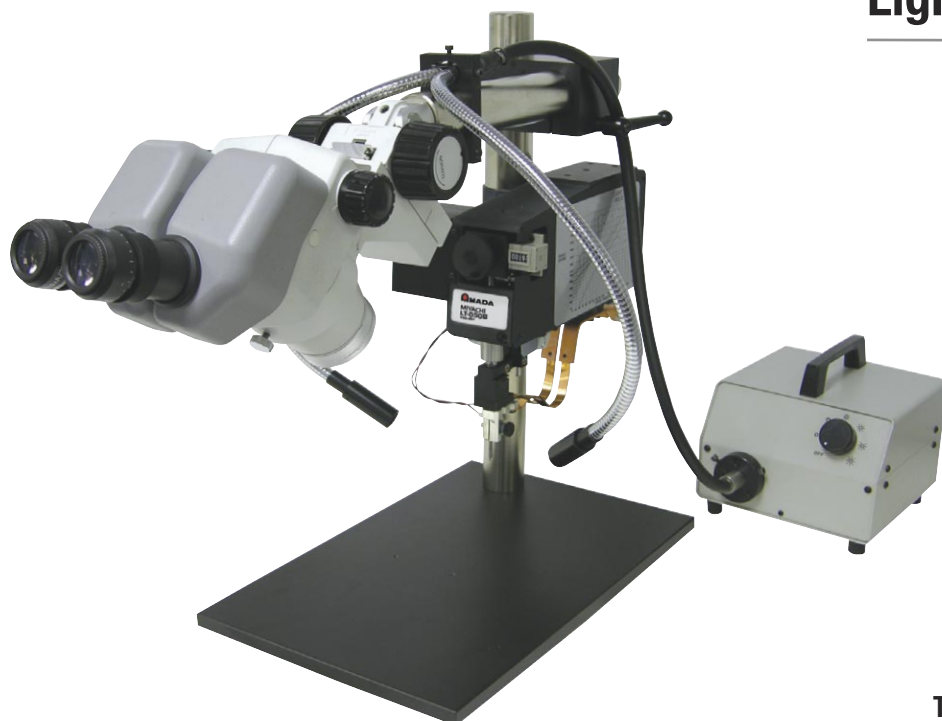


LT-050B

Light Force Weld Heads



- Ultra light force to 0.39 N (40 g) for **micro welding** fine wires and ribbons
- Viewing microscope (optional) for precise part positioning
- Precise force adjustment
- No electrode deflection

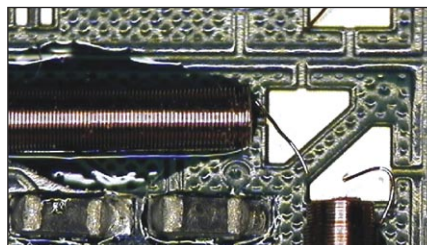
KEY FEATURES

- 0.39 - 9.81 N (40 - 1000 gf) designed to join fine wires and ribbons between 0.0003 in - 0.01 in (0.008 mm - 0.254 mm) in thickness
- Numeric force adjustment set with 3-digit numeric counter
- No deflection through stroke ensures consistent electrode contact and avoids welding blowouts or inconsistencies
- Configurable design accommodates a wide variety of applications
- Manual foot or air actuation
- May be fitted with an optional microscope for manual parts positioning

