



- ✓ High heat and strong vibration resistance for high-reliability applications
- ✓ Unique embedded spring terminals for long-term stable electrical connection
- ✓ Designed for automotive and industrial grade applications

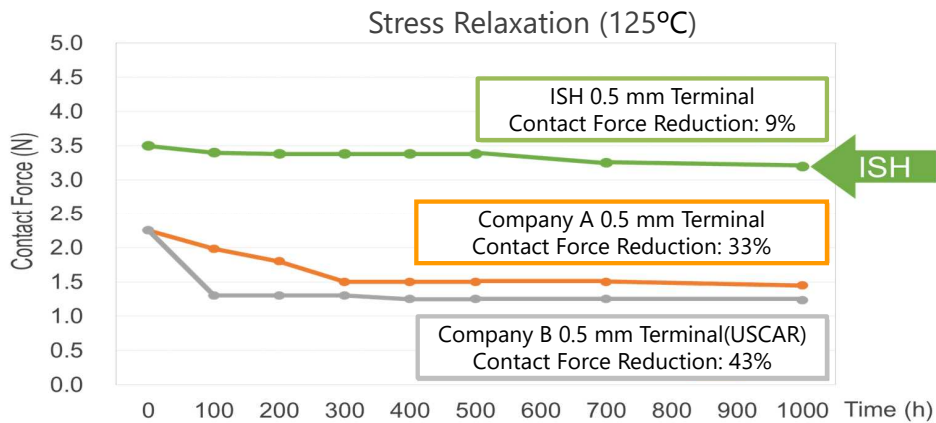
Pin counts:

Range	Up to 40
Available	20

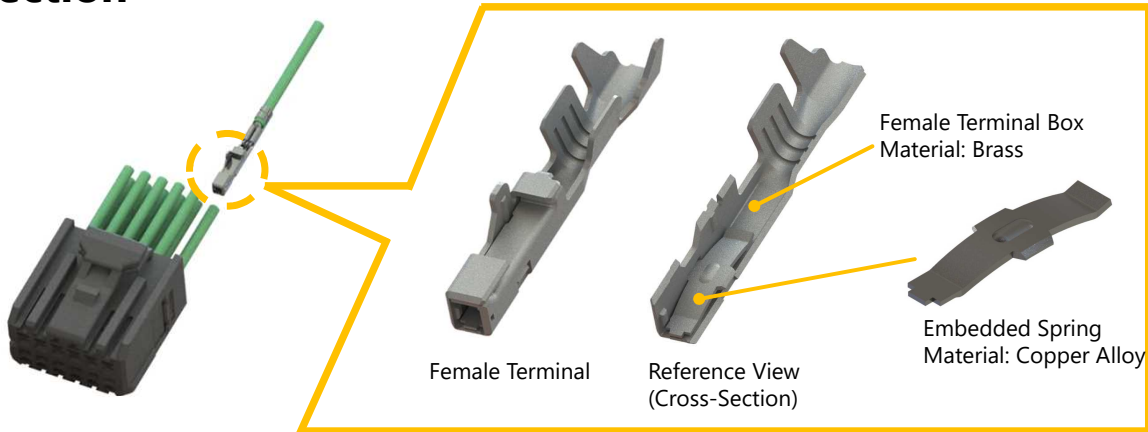
\*Please inquire for pin counts not listed or outside of the pin count range.

Pitch (mm)	2.0
Pin Size (mm)	Signal: 0.5 × 0.4(020) Power: 1.5 × 0.64(060)
Mated Height (mm)	13.60
Width Formula (mm)	33.00
Depth (mm)	25.30
Operating Temperature	-40 - 125°C
Insulation Resistance	100Mohm min.
Vibration Resistance	10G
Current Rating	Signal: 4.5A per pin Power: 7.0A per pin
Voltage rating	100V
Withstand Voltage	AC 1000V/minute
Plating	Sn
Housing	Male: glass-filled LCP Female: PBT
Applicable Cable	Signal: AWG#22,#20 *Insulation Diameter 1.6 mm max. Power: AWG#20 *Insulation Diameter 1.9 mm max.
Evaluation	Several OEM specs

