					LAN	GUAGE					
Λ	molex PRODUCT SPECIFICATION					EN	IGLISH				
			<u>1.2</u>				ECIFICA NN. SIN		<u>°E</u>		
【1.AF	PLICAT	ION]									
						Product Nam	ie		Part Nu	mber	
					RECE	PTACLE H	OUSING		505565 s	series	
	HARN	ESS			RECE	PTACLE TE	RMINAL		505431	1000	
	SID				APPL	CABLE WIR	E (※)		AWG#26	6 ∼ 30	
				AF	PLICABLE C	RIMP DIE M	ODEL No. ()	※)	578146	3410	
				НЕА	DER ASS'Y		S/T TYPE		505568 s PKG : EM	IBOSS	
	SID	ONBOARD SIDE			DER AGO I		R/A TYPE	E	505567 s PKG : EM		
	※ Plea	se refe	r to C	S/RC	S-505431-***f	or further det	ails.				
 Before using — Be sure to read the following precautions before using connector. Keep this manual handy for later reference. The displays and illustrations shown in this manual are for illustrative purposes only and may differ from the actual product. The contents of this manual are subject to change without notice. 											
		nu any	mistak				lear, please co				
	REV.	А									
ŀ	SHEET	1-26				TITLE:					
-	REVISE ON PC ONLYARELEASED J2016-1181 '16/06/03 T.AKAIKE			1	.25 WIRE T SIN	IGLE SMT	CONNECT TYPE				
_	REV.		DES	CRIP			T CONTAINS INFORI GIES, LLC AND SHO		WITHOUT WRITTE	N PERMIS	SSION
	DESI	GN CO J	NTRC	DL	STATUS	WRITTEN BY: TAKAIKE	CHECKED BY: KASAKAWA	APPROVED BY: TKANEKO	DATE: 1 2016	/r/mo/ 6/06/0	
DOC									FILE NA	ME	SHEET
	AS	S-505	5565	-002	2				AS-505565-00		1 OF 26
									EN-0	37(201	5-11 rev.1)

mol	EX PRODUCT SPECIFICATION		LANGUAGE
Contents 1. Application	<u>on</u>	P-1	
2. Instructio	ons		
	uct exterior icable wire and crimp tooling	P-3 P-3	
	t safekeeping before harness process and the surface mount process	P-3	
2-4. Harne	ess process and surface mount process instruction.	P-4	~5
<u>2-5. About</u>	t use in the machinery.	P-5	
<u>2-6. About</u>	t rating / performance standard.	P-5	
<u>2-7. Use o</u>	f the product.	P-6	5
3. <u>The nam</u>	ne of each part & explanation		
3-1. Rece	ptacle crimp terminal	P-7	
3-2. Rece	ptacle housing	P-8	
<u>3-3. Strai</u>	ght Header assembly	P-9	
<u>3-4. Righ</u>	t Angle Header assembly	P-9	
4. <u>The con</u>	firmation item of crimping wire		
4-1. The a	appearance before crimping.	P-1	0
4-2. The a	appearance after crimping.	P-1	0
<u>4-3. Crim</u>	ping failure	P-1	0~13
5. Package	e for over crimping-wire and package	P-1	4
<u>6. Harness</u>	processing (crimping wire insertion method in Receptacle housing)		
6-1 Incorti	on crimping wire	D 1	5~18
	r of crimp terminal	P-1 P-1	
7. <u>Banding</u>	of harness	P-1	9
8. <u>Packing</u>	method of harness	P-2	0~21
9. <u>Instructi</u>	on when mating with HDR connector		
<u>9-</u> 1. Matir	ng process method	P-2	2
<u>9-2. Un-m</u>	nating process method	P-2	3
	ng after mating	P-2	4~25
	REVISE ON PC ONLY TITLE:		
	Micro-Lock Plus		
A	SEE SHEET 1 OF 26 1.25 WIRE TO BOARD CONI SINGLE SMT TYPE		OR

	Α	SEE SHEET 1 OF 26	SINGLE SMT TYPE			
			THIS DOCUMENT CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONI			
	REV.	DESCRIPTION	TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
DOCUMENT NUMBER				FILE NAME	SHEET	
AS-505565-002				AS-505565-002.docx	2 OF 26	
	EN-037(2015-11 rev.				15-11 rev.1)	

molex PRODUCT SPECIFICATION

[2.Instructions]

2-1. Product exterior

- 1. There is no influence on the product performance though the black spots or bubbles etc. might be confirmed on the plastic part of this product and the color might be different (discoloration by secular distortion etc.).
- 2. Slide marks may sometimes appear in plating part of the product, but there is no impact on the function of this product.
- 3. Resin and terminal plating may have some changes in color after reflow, but there is no negative impact on the function of this product.
- 4. Connectors may be damaged by applying force in the machines. Please confirm before use.

2-2. Applicable wire and crimp tooling

- 1. Guarantee is void when product is used with wire out of application range specified in the product specifications.
- 2. Guarantee is void when product is used with tooling not specified by Molex.
- 3. The recommended electric wire is tin plating. Please confirm separately about the use of other electric wires.

2-3. About safekeeping before harness process and the surface mount process

- 1. Please keep product with the delivery being in a state. Also, please keep it under normal temperature and humidity avoiding direct sunlight.
- 2. Please do not allow external force from being applied during the storage.
- 3. During handling, avoid shock or dropping products as it may cause damage.
- 4. First-in, first-out of the stock is recommended.
- 5. Keep product in original packaging before using.
- 6. This product should be inspected its appearance and solder performance before using after expiration date.

	REVISE ON PC ONLY TITLE:				
Α	SEE SHEET 1 OF 26	Micro-Lock Plus 1.25 WIRE TO BOARD CONNE SINGLE SMT TYPE			
REV.	DESCRIPTION	THIS DOCUMENT CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
DOCUMENT NUMBER AS-505565-002			FILE NAME AS-505565-002.docx	SHEET 3 OF 26	
EN-037(2015-11 rev.1)					

n	10 PRODUCT SPECIFICATION	LANGUAGE		
	IUICA PRODUCT SPECIFICATION	ENGLISH		
<u>2-4</u>	. Harness process and surface mount process instruction.			
1.	Please confirm if the products and crimp machine, crimp condition, an applicable wire ar drawing, crimp specifications before use.	e equal to product		
2.	. Beware of unintended damage caused by dust, debris, or foreign objects before using this product. It may result in unsatisfaction of the insertion performance to the housing and electric performance.			
3.	Please do not touch the terminal by bare hand.			
4.	When a terminal is twisted or tangled before or after crimping, please do not pull it by force become damaged.	. The terminal may		
5.	Do not apply force to the product during work in process or in finishing goods. Product ma may not function properly as a connector.	y be damaged and		
6.	 Please do not expose a product and a harness half-finished goods to the following condition Dust Corrosive material Corrosive gas High temperature and high humidity Direct sunlight The above-mentioned conditions may cause poor contact and the corrosion of the terminal performance deterioration of the housing. Please keep in boxes. 			