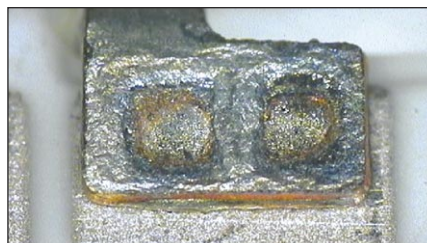
TYPICAL APPLICATIONS



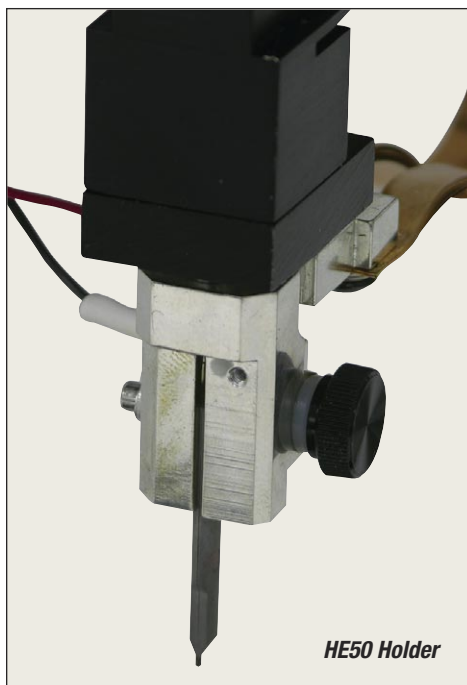
Wire to chip



Fine magnet wire

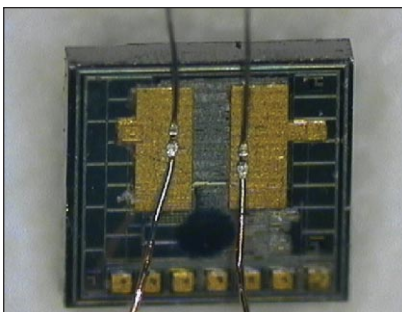


Reflow contact to pad

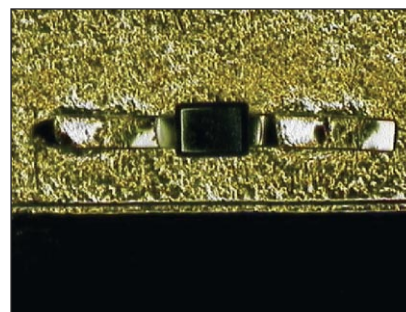


MODEL LT-050B-F OR LT-050B-A/24 ELECTRODE HOLDER WITH UNITIP® ELECTRODE

- Single-sided parallel gap welding
- Accessibility into electronic packages
- Ribbon and wire thickness from 0.0003 in to 0.005 in (0.008 to 0.127 mm)
- Best suited for conductive materials



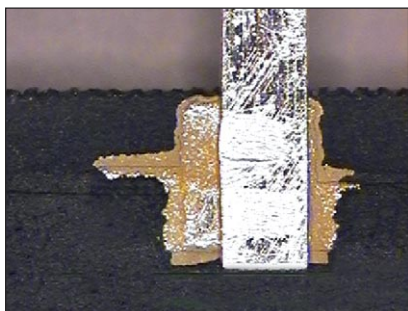
0.001 in (0.025 mm) gold coated copper wire to gold pad



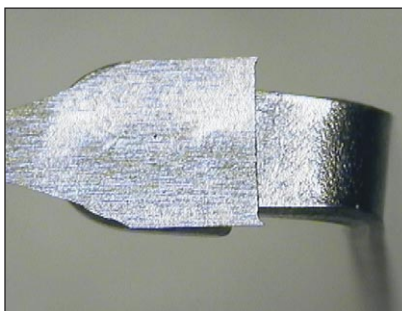
0.005 in (0.127 mm) gold ribbon to gold pad

MODEL LT-050B-F/UB OR LT-050B-A/UB ELECTRODE HOLDER WITH UNIBOND® ELECTRODES

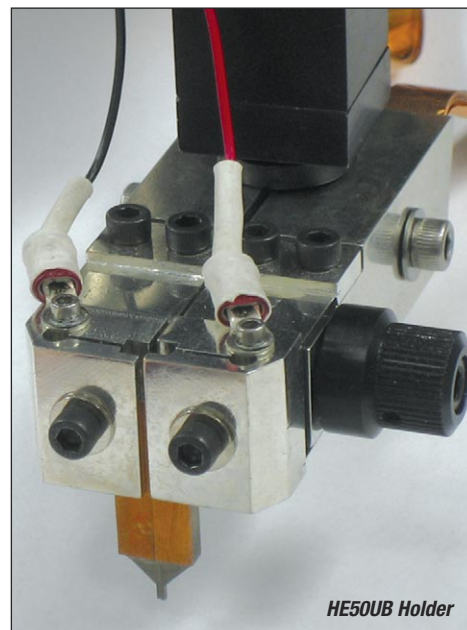
- Single-sided parallel gap welding (adjustable gap)
- Electrode footprint size promotes electrode lifetime
- Ribbon and wire thickness from 0.0005 in - 0.005 in (0.013 mm - 0.127 mm)
- UTA adapter available for UNITIPS
- Welds both resistive and conductive materials



0.005 in (0.127 mm) silver tab to metalized pad

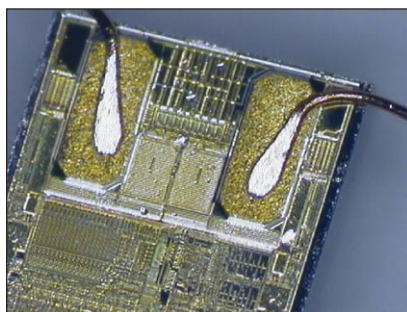


0.002 in (0.051 mm) nickel strip to block



LT-050B-RF – 17BM STYLE BLADE THERMODE LT-050B-LRF – 17P STYLE THERMODE

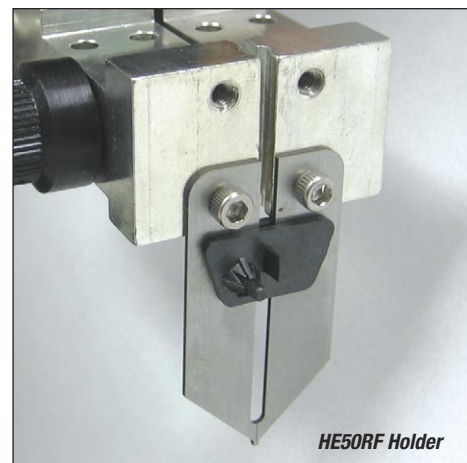
- Blade or single point thermode heating element according to part accessibility