## High heat and strong vibration resistance for high-reliability applications



## Unique embedded spring terminals for long-term stable electrical connection



## Designed for automotive and industrial grade applications



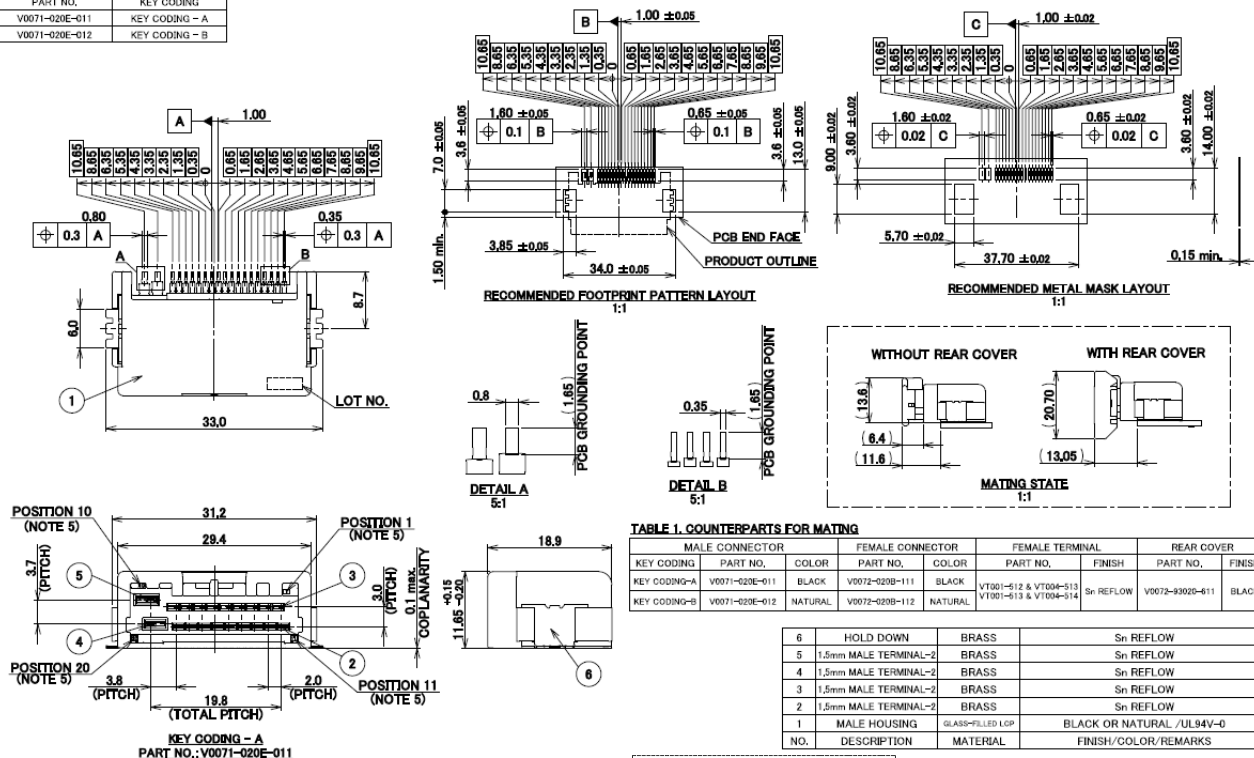
- Headlamp control unit
- Inverter & DC/DC converter
- Battery control module
- Rear view camera module
- Instrument cluster
- Robotic equipment
- Factory automation equipment, etc.

Suitable for high-temperature applications

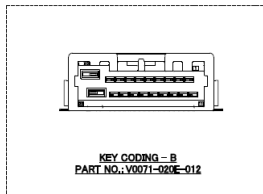
# ISH<sup>®</sup> (Horizontal Type-Hybrid) Component Parts Detail