- 7. Please do not add loads to connector and harness half-finished goods during production, packaging, transportation, or storage. It may cause damage and result in poor performance.
- 8. When pulling the electric wire of harness half-finished goods, contact defect may be caused by adding load to contacts, crimp parts and lock parts. When performing the guidance wiring of the electric wire, do not apply excessive forces that the connector can't withstand.
- 9. Do not damage receptacle crimp housing and a crimp terminal intentionally. Product performance can be affected by this condition.
- 10. Please use the product within the day the package is opened. Moisture absorption or drying may cause the deterioration of materials by neighboring atmospheres. When you cannot use it up, please seal the bag again and keep it in a box.
- 11. Please be careful not to be injured by the edges part such as metal parts when handling a connector.
- 12. To avoid injury, please be careful when handling the paper between terminals and metal carrier on reels.
- 13. Our evaluation is with the use of standard rigid PCB. When the product is used on flexible printed circuits (FPC) please evaluate in advance.
- 14. Please solder all the terminal departments and the nail part. Non-soldered part may cause defect.
- 15. In the case of changing our recommended board pattern size or design, please consult us in advance because such changes may cause defects.
- 16. Please do not apply to load the connector. For example, carrying the PCB when connector is mated may cause damage.
- 17. Please do not stack PCB after connector has soldered to PCB.

		REVISE ON PC ONLY	TITLE:			
	Α	SEE SHEET 1 OF 26	Micro-Lock Plus 1.25 WIRE TO BOARD CONNECTOR SINGLE SMT TYPE			
	REV.	DESCRIPTION	THIS DOCUMENT CONTAINS INFORMATION THAT IS PRO TECHNOLOGIES, LLC AND SHOULD NOT BE USED V			
	ILV.	DESCRIPTION				
DOCUMENT NUMBER				FILE NAME	SHEET	
AS-505565-002		S-505565-002		AS-505565-002.docx	4 OF 26	
	EN-037(2015-11 rev.1					

moley	PRODUCT SPECIFICATION	LANGUAGE
molex		ENGLISH

- 18. Please follow the conditions of specifications, when the connecting connector with a soldering iron. For conditions exceeding specifications, the connector may be damaged.
- 19. When using a solder iron, please do not use excessive solder and flux. It may cause poor contact performance by solder wicking and flux wicking.
- 20. There may be changes in color of the resin part and twisting in the terminal plating parts depending on the flow conditions, but it does not degrade product performance.
- 21. Do not coil electric wires around the housing or the gap of the housing lock during harness processing and packaging of harness product. In addition, please do not pull an electric wire by force when an electric wire has coiled itself around the housing and the gap of the housing lock. If wire becomes tangled, it may cause terminal damage. Please do not apply load to housing lock when removing wires.

2-5. About use in the machinery.

- 1. Vibration of an electric wire or printed circuit board due to machinery vibration or rotation must be avoided to prevent damage to connector at contact area. Contact failure due to abrasion may be caused. Therefore, please fix electric wires and printed circuit boards in the machinery and take measures to hold resonances.
- 2. Do not fix printed circuit boards only by using connectors. They must be fixed or supported by other means.
- 3. Please do not touch terminals and fitting nails before and after mounting on the circuit board.
- 4. Please insert and withdraw connector along fixed axis. The diagonal insertion and withdrawal cause damage to the connector.
- 5. After mating, do not intentionally apply force to span or rotate a connector. Such force may cause damage to connector or solder cracking.
- 6. If an electric wire is pulled after mating a connector, it may damage contact or crimping areas or the lock area and result in contact failure. When performing the guidance wiring of the electric wire. Please keep the wire loose to avoid applying excessive force to connector.
- 7. When withdrawing the connector, please hold wire lightly and remove the lock securely using the entire finger.
- 8. Plastic lances may be damaged after removing crimp terminals. Therefore, please use a new crimp housing when repairing a connector.

2-6. About rating / performance standard.

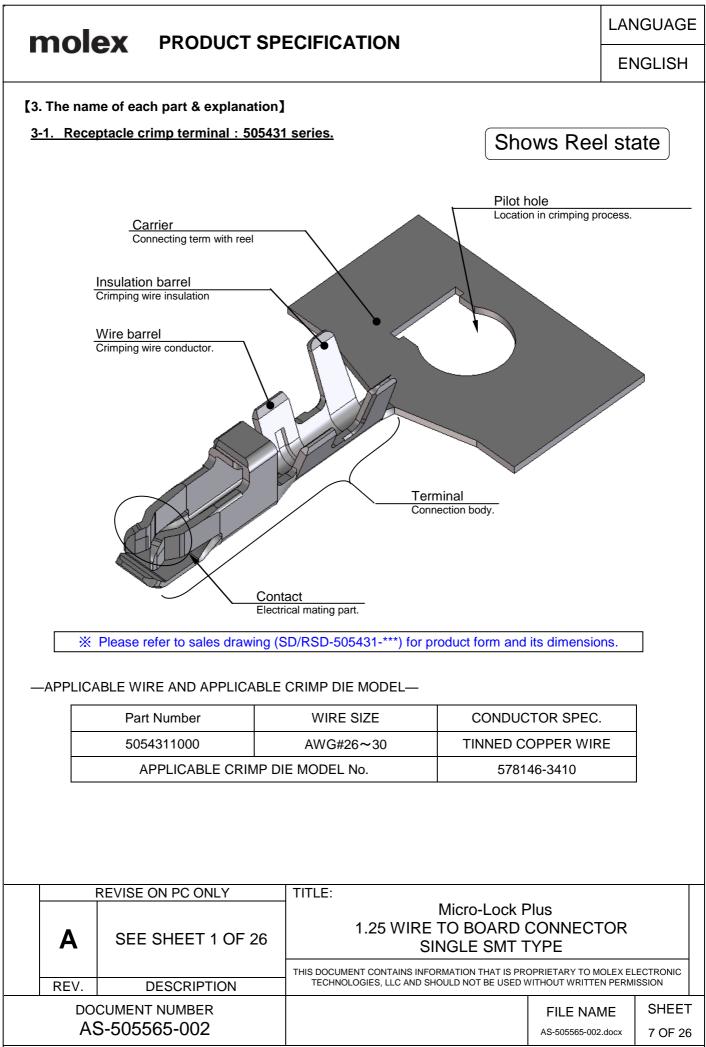
- 1. Please use the product within the rating / the standard of product specifications.
- 2. This product is not designed for usage in "hot-swap" applications where power is on.
- 3. Please confirm that machinery design standards are satisfied before using the connector.
- 4. In order to avoid short circuits, please do not allow connectors to contact with metal objects.
- 5. Please avoid to use current higher than the rated current.

	1		1			
		REVISE ON PC ONLY	TITLE:			
	Α	SEE SHEET 1 OF 26	Micro-Lock F 1.25 WIRE TO BOARD (SINGLE SMT T	CONNECTOR		
			THIS DOCUMENT CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC			
	REV.	DESCRIPTION	TECHNOLOGIES, LLC AND SHOULD NOT BE USED V	VITHOUT WRITTEN PERM	SSION	
DOCUMENT NUMBER				FILE NAME	SHEET	
AS-505565-002		S-505565-002		AS-505565-002.docx	5 OF 26	
	EN-037(2015-11 rev.1)					

