

Applications



Automotive Powertrain Systems



EV Battery Packs



Agricultural, Construction machinery



Compact



High Voltage



Power Supply

Meet Hirose's award-winning ZE150HV Series—a compact high-voltage wire-to-board connector engineered for EV and HEV powertrain applications. Supporting 1000V AC/DC, 10A per pin, and operating temperatures up to 125°C, the ZE150HV Series delivers reliable power connections in demanding automotive environments.

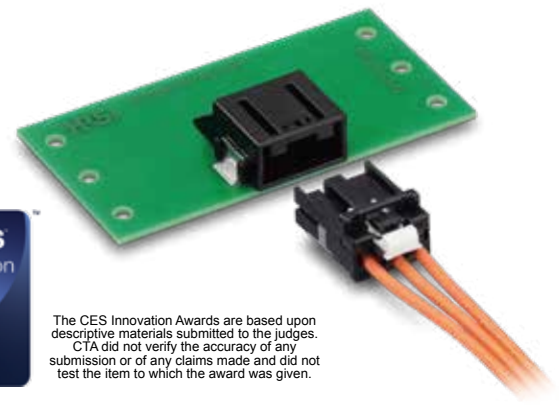
Its compact 4.5mm pitch design incorporates proprietary rib technology that optimizes creepage and clearance distances, while a dual-spring, three-point contact structure maintains stable electrical performance under vibration. A Connector Position Assurance (CPA) mechanism helps prevent incomplete mating, providing an additional level of safety for high-voltage applications.

KEY BENEFITS OF THE ZE150HV SERIES INCLUDE:

- Support for 1000V AC/DC, 10A per pin, and operating temperatures up to 125°C for demanding high-voltage applications
- A compact 4.5mm pitch design with proprietary rib technology that optimizes creepage and clearance distances for high-voltage performance
- A dual-spring, three-point contact structure that maintains stable electrical connections under severe vibration
- A Connector Position Assurance (CPA) mechanism that helps prevent incomplete mating and improves high-voltage safety
- Compliance with IEC 60664 requirements, supporting reliable operation in harsh automotive environments

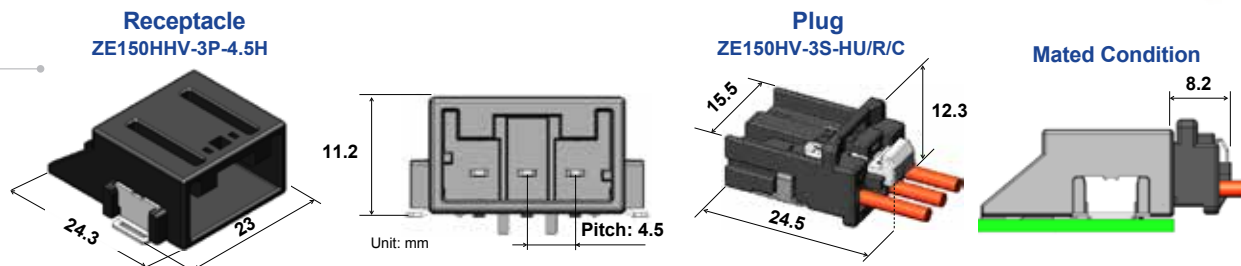


The CES Innovation Awards are based upon descriptive materials submitted to the judges. CTA did not verify the accuracy of any submission or of any claims made and did not test the item to which the award was given.