## ISH<sup>®</sup> (Horizontal Type-Hybrid) MALE:

PART NO.	KEY CODING
V0071-020E-011	KEY CODING - A
V0071-020E-012	KEY CODING - B

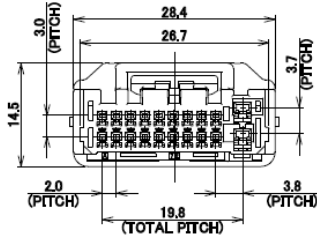
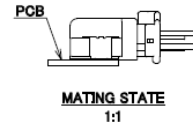
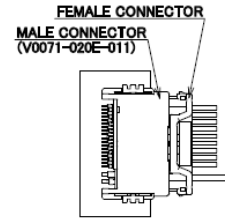
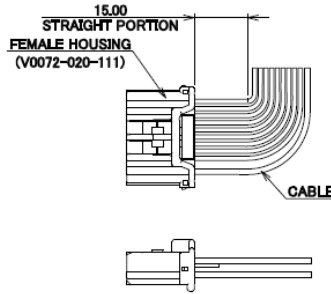
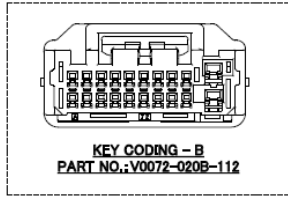
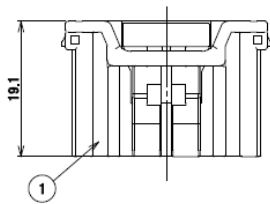


- NOTES**
1. APPLICABLE PART NO. ARE SHOWN IN TABLE 1.
  2. COMPLY WITH ELV/RoHS
  3. HANDLE OF PRODUCT IN COMPLIANCE WITH HANDLING MANUAL [HDM-0009]
  3. USE METAL MASK WHICH HAS A THICKNESS OF 0.15mm MIN. WHEN THE MALE CONNECTOR IS MOUNTED ON THE PCB.
  4. POSITION NUMBERS ARE INDICATED.

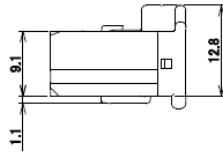


# ISH® (Horizontal Type-Hybrid) FEMALE:

PART NO	KEY CODING
V0072-020B-111	KEY CODING - A
V0072-020B-112	KEY CODING - B



KEY CODING - A  
PART NO.: V0072-020B-111



FEMALE CONNECTOR  
1:1

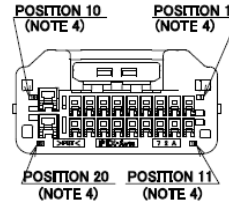


TABLE 1. COUNTERPARTS FOR MATING

FEMALE CONNECTOR			MALE CONNECTOR		FEMALE TERMINAL		REAR COVER	
KEY CODING	PART NO.	COLOR	PART NO.	COLOR	PART NO.	FINISH	PART NO.	COLOR
KEY CODING - A	V0072-020B-111	BLACK	V0071-020E-011	BLACK	VT001-512 & VT004-513	Sn REFLOW	V0072-93020-611	BLACK
KEY CODING - B	V0072-020B-112	NATURAL	V0071-020E-012	NATURAL	VT001-513 & VT004-514			

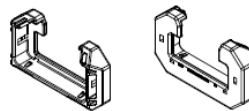
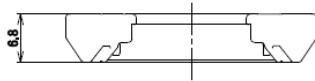
2	RETAINER	1	PBT	BLACK	-
1	FEMALE HOUSING	1	PBT	KEY CODING - A: BLACK KEY CODING - B: NATURAL	-
NO.	DESCRIPTION	QTY.	MATERIAL	FINISH/COLOR	REMARKS

- NOTE  
 1. APPLICABLE MALE CONNECTOR PARTS NO. ARE SHOWN IN TABLE 1.  
 2. COMPLY WITH ELV/RoHS  
 3. HANDLE OF PRODUCT IN COMPLIANCE WITH HANDLING MANUAL [HDM-0009]  
 4. POSITION NUMBERS ARE INDICATED.

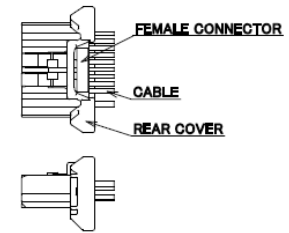
Rev. 4

# ISH® (Horizontal Type-Hybrid) REAR COVER:

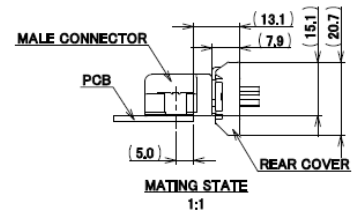
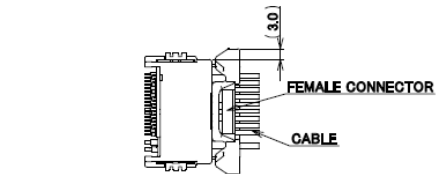
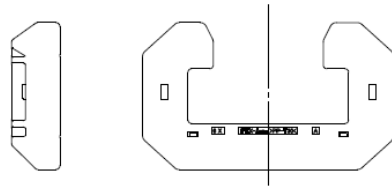
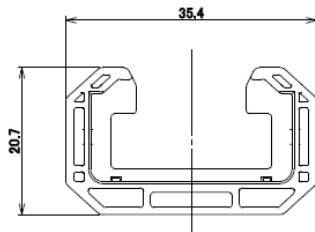
PART NO.
V0072-93020-611