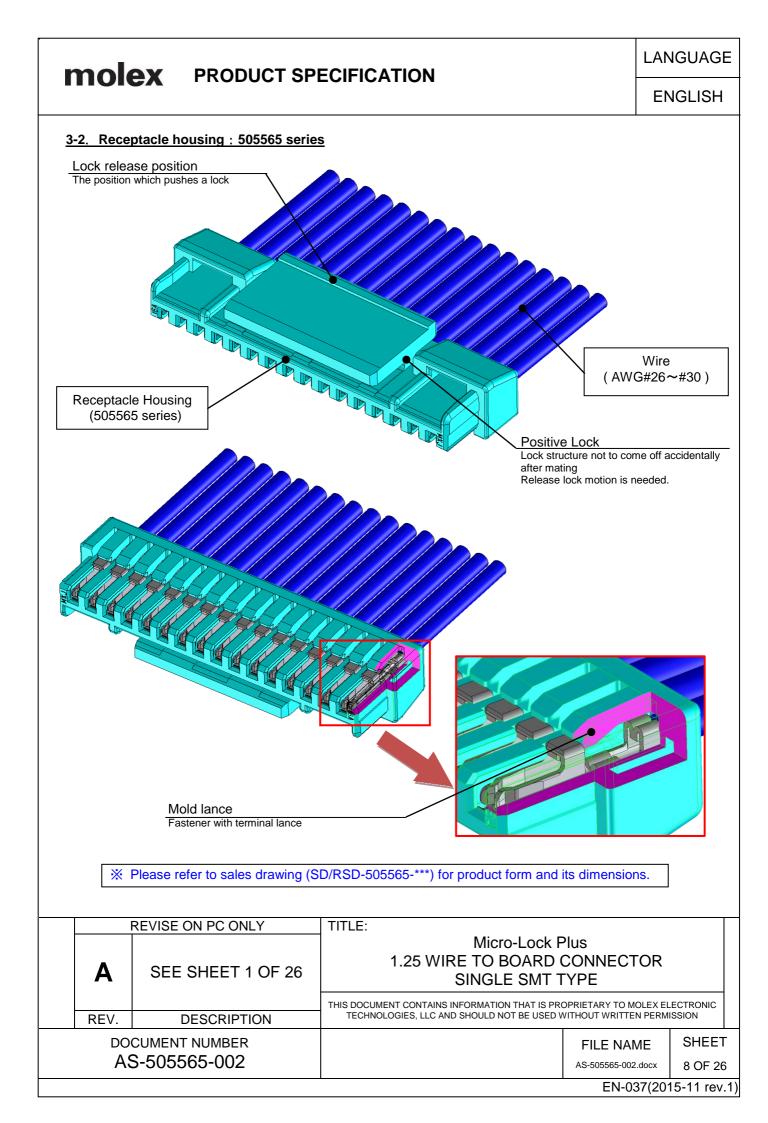
2-7. Use of the product.

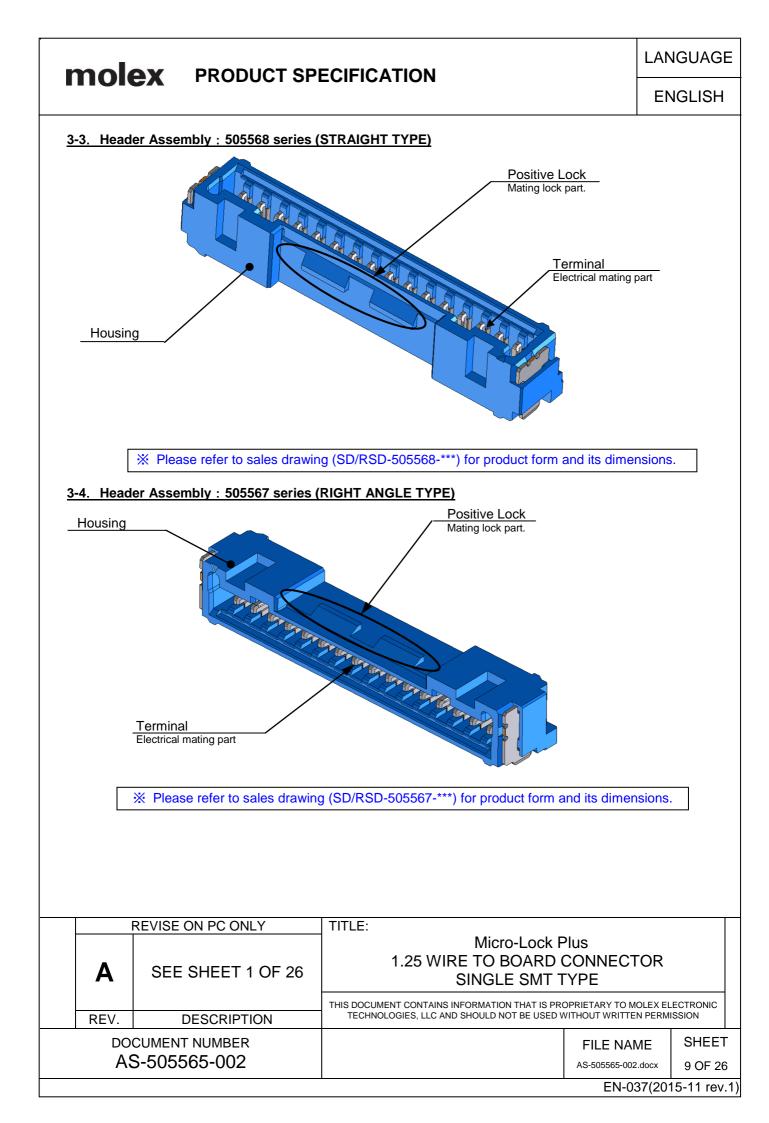
- 1. This product is not designed and produced for the machine to be used under the condition involving human lives or for the use of system. If you use this product for special use such as medical, aerospace and nuclear power etc., please confirm us before using.
- 2. Please contact us without fail before using if you plan to use the product for automobile and ship etc. (We will consider if the product can be applied to such specification condition.)
- 3. Please avoid using the product outdoors or under similar environment.

	REVISE ON PC ONLY	TITLE:				
Α	SEE SHEET 1 OF 26	Plus CONNECTOR TYPE				
REV.	DESCRIPTION	THIS DOCUMENT CONTAINS INFORMATION THAT IS PRO TECHNOLOGIES, LLC AND SHOULD NOT BE USED V				
DOCUMENT NUMBER AS-505565-002			FILE NAME AS-505565-002.docx	SHEET 6 OF 26		
EN-037(2015-11 rev.1)						



EN-037(2015-11 rev.1)





molex PRODUCT SPECIFICATION

[4. Confirmation items of crimping wire]

4-1. The appearance before crimping.

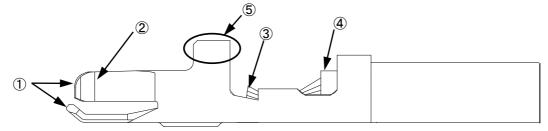
When using the loose terminals products before crimping, please make sure that there is no deformation of the crimp terminal.

If you find that the terminals are tangled, please do not remove them forcibly.

Please refer to sales drawing (SD/RSD-505431-***) for product form and its dimensions.

4-2. The appearance after crimping.

Confirmation items and crimping failure after crimping are shown as follows. Please refer to CS/RCS-505431-*** for specified crimp height, pull testing, and applicable wire specifications.



- No visible damage on terminal. (1)
- No visible damage or deformation on spring contact area.
- 2 3 All wire strands are in conductor barrel.
- **(4**) The insulator part of the electric wire is located in the intermediate position of wire barrel and insulation barrel.
- (5) No damage on terminal lance.
- 6) No damage on appearance. (Dirt / foreign objects)

4-3. Crimping failure.

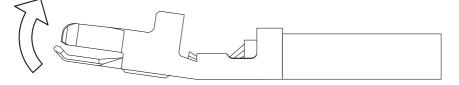
Please be careful of the crimping failure as shown below.

It may affect the insertion to housing and affect a product function.

