



- ✓ 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

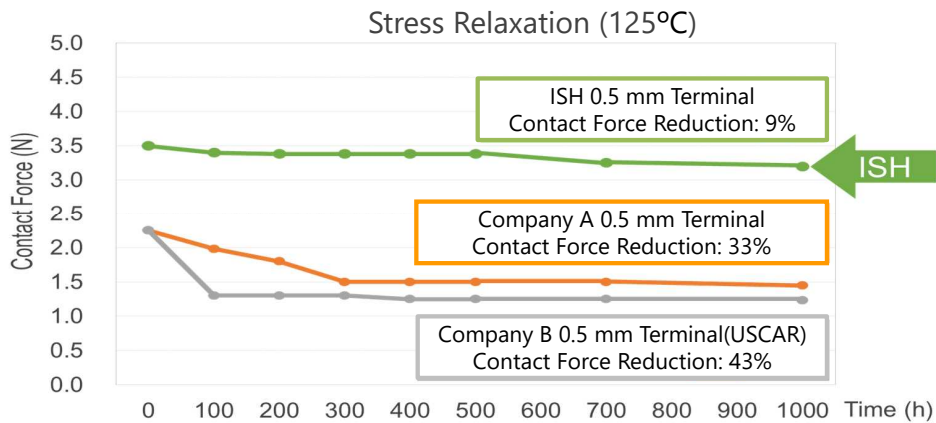
Pin counts:

Range	Up to 40
Available	3, 8

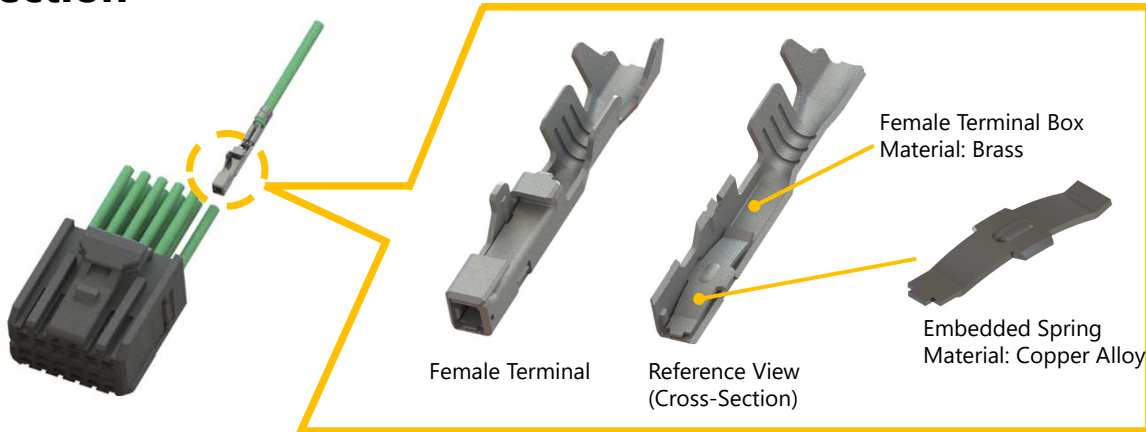
*Please inquire for pin counts not listed or outside of the pin count range.

Pitch (mm)	2.0
Pin Size (mm)	0.5 × 0.4(020)
Mated Height (mm)	Single row: 8.0 Double row: 11.7
Width Formula (mm)	Single row: 4.9+2.0*?pin Double row: 5.3+1.0*?pin
Depth (mm)	31.95
Operating Temperature	-40° - 125°C
Insulation Resistance	100Mohm min.
Vibration Resistance	10G
Current Rating	4.5A per pin
Voltage rating	100V
Withstand Voltage	AC 1000V/minute
Plating	Sn
Housing	Male: glass-filled LCP Female: PBT
Applicable Cable	AWG#22,#20 *Insulation Diameter 1.6 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



