

LBT A TYPE Series

Purpose:

- To introduce the **LBT A TYPE** Series wire-to-board, crimp style connector from JST.

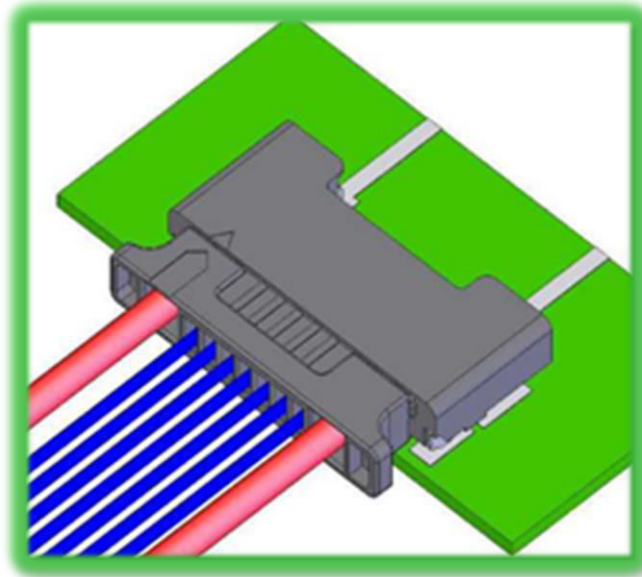
Objectives:

- Illustrate the intended application.
- Present the individual components of the **LBT A TYPE** Series.
- Review the application crimp tooling.

Content:

- 10 Pages

LBT A TYPE Series

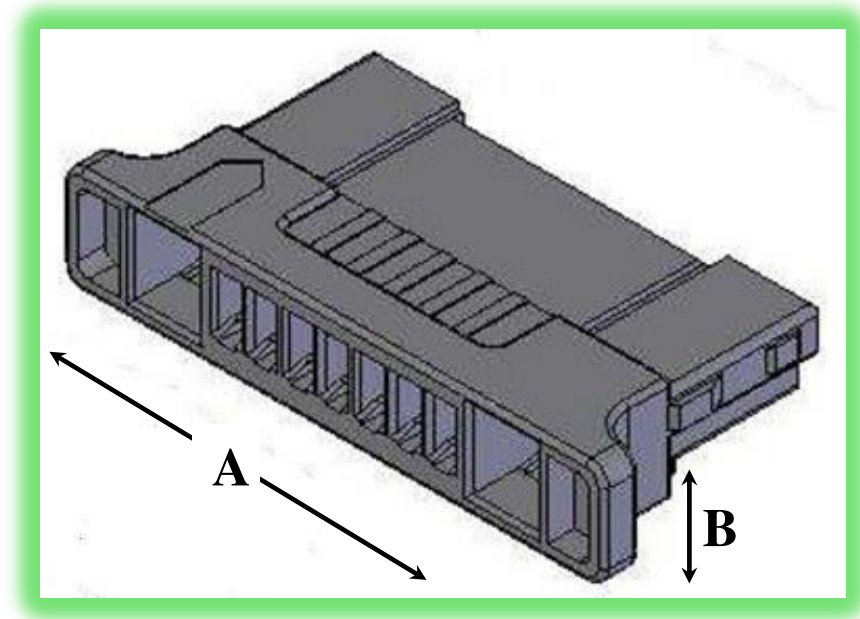


Wire-to-Board

Many applications require a small form factor connector system for **wire-to-board** connections that incorporates both “power” & “signal” circuits. The **LBT A TYPE Series**, crimp-style connector system is offered in a wire-to-board , molded in a RoHS compliant 94V-0, SMT headers and housings, and incorporate polarization and designed to prevent contact stubbing / back-out when mated. Rated 7A AC/DC (using 20AWG) power and 0.5A AC/DC (using 28AWG) signal at 50V AC/DC. PCB mounted headers are available in “side” entry configuration. The series has an operating temperature range of -25° C to +85 °C including temperature rise when applying an electrical current. The series is offered in 3, 5, 7 & 9 circuit sizes.