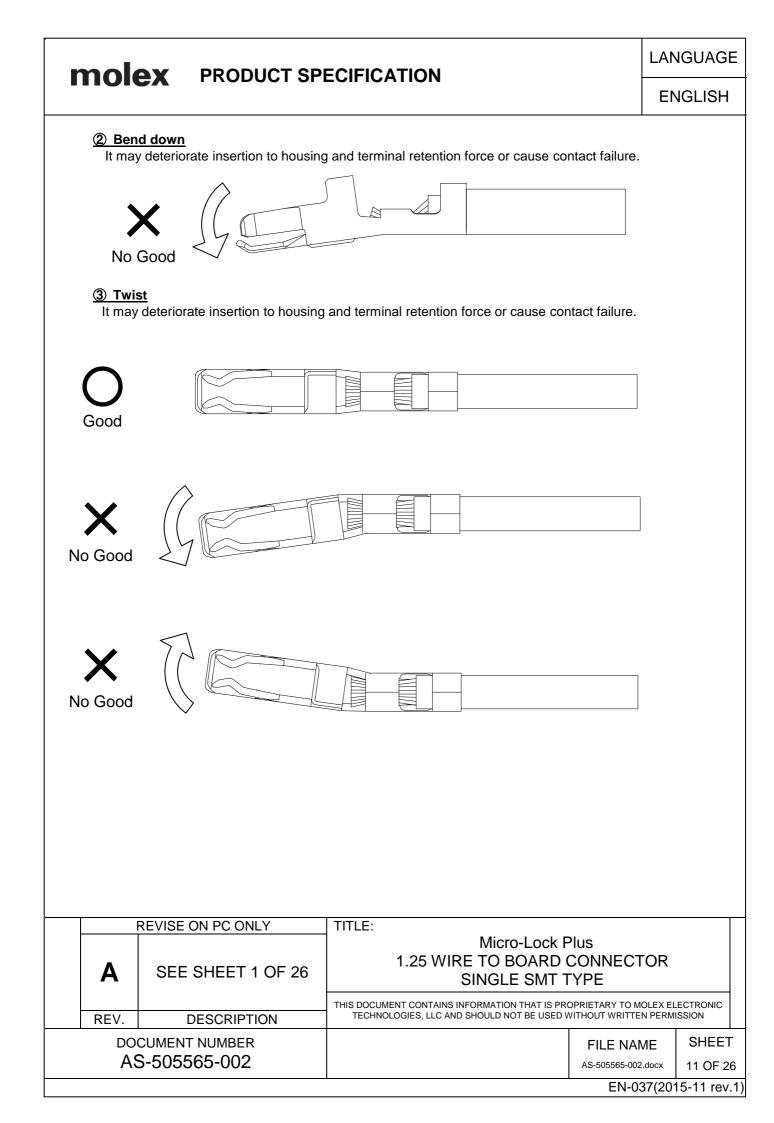
(1) Bend up

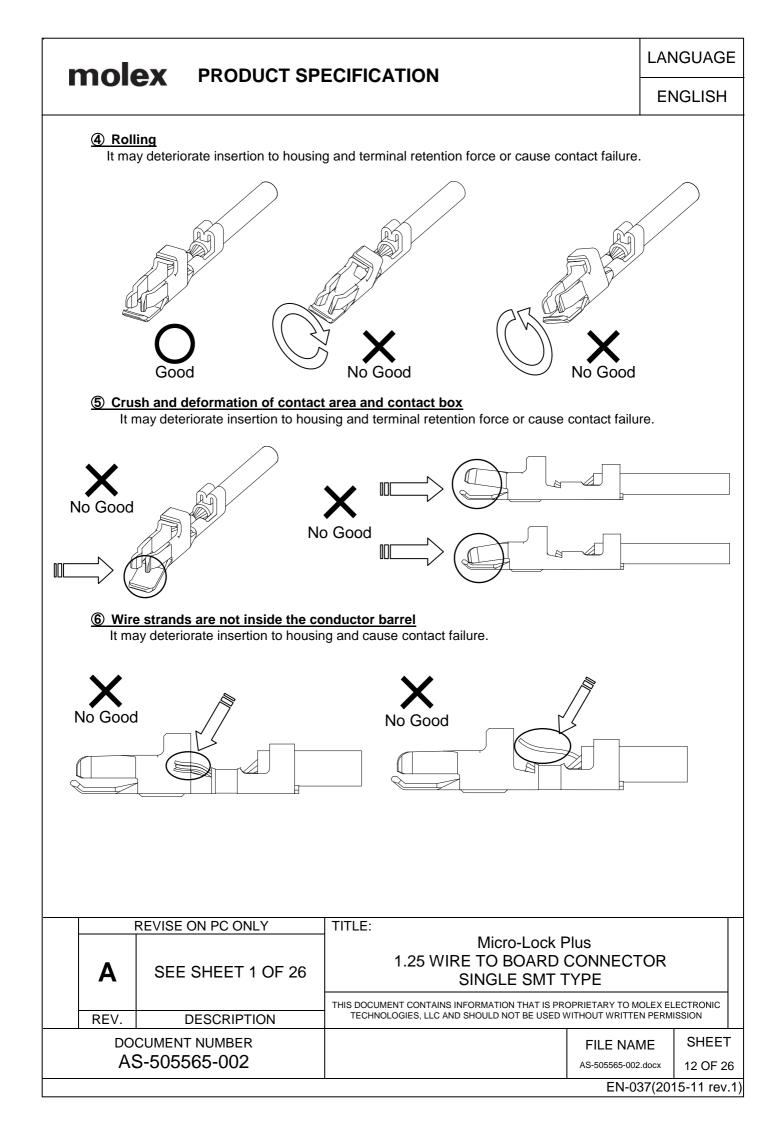
It may deteriorate insertion to housing and terminal retention force or cause contact failure.