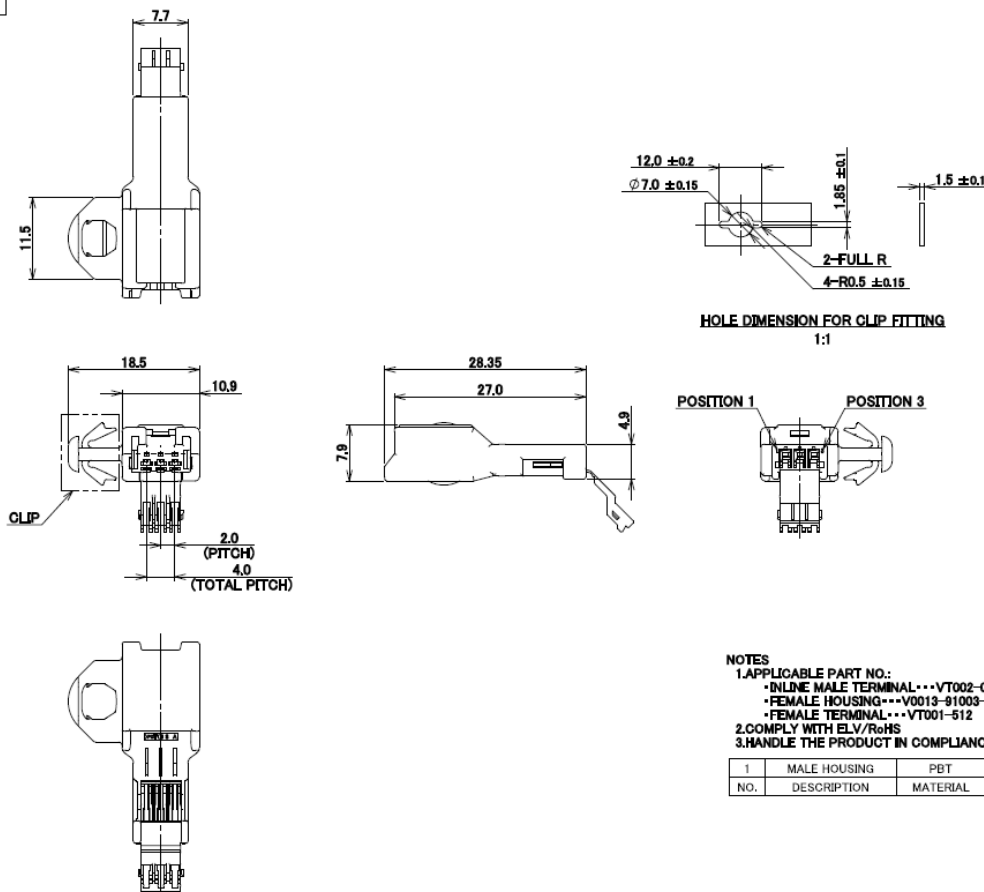
- Headlamp control unit
- Inverter & DC/DC converter
- Battery control module
- Rear view camera module
- Instrument cluster
- Robotic equipment
- Factory automation equipment, etc.

Suitable for high-temperature applications

ISH[®] (Wire-to-Wire Type) Component Parts Detail

ISH[®] (Wire-to-Wire Type) MALE (SINGLE ROW):

PART NO.
V0014-91003-221



Rev. 7

ISH® (Wire-to-Wire Type) MALE (DOUBLE ROWS):