LBT A TYPE Series

Housings

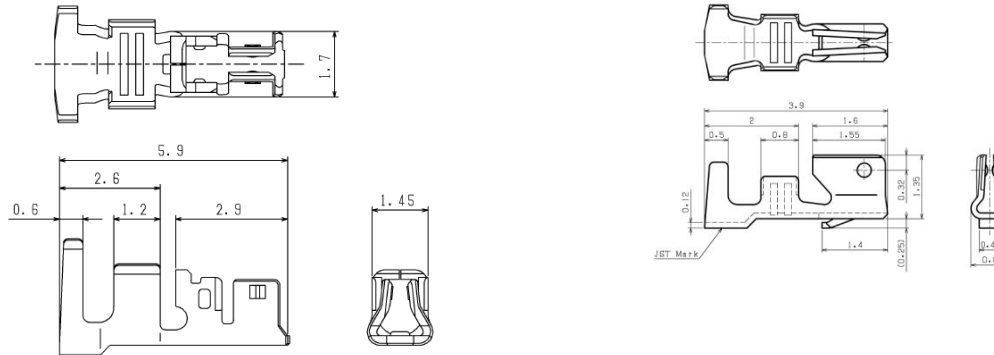


Part Number	Circuit Sizes	Signal Circuits	Power Circuits	A	B
LBTAR-03V-2K-K (HF)	3	1	2	9.1mm	3mm
LBTAR-05V-2K-K (HF)	5	3	2	11.1mm	3mm
LBTAR-07V-2K-K (HF)	7	5	2	13.1mm	3mm
LBTAR-09V-2K-K (HF)	9	7	2	15.1mm	3mm

The signal circuits are between the 2 power circuits are on each end.

LBT A TYPE Series

Crimp style contacts



Power Contact

Signal Contact

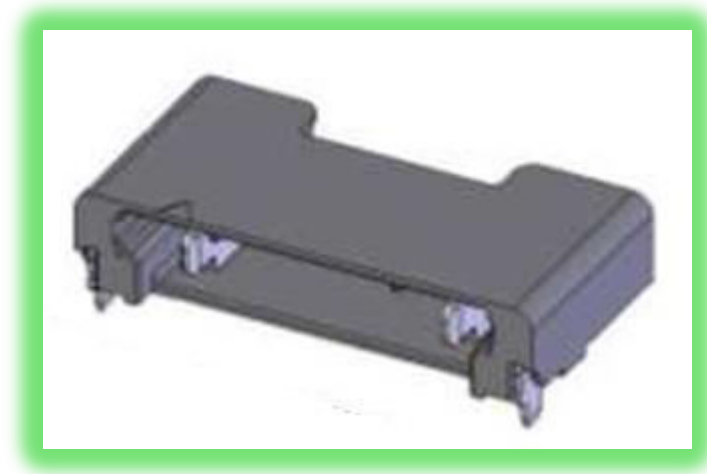
Application	Part number	Wire range	Insulation O.D. (mm)
Power	SLBTAD-01T-MO.5	24~20 AWG	1.11~1.44
Signal	SSH-003T-P0.2-H	32~28 AWG	0.4~0.8

The **LBT A TYPE** contacts are designed to accommodate a wire range of :

- Power: 24~20 AWG & O.D Range of 1.11~1.44mm - are tin-plated over a copper alloy base material.
- Signal: 32~28 AWG & O.D Range of 0.4~0.8mm - are tin-plated over a phosphor bronze base material.