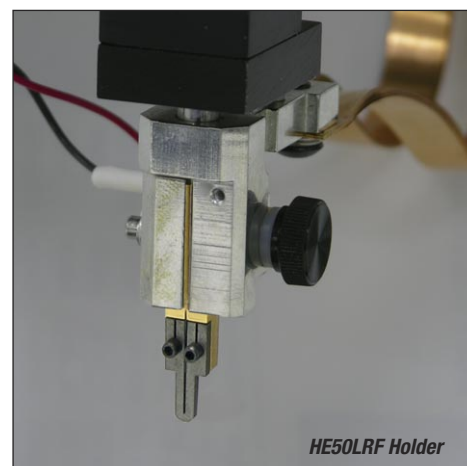
0.002 in (0.051 mm) diameter magnet wire to gold pad



0.005 in (0.127 mm) diameter magnet wire to gold pad



HE50RF Holder



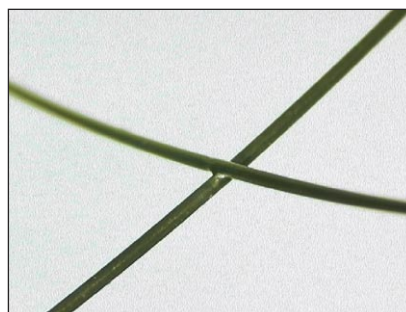
HE50LRF Holder

MODEL LT-050B-F/OPP

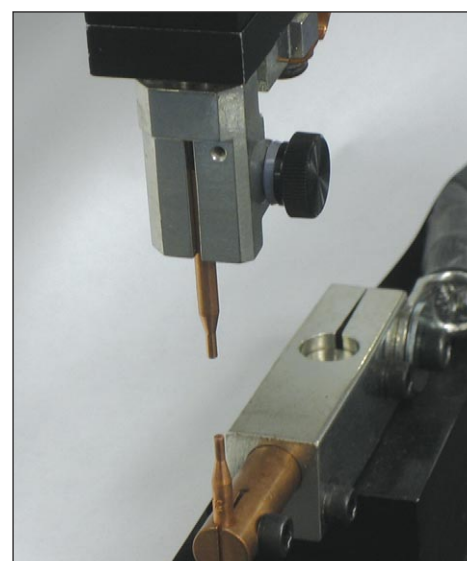
- Light force opposed configuration enables the welding of a wide range of both conductive and resistive materials
- Uses standard ES0400 series electrodes



0.002 in (0.051 mm) thick platinum strip to platinum tube



0.01 in (0.254 mm) diameter tungsten cross wire weld



HE50 with HE1200S lower electrode holder

TECHNICAL SPECIFICATIONS

Stroke	0.75 in (19.0) mm
Throat depth	4.66 in (118.0 mm)
Power rating	125 Watt-seconds or 2 kVA at 8% duty cycle

Model (all models)	Electrode holder	Electrode type	Force range (Newtons)	Force range (gf)	Actuation	Application
LT-050B-F	HE50	UNITIP	0.39 - 9.81	40 - 1000	Foot	Welding
LT-050B-F/OPP	HE50	1/8 in diameter	0.39 - 9.81	40 - 1000	Foot	Welding
LT-050B-A/24	HE50	UNITIP	0.39 - 9.81	40 - 1000	Air, 24 VAC	Welding
LT-050B-F/UB	HE50UB	UNIBOND	1.22 - 9.81	125 - 1000	Foot	Welding
LT-050B-A/UB	HE50UB	UNIBOND	1.22 - 9.81	125 - 1000	Air, 24 VAC	Welding
LT-050B-F/RF	HE50RF	Thermode	1.22 - 9.81	125 - 1000	Foot	Reflow Soldering
LT-050B-A/RF	HE50RF	Thermode	1.22 - 9.81	125 - 1000	Air, 24 VAC	Reflow Soldering
LT-050B-F/LRF	HE50LRF	Thermode	0.39 - 9.81	40 - 1000	Foot	Thermocompression Bonding
LT-050B-A/LRF	HE50LRF	Thermode	0.39 - 9.81	40 - 1000	Air, 24 VAC	Thermocompression Bonding

All LT-050B heads come with baseplate and optical mount assembly. Manual LT-050B models include CP footpedal, Air (EZ-AIR®) models require either FS1L or FS2L foot switch.

MICROSCOPE ACCESSORIES

BLFOI fiber optic illuminator system, 10-276-02
Nikon microscope, 10-395-01, 15X stereo microscope, 3.5-15X zoom range, 10X eyepiece with 21 mm field view, 0.5X auxiliary lens, 181 mm working distance
10-395-02, 30X stereo microscope, 7-30X zoom range, 20X eyepiece with 12 mm field view, 0.5X auxiliary lens, 181 mm working distance

WEIGHT & DIMENSIONS

	Without microscope	With optional microscope
Dimensions (W x D x H)	10 in x 17.5 in x 16 in (254.0 mm x 444.5 mm x 406.4 mm)	10 in x 23 in x 16 in (254.0 mm x 584.2 mm x 406.4 mm)
Weight	6 lb (2.7 kg)	25 lb (11.4 kg)



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