PART NO.	KEY CODING
V0031-008B-201	KEY CODING-A
V0031-008B-202	KEY CODING-B

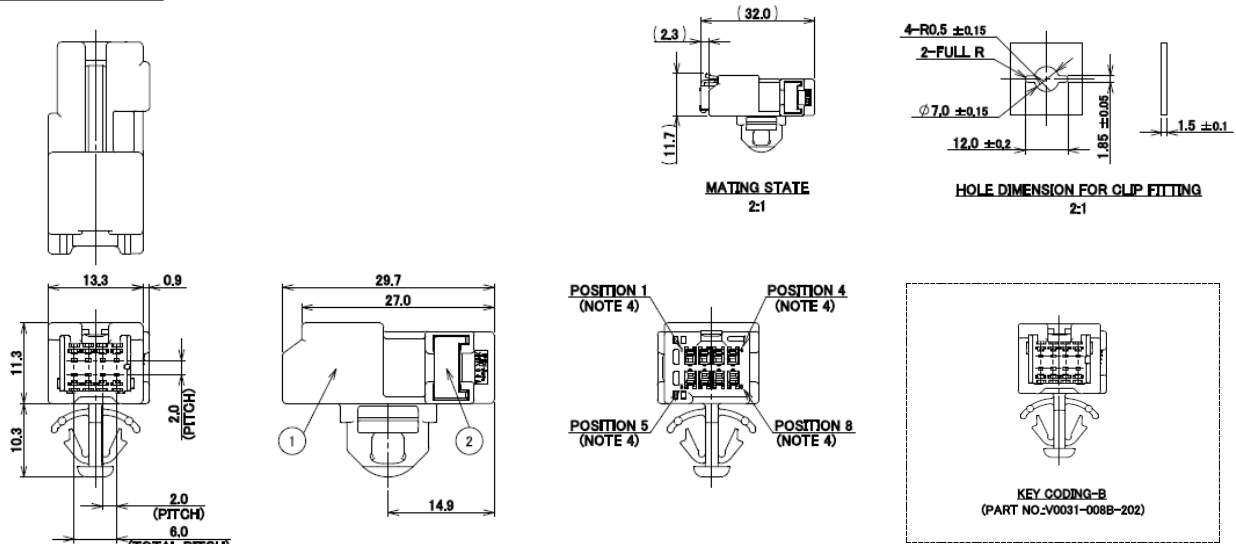


TABLE 1. COUNTERPARTS FOR MATING

KEY CODING	MALE CONNECTOR		FEMALE CONNECTOR					
	PART NO.	COLOR	FEMALE HOUSING PART NO.	COLOR	FEMALE RETAINER PART NO.	COLOR	FEMALE TERMINAL PART NO.	FINISH
KEY CODING-A	V0031-008B-201	MALE HOUSING: BLACK MALE RETAINER: BLACK	V0020-91008-212	BLACK	V0027-92008-211	BLACK	VT001-512	Sn REFLOW
KEY CODING-B	V0031-008B-202	MALE HOUSING: NATURAL MALE RETAINER: BLACK	V0020-91008-213	NATURAL				