LBT A TYPE Series

Side Entry Headers



Part Number	Circuit Sizes	Signal Circuits	Power Circuits	A	B
SM03B-LBTAKS-TD-N2T (HF)	3	1	2	9.1mm	3mm
SM05B-LBTAKS-TD-N2T (HF)	5	3	2	11.1mm	3mm
SM07B-LBTAKS-TD-N2T (HF)	7	5	2	13.1mm	3mm
SM09B-LBTAKS-TD-N2T (HF)	9	7	2	15.1mm	3mm

The **LBT A TYPE** header contacts:

Power: Tin-plated over a copper alloy base material.

Signal: Tin-plated over a copper alloy base material.

Solder Tab: Tin-plated over a copper alloy base material.

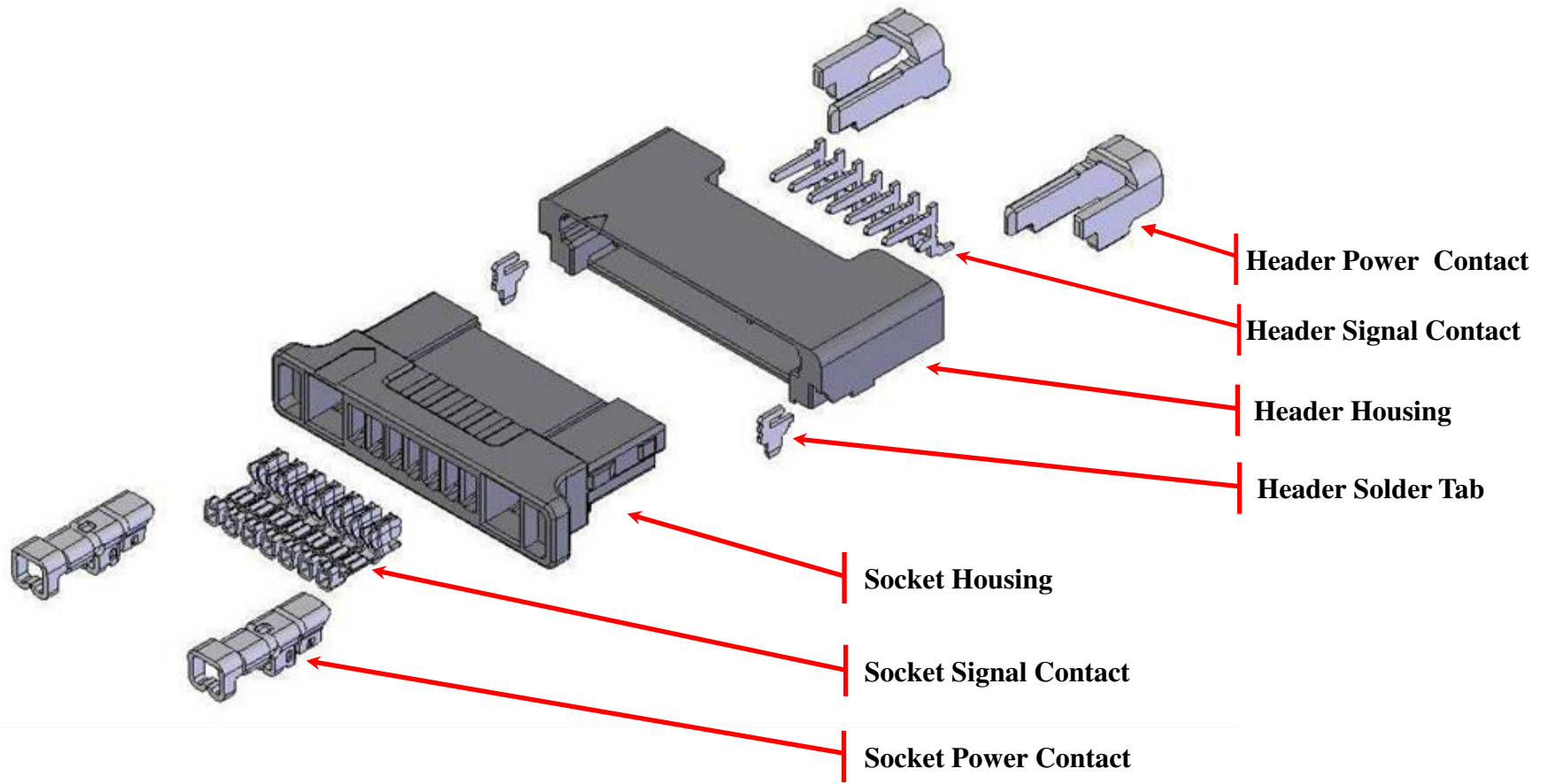
LBT A TYPE Series

General Specifications

General Specifications:	
Temperature range:	25°C~+85°C (Including the temperature rise in applying electrical current)
Current range:	
Power:	5.0A with 24 AWG 6.0A with 22 AWG 7.0A with 20 AWG
Signal:	0.5A with 28 AWG
Voltage rating:	50V AC/DC
Applicable wire:	
Power:	24~20 AWG / 1.11~1.44mm O.D.
Signal:	32~28 AWG / 0.4~0.8mm O.D.