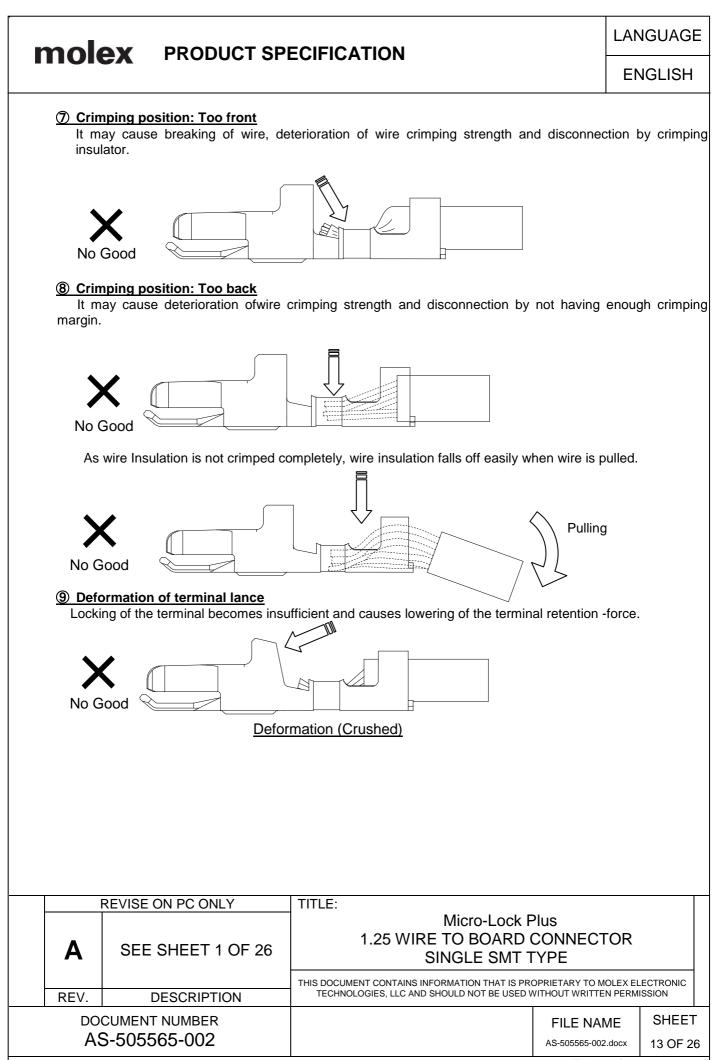




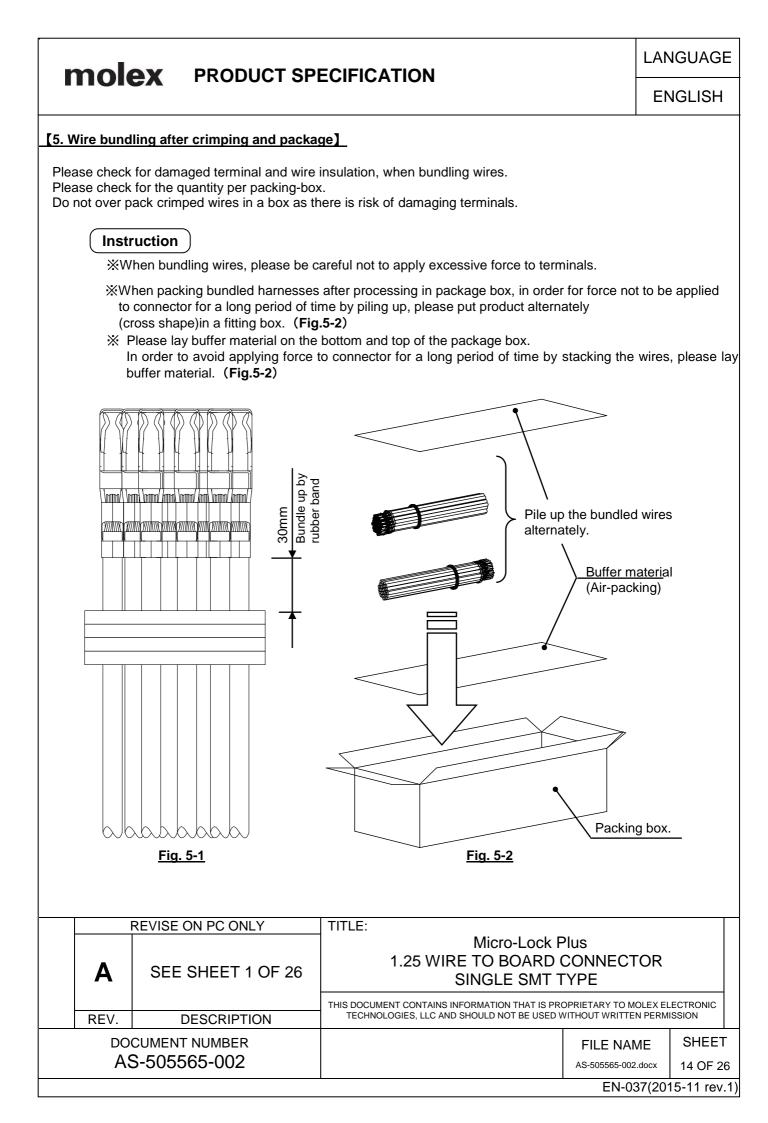
	REVISE ON PC ONLY TITLE:					
	Α	SEE SHEET 1 OF 26	Micro-Lock Plus 1.25 WIRE TO BOARD CONNECTOR SINGLE SMT TYPE			
			THIS DOCUMENT CONTAINS INFORMATION THAT IS PRO			
	REV.	DESCRIPTION	TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
DOCUMENT NUMBER				FILE NAME	SHEET	
AS-505565-002		8-505565-002		AS-505565-002.docx	10 OF 26	
	EN-037(2015-11 rev.1)					