2	MALE RETAINER	GLASS-FILLED PBT	BLACK
1	MALE HOUSING	PBT	BLACK, NATURAL
NO.	DESCRIPTION	MATERIAL	FINISH/COLOR/REMARKS

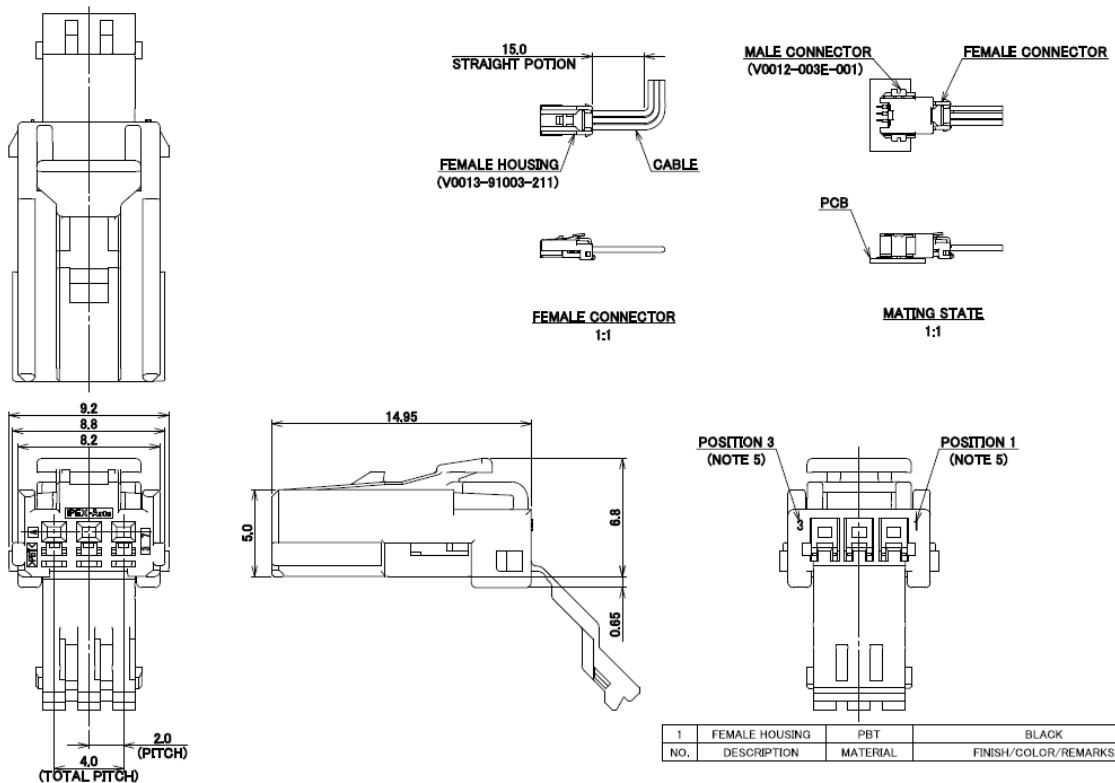
NOTES

1. APPLICABLE PART NO.:
• MALE TERMINAL...VT002-012
• FEMALE CONNECTOR...IT IS SHOWN IN TABLE 1.
2. COMPLY WITH ELV / RoHS.
3. HANDLE OF PRODUCT IN COMPLIANCE WITH HANDLING MANUAL [HDM-0006]
4. POSITION NUMBERS ARE INDICATED.

Rev. 2

ISH® (Wire-to-Wire Type) FEMALE (SINGLE ROW):

PART NO.	LOCK TYPE	KEY CODING	COLOR	FOR REAR COVER
V0013-91003-211	NORMAL ROCK	-	BLACK	N/A



1	FEMALE HOUSING	PBT	BLACK
NO.	DESCRIPTION	MATERIAL	FINISH/COLOR/REMARKS

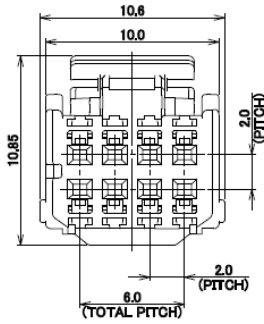
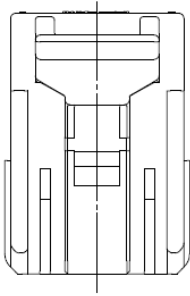
NOTES

1. APPLICABLE PART NO.:
• FEMALE TERMINAL...VT001-512
• CABLE COVER...V0013-92003-211
2. MATERIAL: PBT
3. COMPLY WITH ELV/RoHS.
4. HANDLE OF PRODUCT IN COMPLIANCE WITH HANDLING MANUAL [HDM-0002]
5. POSITION NUMBERS ARE INDICATED.

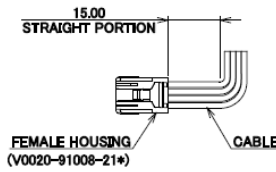
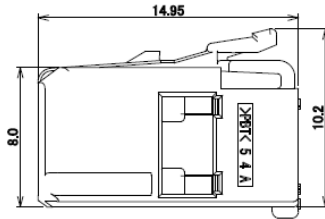
Rev. 7

ISH[®] (Wire-to-Wire Type) FEMALE (DOUBLE ROWS):

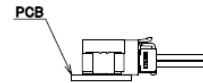
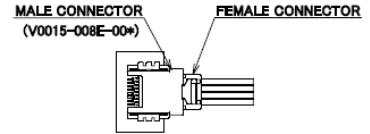
PART NO.	LOCK TYPE	KEY CODING	COLOR	FOR REAR COVER
V0020-91008-211	NORMAL LOCK	KEY CODING-A	BLACK	N/A
V0020-91008-212		KEY CODING-A	BLACK	N/A
V0020-91008-213	INERTIA LOCK	KEY CODING-B	NATURAL	N/A
V0020-91008-214		KEY CODING-C	BLACK	N/A
V0020-91008-215		KEY CODING-D	NATURAL	N/A
V0020-91008-216		KEY CODING-A	BLACK	APPLICABLE



