Space Required: 20 x 25 in. (50.8 x 63.5 cm).
- ! Unit Weight/Shipping Weight: 70 lbs (31.8 Kg)/150 lbs (68.6Kg), shipping weight may vary depending on options.
- ! Industry Standards: CE.



For more information, contact:

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