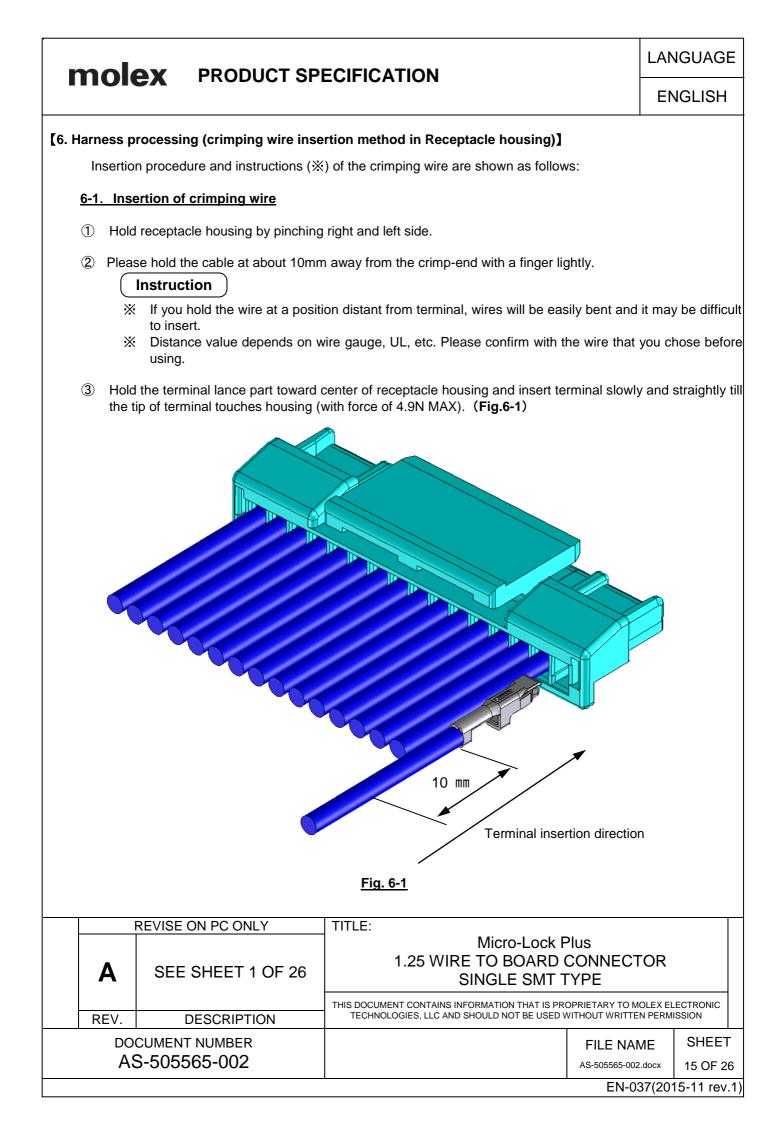


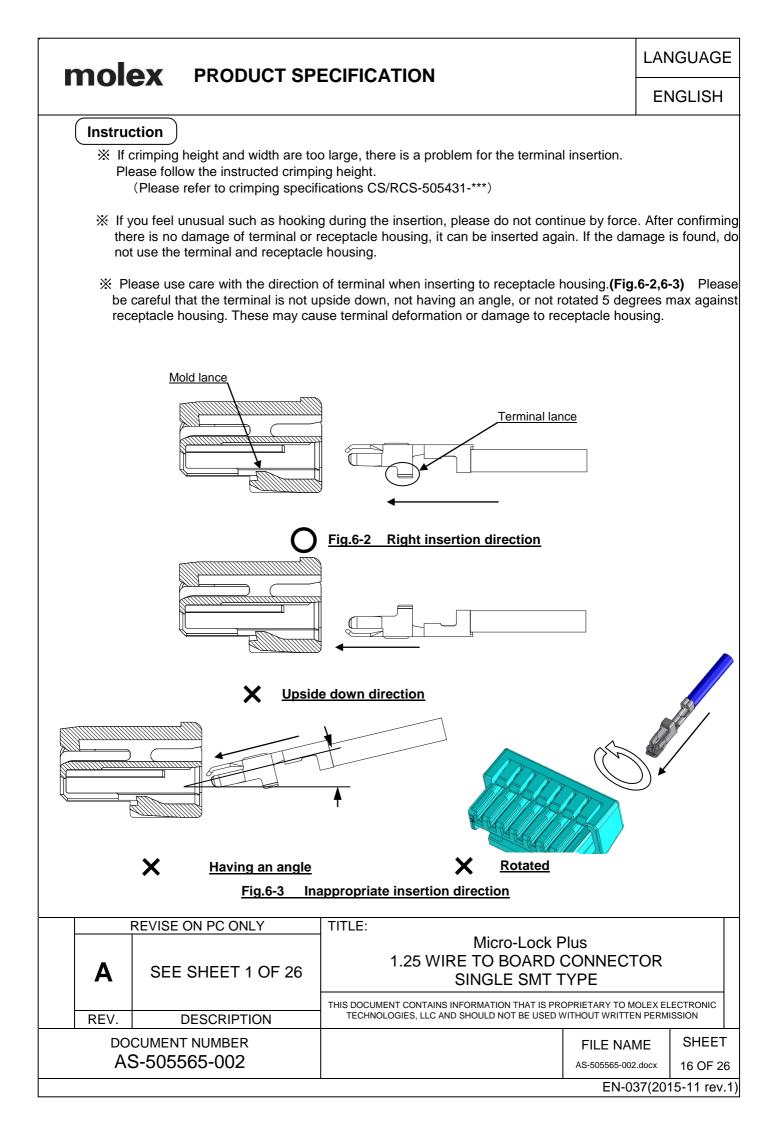


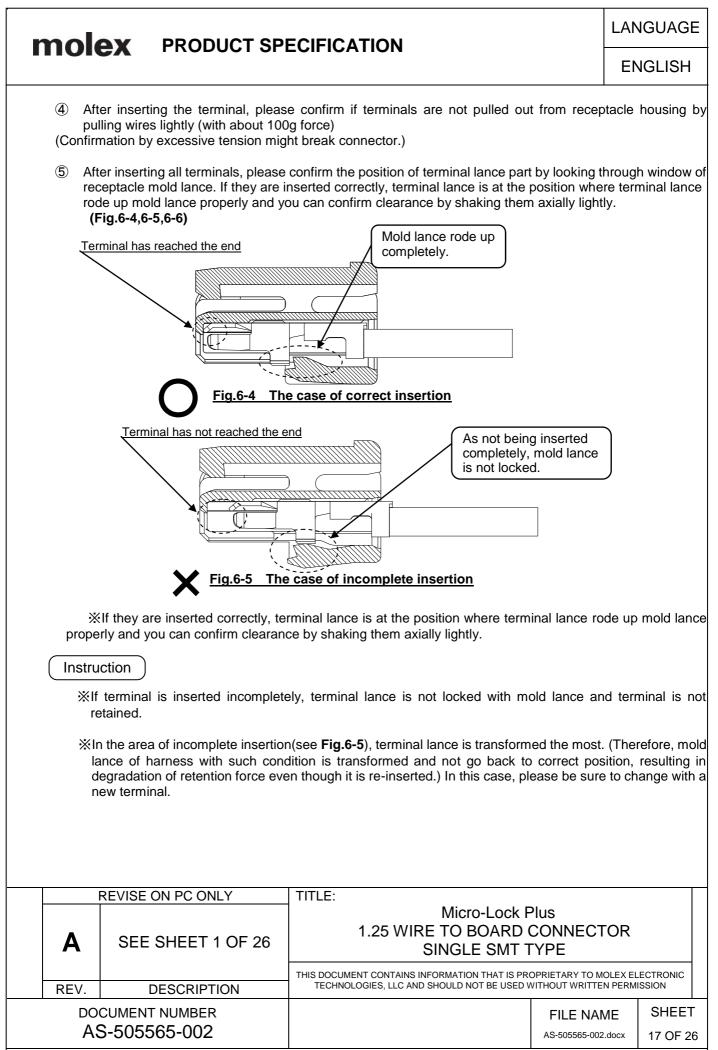


EN-037(2015-11 rev.1)