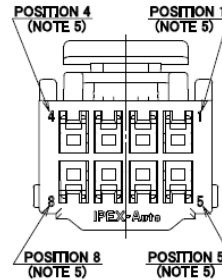
PART NO.: V0020-91008-211



FEMALE CONNECTOR
1:1



MATING STATE
1:1



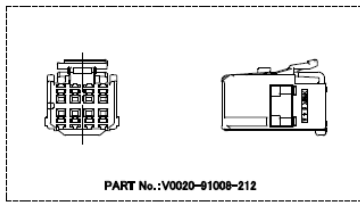
NO.	DESCRIPTION	MATERIAL	FINISH/COLOR/REMARKS
1	MALE HOUSING	PBT	BLACK, NATURAL

- NOTES**
1. APPLICABLE PART NO.:
 * FEMALE TERMINAL *** VT001-512
 * FEMALE RETAINER *** V0027-62008-211
 * REAR COVER *** V0020-94008-811
 2. MATERIAL: PBT
 3. COMPLY WITH ELV/RoHS.
 4. HANDLE OF PRODUCT IN COMPLIANCE WITH HANDLING MANUAL. [HDM-0002]
 5. POSITION NUMBERS ARE INDICATED.

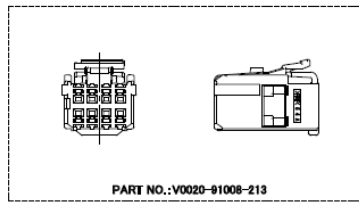
Rev. 8

ISH[®] (Wire-to-Wire Type) FEMALE (DOUBLE ROWS):

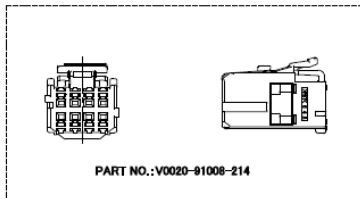
PART NO.	LOCK TYPE	REAR COVER	KEY CODING	COLOR
V0020-91008-211	NORMAL LOCK	N/A	KEY CODING-A	BLACK
V0020-91008-212		N/A	KEY CODING-A	BLACK
V0020-91008-213	INERTIA LOCK	N/A	KEY CODING-B	NATURAL
V0020-91008-214		N/A	KEY CODING-C	BLACK
V0020-91008-215		N/A	KEY CODING-D	NATURAL
V0020-91008-216		APPLICABLE	KEY CODING-A	BLACK