LBT A TYPE Series

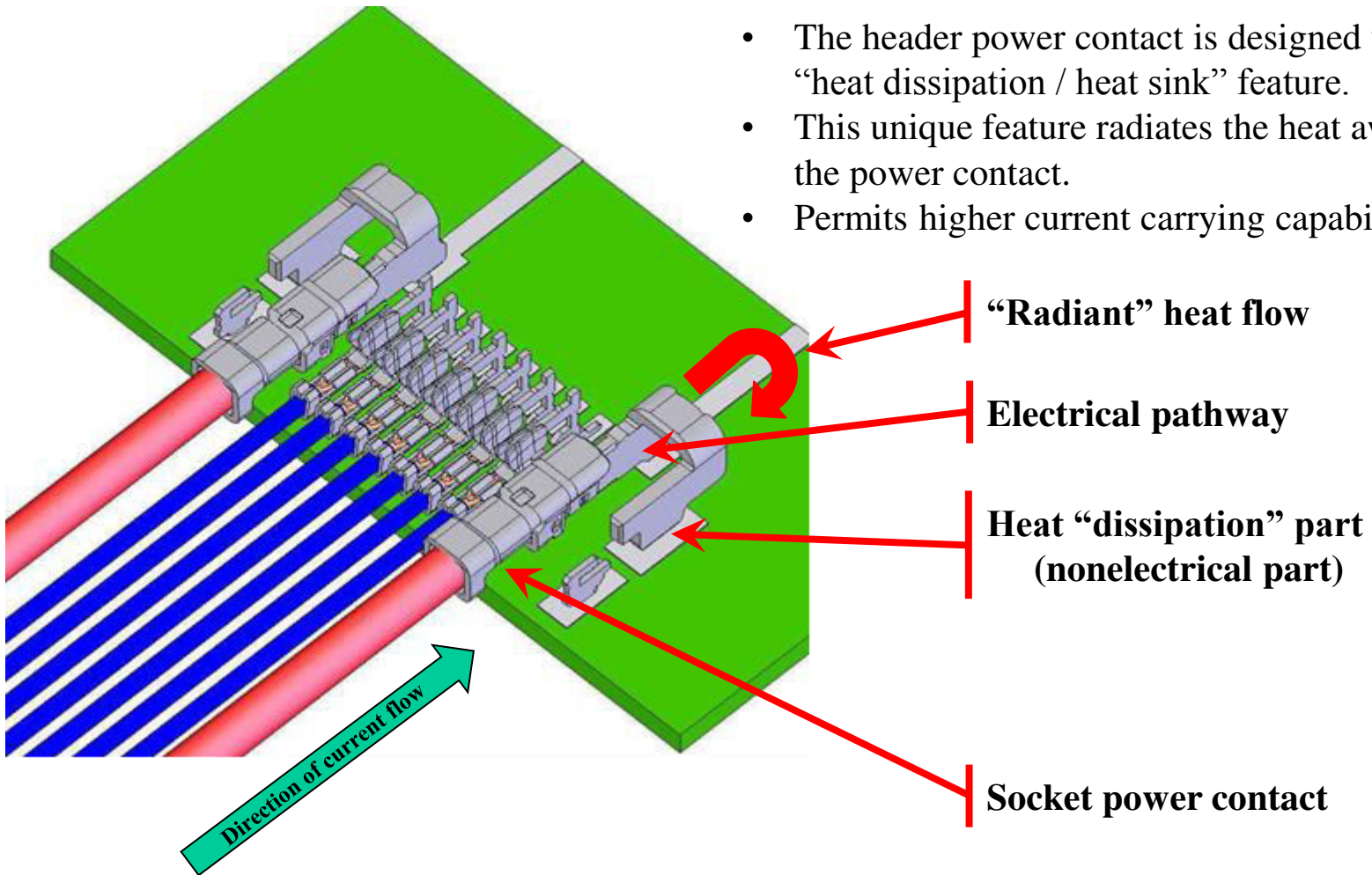
Connector Exploded View



LBT A TYPE Series

Unique “Heat Radiating” Power Contact

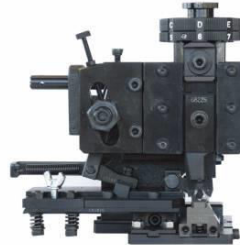
- The header power contact is designed with a “heat dissipation / heat sink” feature.
- This unique feature radiates the heat away from the power contact.
- Permits higher current carrying capability.



THE LBT A TYPE SERIES IS ENGINEERING & MANUFACTURING FREINDLY



**Bench press and
applicator for the
LBT Series**



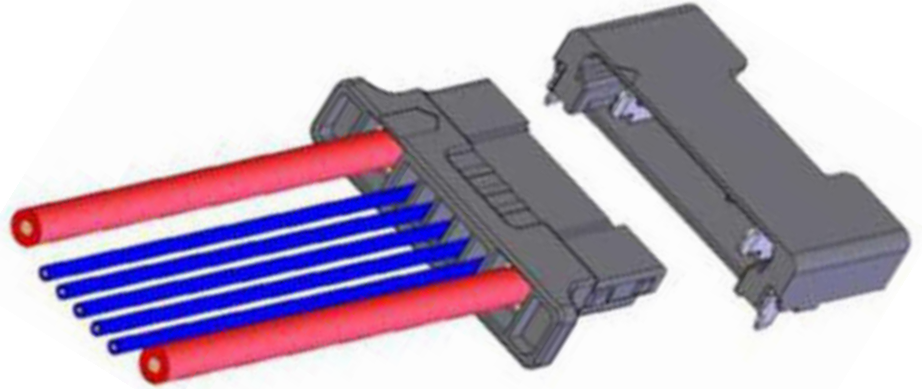
**Industry standard
applicator for the
LBT Series**



**YRS, YC & WC
hand tools for the
LBT Series**

Applicators are available for semi-automatic and fully automatic termination equipment normally found in the manufacturing environment as well as standard hand tools and contact extraction tooling (insertion tooling is not required for the PBV Series contacts. Standard reels for the LBT A Type Series for semi-automatic and fully automatic assembly equipment are available for manufacturing.

THE LBT A TYPE SERIES SUMMARY



The LBT A TYPE Series wire-to-board connector with :

- **Reliable contact construction ideal for vibration conditions**
- **Secure locking system**
- **Available in 3, 5, 7, & 9 circuits**
- **Applicable AWG #20~24 & 28~32**
- **Combination of power and signal circuits**
- **Sequencing of power and signal contacts**
- **RoHS compliant, SMT product**
- **Supported with termination tooling for manufacturing requirements**