ISOMETRIC VIEW  
1:1



REAR COVER ASSEMBLY  
1:1



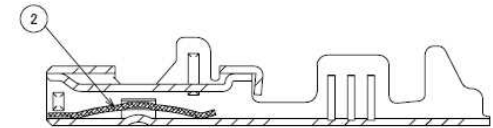
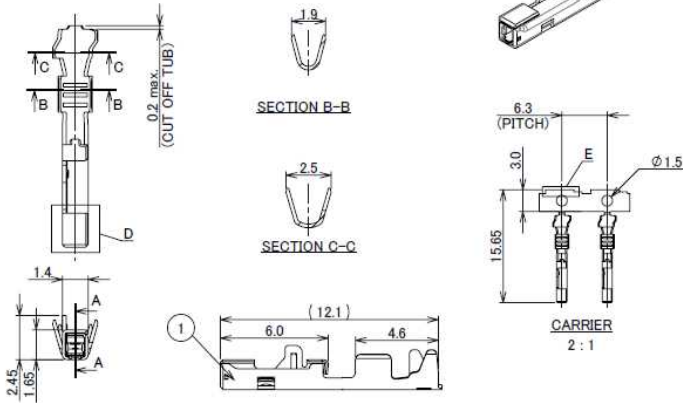
1	REAR COVER	PP-T30	BLACK
NO.	DESCRIPTION	MATERIAL	FINISH/COLOR/REMARKS

- NOTES  
 1. APPLICABLE PART NO.:  
 \*FEMALE HOUSING: V0072-020B-111 (KEY CODING - A)  
 \*\*\*V0072-020B-112 (KEY CODING - B)  
 2. COMPLY WITH ELV/RoHS  
 3. INSERTION FORCE TO FEMALE HOUSING: 55N MAX.  
 RETENTION FORCE TO FEMALE HOUSING: 30N MIN.

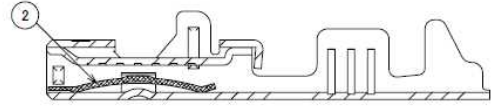
Rev. 3

# ISH® (Horizontal Type-Hybrid) TERMINAL (Size 0.5 mm):

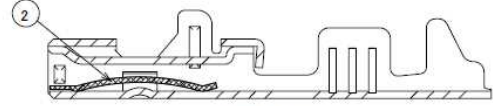
PART NO.	PLATING
VT001-512	Sn REFLOW
VT001-513	
VT001-552	CONTACT AREA : Au PLATING CRIMPING AREA : Sn REFLOW



PART NO.:VT001-512



PART NO.:VT001-513

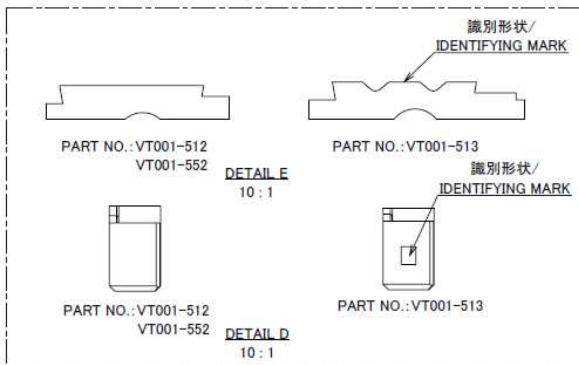


PART NO.:VT001-552  
SECTION A-A  
10 : 1

- 注記  
 1. 適合メスハウジング: ISH CONNECTOR シリーズ  
 2. 適用電線: 0.3mm<sup>2</sup> / 0.5mm<sup>2</sup> (被覆外径 φ1.60mm MAX.)  
 3. ELV/RoHS 対応品  
 4. 圧着仕様は取扱説明書【HDM-0002】に準拠。

- NOTE  
 1. APPLICABLE FEMALE HOUSING: ISH CONNECTOR SERIES  
 2. APPLICABLE CABLE SIZE: 0.3mm<sup>2</sup> / 0.5mm<sup>2</sup> (FINISHED φ1.60mm MAX.)  
 3. COMPLY WITH ELV/RoHS.  
 4. TERMINAL CRIMP SPECIFICATION MUST BE COMPLIANT WITH HANDLING MANUAL【HDM-0002】.