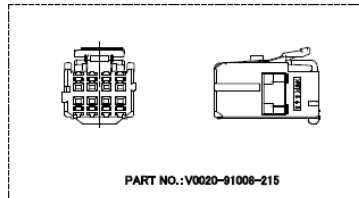
PART NO.: V0020-91008-212



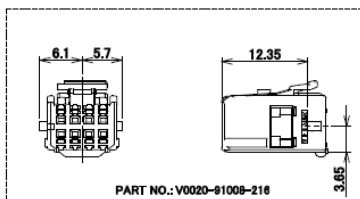
PART NO.: V0020-91008-213



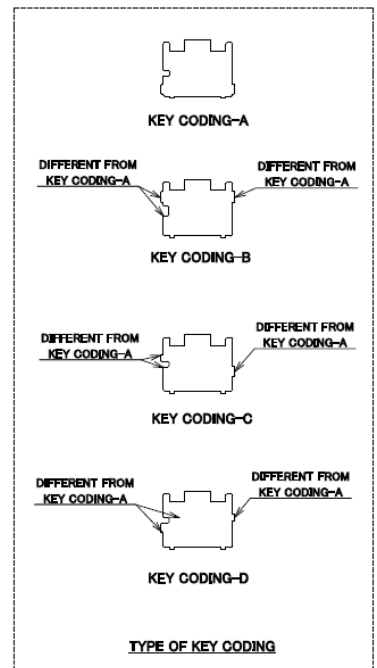
PART NO.: V0020-91008-214



PART NO.: V0020-91008-215

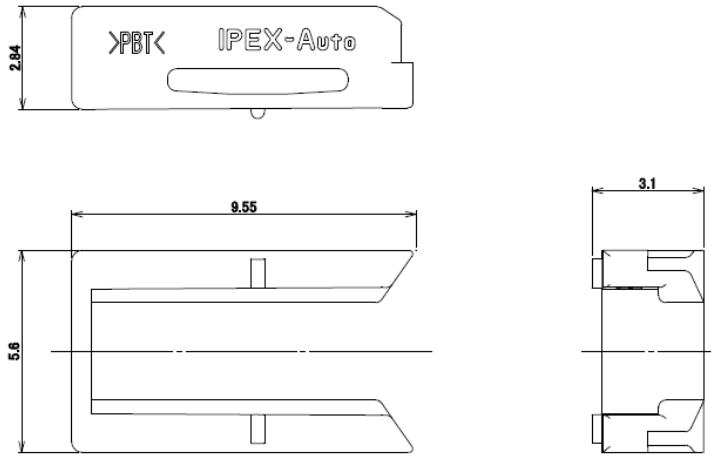


PART NO.: V0020-91008-216



ISH® (Wire-to-Wire Type) FEMALE RETAINER (DOUBLE ROWS):

PART NO.
V0027-91008-211



NOTES
 1.APPLICABLE PART NO.:
 *FEMALE HOUSING***V0020-91008-211
 V0020-91008-212
 V0020-91008-213
 V0020-91008-214
 V0020-91008-215
 V0027-91008-211

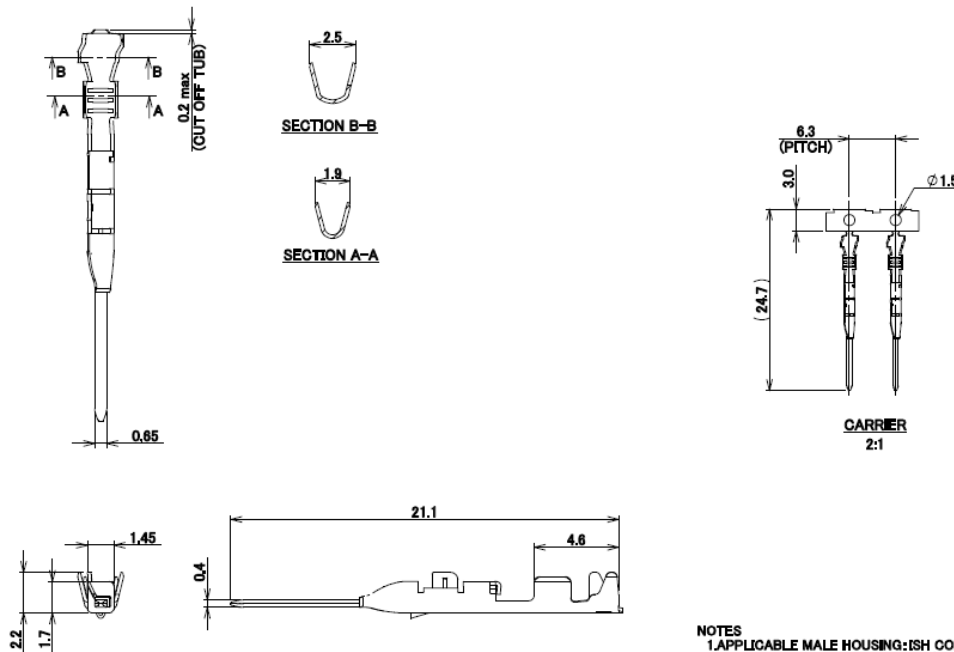
2.MATERIAL: PBT
 3.COMPLY WITH ELV/RoHS.
 4.HANDLE OF PRODUCT IN COMPLIANCE WITH HANDLING MANUAL [HDM-0002]

1	FEMALE RETAINER	PBT	BLACK
NO.	DESCRIPTION	MATERIAL	FINISH/COLOR/REMARKS

Rev. 5

ISH® (Wire-to-Wire Type) TERMINAL (for MALE):