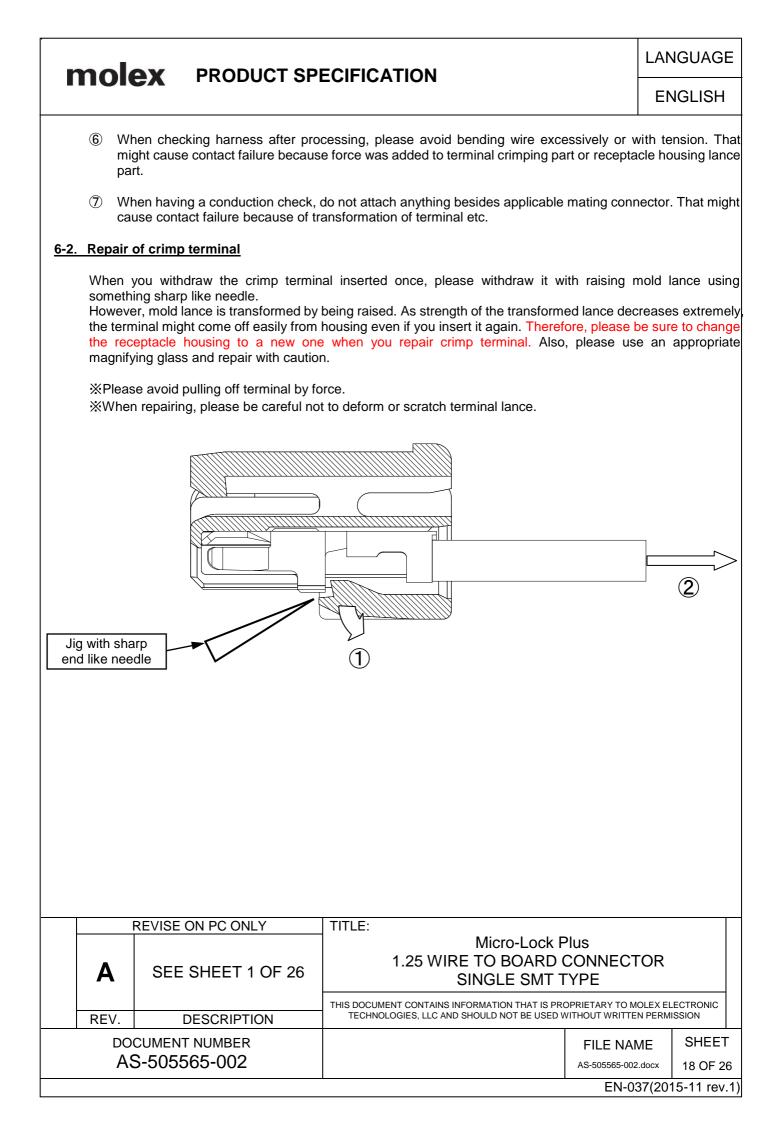


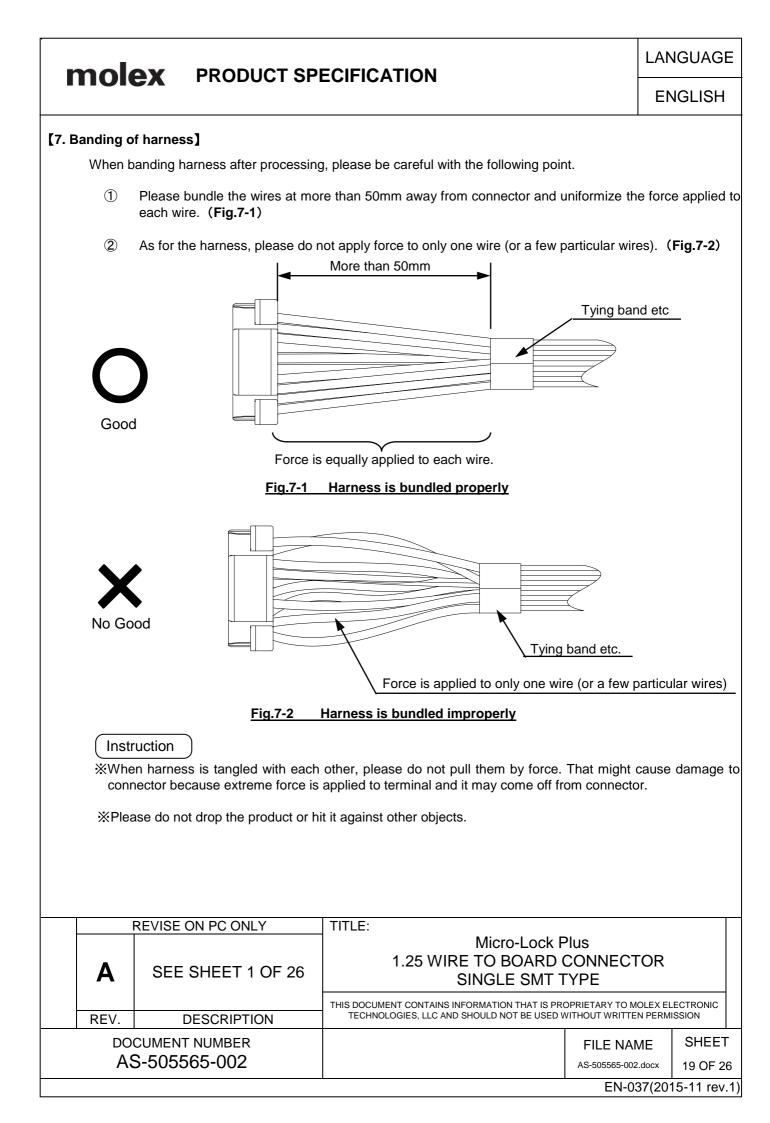






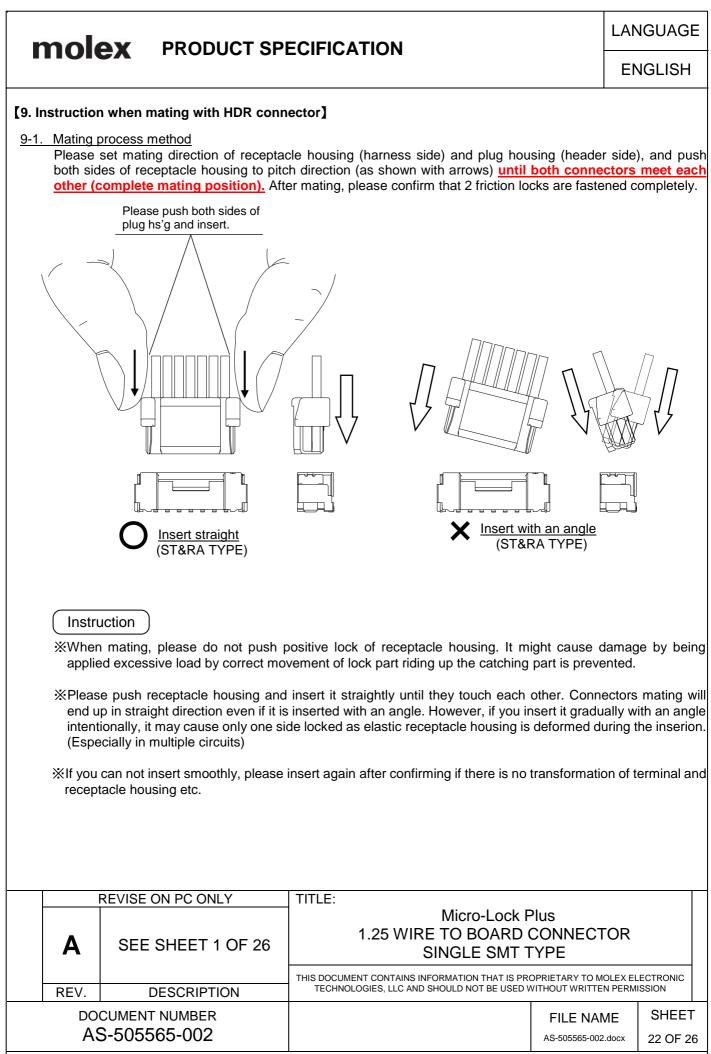
EN-037(2015-11 rev.1)





MOLEX PRODUCT SPECIFICATION		LANGUAGE	
			ENGLISH
[8. Recomme	ended packaging of cable harr	ness and assemblies]	
When	packing harness after processing	g, procedure and instruction $(\%)$ are shown below.	
1	Bundle the harness after process	sing. Please band 20 harness at most in one bunch.	
Wh that take (F Wh	t fastens tightly such as rubber f e measure to protect connector f 'ig.8-1) en some harness is banded, ea	to avoid applying excessive force constantly, please do band. Please band at the center (at one point) with v rom shock or load by wrapping each bunch of connect ach connector contact and part of lock might be load cause defective performance because the lock being d	inyl string. Please or with air packing ded. In that case,
	Connector		
	1		
∠ _	Air packing	band at the center with vinyl string	
	<u>Fic</u>	<u>a.8-1 A bunch of harness</u>	
	REVISE ON PC ONLY	TITLE:	
A	SEE SHEET 1 OF 26	Micro-Lock Plus 1.25 WIRE TO BOARD CONNEC SINGLE SMT TYPE	TOR
REV.	DESCRIPTION	THIS DOCUMENT CONTAINS INFORMATION THAT IS PROPRIETARY TO M TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTE	
	DESCRIPTION DCUMENT NUMBER	FILE NA	
	S-505565-002	AS-505565-00	
		EN-0	37(2015-11 rev.1)

LANGUAGE **molex PRODUCT SPECIFICATION** ENGLISH (2) Put banded harness into carton box. Figure below (Fig 8-2) is one of examples for recommended reference. Please take measure not to add force to connector for a long period of time by stacking if you pack by different packing method for long harness. Instruction When packing bundle of harness after processing in a package box, please follow instructed packaging and avoid applying excessive load or force to harnesses. (cross shape) (Fig.8-2 (1)) *Please lay air packing etc. on the bottom of package box. In order to prevent force from applying to connectors for a long time by piling up package boxes, please lay air packing etc. (Fig.8-2 (2)) 1 Package box Package box A bunch of harness Air packing Air packing (1) Packing condition from upside) (2 Packing condition from side) Fig.8-2 Packing condition **REVISE ON PC ONLY** TITLE: Micro-Lock Plus **1.25 WIRE TO BOARD CONNECTOR** Α SEE SHEET 1 OF 26 SINGLE SMT TYPE THIS DOCUMENT CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION REV. DESCRIPTION DOCUMENT NUMBER SHEET FILE NAME AS-505565-002 AS-505565-002.docx 21 OF 26



EN-037(2015-11 rev.1)