Dimensions

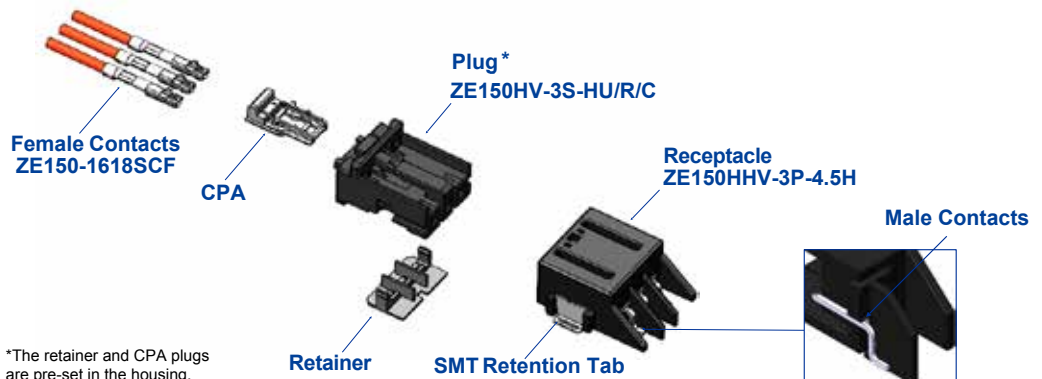
Space saving by
product shape
specialized
for high-voltage



Product Structure

CLICK HERE
FOR MORE INFORMATION

CLICK HERE TO ORDER
SAMPLE NUMBER:
US-ZE150HVSAMPLE-26

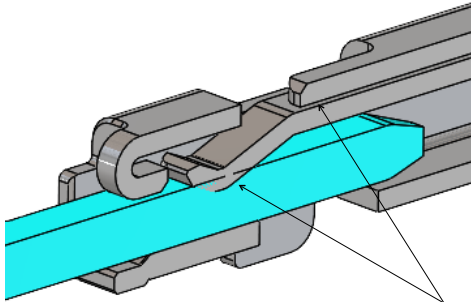


High Vibration Resistance with Optimized Contact Design

Female Contact Design

Dual Spring Design

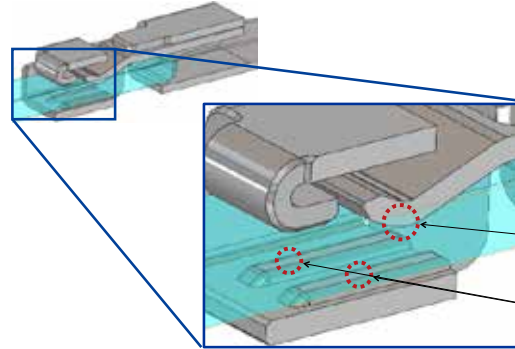
Increase the contact force and prevents vibration from outside.



Dual Spring

Three-point Contact Design

Improves contact reliability under severe vibration conditions.



1 Spring

2 Embossed Contact Points

1 Spring+2 Embossed Contact Points= Three-point Contact Design

* The contact is shown inverted for clarity.

Stable Contact Reliability Under Vibration

Specifications

Material and Finish

COMPONENT		MATERIAL	FINISH, REMARKS
Receptacle	Housing	PA (Material Group: I, PLC0)	UL94V-0 / Black
	Contact	Copper Alloy	Tin Plating (Under Nickel Plated)
	Retention Tab	Brass	Tin Plating (Under Nickel Plated)
Plug	Housing	PA (Material Group: II, PLC1)	UL94V-0 / Black
	Retainer	PA (Material Group: II, PLC1)	UL94V-0 / Dark Gray
	CPA	PBT (Material Group: IIIa, PLC3)	UL94V-0 / White
Crimp Contact		Copper Alloy	Tin Plating (Under Copper Plated)

Performance Characteristics

Rated Current	10A (All pins power supply)
Rated Voltage	1,000V AC / DC
Operating Temperature	-40 to +125°C*
Contact Resistance	Initial: 3mΩ Max. After Testing: 10mΩ Max.
Withstanding Voltage	3,000V AC for 1 min.
Insulation Resistance	100MΩ Min. (1,000V DC)
Mating Durability	30 times

-RoHS2 Compliant

-No. of Pos.: 3(Mass production) 5, 8, 10(Under development)

-Applicable Cable: 16 to 18 AWG (0.75 to 1.25sq), Outer dia.ø1.8 to 2.1mm

*Includes temperature rise due to current flow.



For additional information please go to
www.hirose.com/en/product/series/ZE150HV
 Specifications herein are subject to change without notice.
 Contact Hirose for latest specifications, drawings, or availabilities.

STAY CONNECTED