PART NO.	PLATING
VT002-012	Sn REFLOW



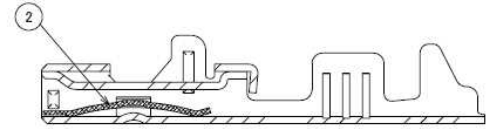
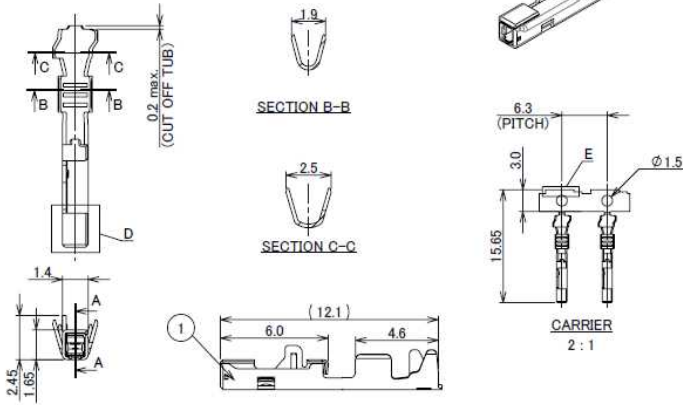
NOTES
 1.APPLICABLE MALE HOUSING:ISH CONNECTOR SERIES
 2.APPLICABLE CABLE SIZES:0.3mm² / 0.5mm² (FINISHED ϕ 1.80mm MAX.)
 3.MATERIAL:BRASS
 PLATING:Sn REFLOW
 4.COMPLY WITH ELV/RoHS.
 5.TERMINAL CRIMP SPECIFICATION MUST BE COMPLIANT WITH HANDLING MANUAL [HDM-0006].

1	MALE TERMINAL	BRASS	PLATING:Sn REFLOW
NO.	DESCRIPTION	MATERIAL	FINISH/COLOR/REMARKS

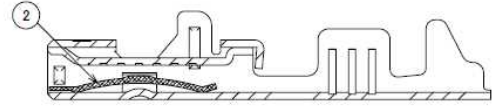
Rev. 6

ISH[®] (Wire-to-Wire Type) TERMINAL (for FEMALE):

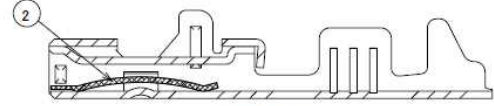
PART NO.	PLATING
VT001-512	Sn REFLOW
VT001-513	
VT001-552	CONTACT AREA : Au PLATING CRIMPING AREA : Sn REFLOW



PART NO.:VT001-512



PART NO.:VT001-513

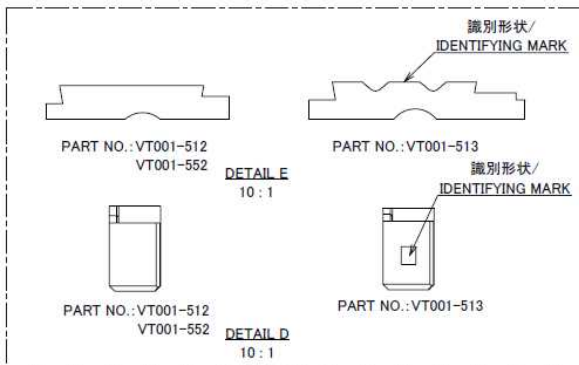


PART NO.:VT001-552
SECTION A-A
10 : 1

- 注記
 1. 適合メスハウジング: ISH CONNECTOR シリーズ
 2. 適用電線: 0.3mm² / 0.5mm² (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: 0.3mm² / 0.5mm² (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 VT001-552 PLATING : Au PLATING
1	BODY	BRASS	VT001-51+ PLATING : Sn REFLOW VT001-552 PLATING : Au PLATING CONTACT AREA : Au PLATING CRIMPING AREA : Sn REFLOW
NO.	DESCRIPTION	MATERIAL	FINISH/COLOR/REMARKS



Rev. 8

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