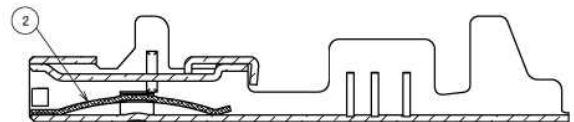
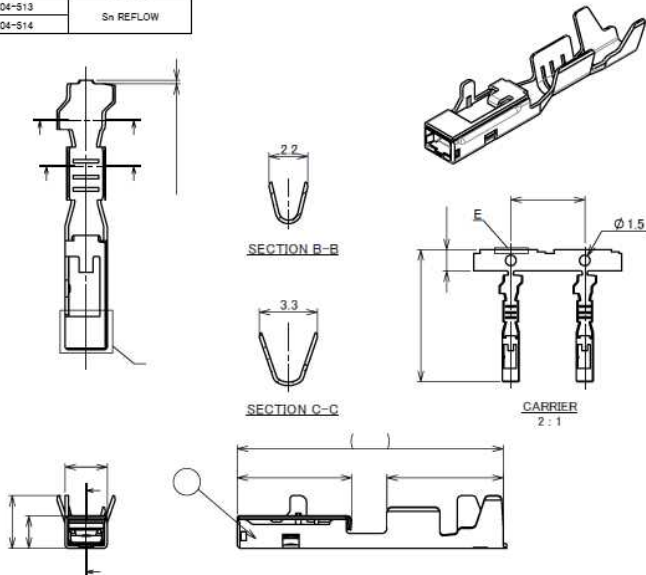
2	SPRING	COPPER ALLOY	VT001-51+ PLATING : Sn REFLOW VT001-52 PLATING : Au PLATING
1	BODY	BRASS	VT001-51+ PLATING : Sn REFLOW VT001-52 PLATING : Au PLATING CONTACT AREA : Au PLATING CRIMPING AREA : Sn REFLOW
NO.	DESCRIPTION	MATERIAL	FINISH/COLOR/REMARKS



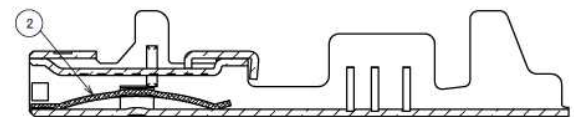
Rev. 8

# ISH® (Horizontal Type-Hybrid) TERMINAL (Size 1.5 mm):

PART NO.	PLATING
VT004-513	Sn REFLOW
VT004-514	



PART NO.:VT004-513

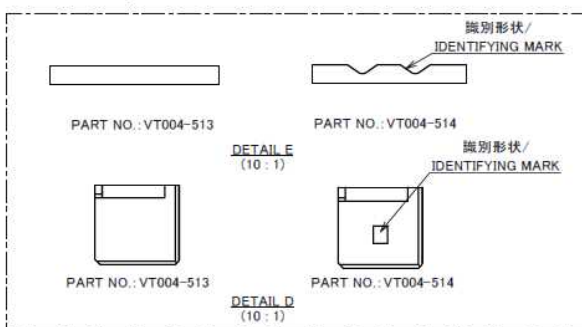


PART NO.:VT004-514  
SECTION A-A  
10 : 1

- 注記  
 1. 適合メスハウジング: ISH CONNECTOR シリーズ  
 2. 適用電線: 0.5mm<sup>2</sup> (被覆外径 φ1.93mm MAX.)  
 3. ELV/RoHS 対応品  
 4. 圧着仕様は取扱説明書【HDM-0009】に準拠。

- NOTE  
 1. APPLICABLE FEMALE HOUSING: ISH CONNECTOR SERIES  
 2. APPLICABLE CABLE SIZE: 0.5mm<sup>2</sup> (FINISHED φ1.93mm MAX.)  
 3. COMPLY WITH ELV/RoHS.  
 4. TERMINAL CRIMP SPECIFICATION MUST BE COMPLIANT WITH HANDLING MANUAL【HDM-0009】.

2	SPRING	COPPER ALLOY	PLATING : Sn REFLOW
1	BODY	BRASS	PLATING : Sn REFLOW
NO.	DESCRIPTION	MATERIAL	FINISH/COLOR/REMARKS



Rev. 3



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