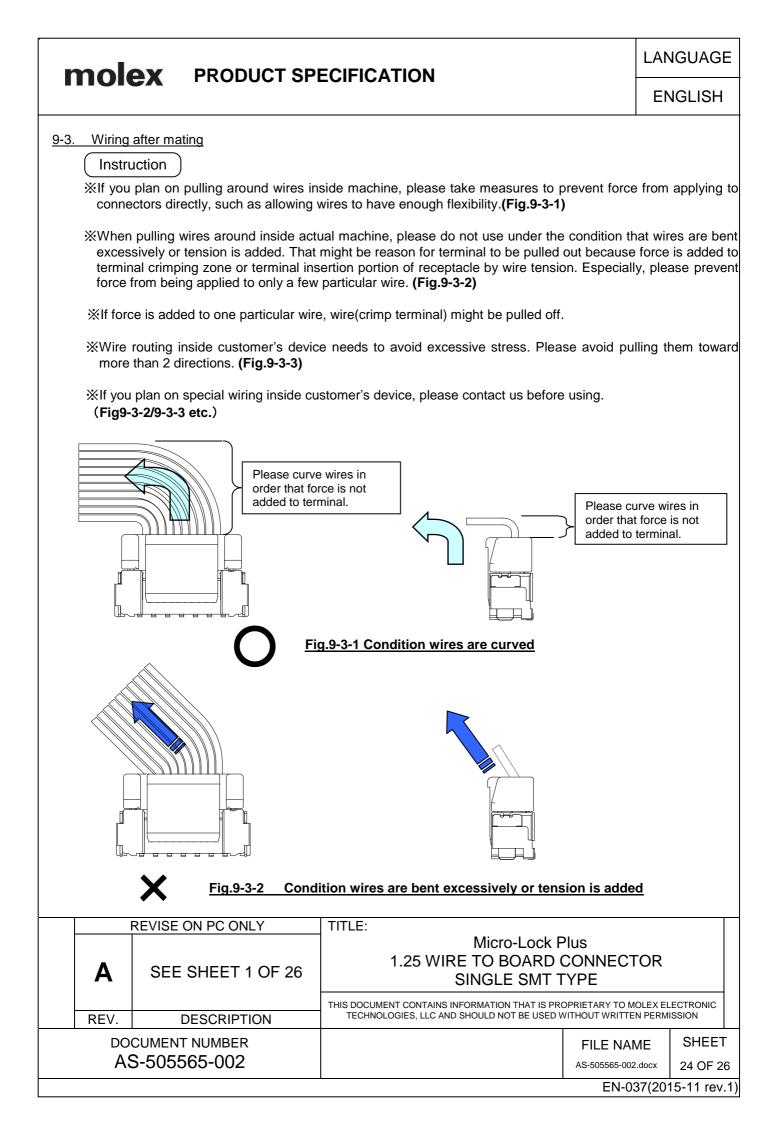
molex PRODUCT SPECIFICATION			LANGUAGE	
moi	ex PRODUCT SP	ECIFICATION	_	ENGLISH
<u>9-2. Recomr</u>	mended un-mating method			
and pus axially a	hing bar for releasing lock us	After releasing lock completely by atta ing flat part of finger, please withdraw ithdrawing them with an angle and rou	receptacle l	nousing slowly
		Be sure	e to unlock.	
	Wit	hdrawal direction		
※Pleas termina ※When	ls, connector might be damaged	r for releasing lock with flat part of finger, r		
If finger	nail is too long, it might catch lo	ock protection wall.		
	REVISE ON PC ONLY	TITLE: Micro-Lock P	lus	
A	SEE SHEET 1 OF 26	1.25 WIRE TO BOARD C SINGLE SMT T	CONNECT	OR
REV.	DESCRIPTION	THIS DOCUMENT CONTAINS INFORMATION THAT IS PRO TECHNOLOGIES, LLC AND SHOULD NOT BE USED W		
I	CUMENT NUMBER		FILE NAM	IE SHEET

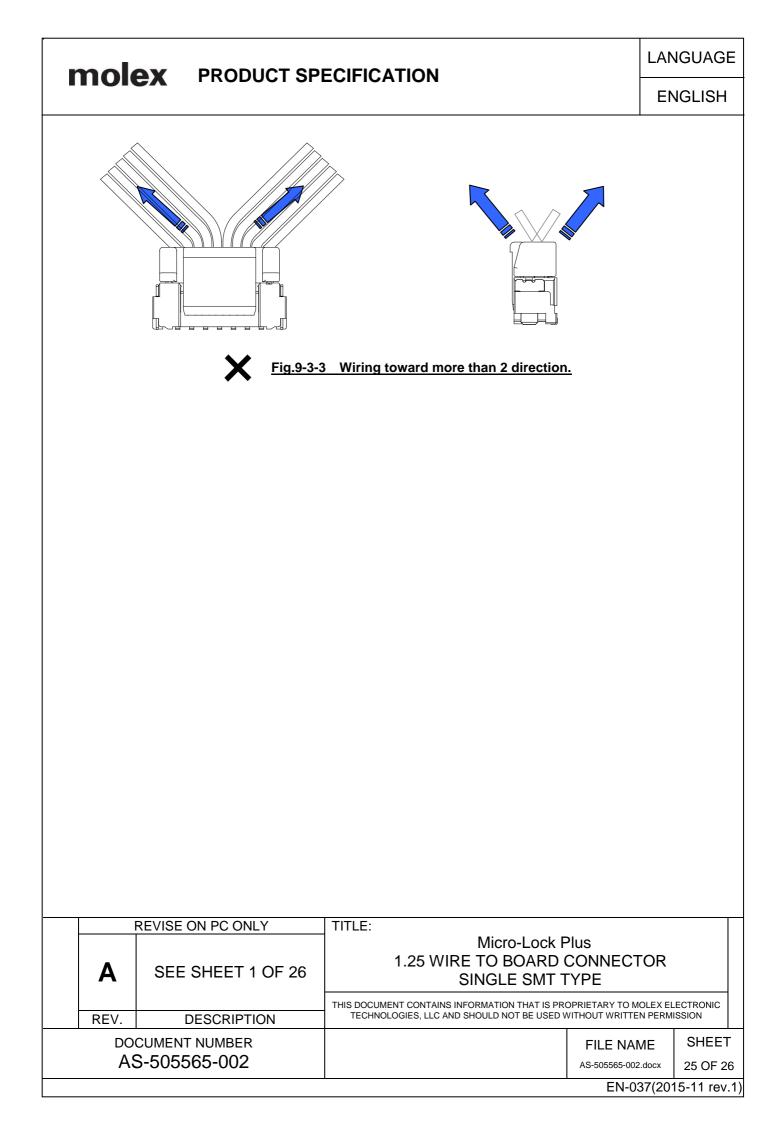
AS-505565-002.docx

23 OF 26

EN-037(2015-11 rev.1)

AS-505565-002





molex PRODUCT SPECIFICATION

LANGUAGE

ENGLISH

REV.	REV. RECORD	DATE	ECN NO.	WRITTEN BY :	CHECKED BY :
А	RELEASED	'16/06/03	J2016-1181	T.AKAIKE	K.ASAKAWA
I		1		I	l

	REVISE ON PC ONLY		TITLE:					
	Α	SEE SHEET 1 OF 26	Micro-Lock Plus 1.25 WIRE TO BOARD CONNECTOR SINGLE SMT TYPE					
			THIS DOCUMENT CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC					
	REV.	DESCRIPTION	TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					
DOCUMENT NUMBER				FILE NAME	SHEET			
AS-505565-002		8-505565-002		AS-505565-002.docx	26 OF 26			
EN-037(2015-11 rev.1								