



PRODUCT SPECIFICATION



LANGUAGE

JAPANESE
ENGLISH

【3. 定格 RATINGS】

項目 Item	規格 Standard	
最大許容電圧 Rated Voltage(MAXIMUM)	50 V	[AC(実効値 rms)/DC]
最大許容電流 Rated Current (MAXIMUM)	0.5 A /CIRCUIT *1	
使用温度範囲 Ambient Temperature Range (Operating and Non-operating)	-25°C ~+85°C *2	

*1 : 但し、全極数合計の電流値は、最大10Aまでとする。

However, total current must not exceed 10 A MAX.

*2 : 通電による温度上昇分を含む。

Including terminal temperature rise

【4. 性能 PERFORMANCE】

4-1. 電気的性能 Electrical Performance

項目 Item	条件 Test Condition	規格 Requirement
4-1-1 接触抵抗 Contact Resistance	コネクタを嵌合させ、開放電圧 20mV以下、 短絡電流10mA以下にて測定する。 (JIS C5402 5.4) Mate connectors, measure by dry circuit , 20mV MAXIMUM, 10mA MAXIMUM. (JIS C5402 5.4)	40 milliohm MAXIMUM
4-1-2 絶縁抵抗 Insulation Resistance	コネクタを嵌合させ、隣接するターミナル間 及びターミナル、アース間に、DC125Vを 印加し測定する。 (JIS C5402 5.2/MIL-STD-202 試験法 302) Mate connectors together and apply 125V DC between adjacent terminal and ground. (JIS C5402 5.2/MIL-STD-202 Method 302)	100 megohms MINIMUM
4-1-3 耐電圧 Dielectric Strength	コネクタを嵌合させ、隣接するターミナル間 及びターミナル、アース間に、AC 125V (実効値)を1分間印加する。 (JIS C5402 5.1/MIL-STD-202 試験法 301) Mate connectors, apply 125V AC for 1 minute between adjacent terminal or ground. (JIS C5402 5.1/MIL-STD-202 Method 301)	異常なきこと No Breakdown

REVISE ON PC ONLY		TITLE: 0.5 mm PITCH B TO B CONN.	
B	SEE SHEET 1 OF 10	-LEAD FREE- 製品仕様書	
	REV.	DESCRIPTION	THIS DOCUMENT CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION
DOCUMENT NUMBER PS-54363-046		FILE NAME PS54363046.doc	SHEET 2 OF 10



PRODUCT SPECIFICATION



LANGUAGE

JAPANESE
ENGLISH

4-2. 機械的性能 Mechanical Performance

項目 Item	条件 Test Condition	規格 Requirement
4-2-1 挿入・抜去力 Insertion Force/ Withdrawal Force	毎分25±3 mmの速さで挿入、抜去を行う。 Mate and un-mate connectors, at a rate of 25+3/-3 mm per minute.	第6項参照 Refer to paragraph 6
4-2-2 ターミナル保持力 Terminal Pull-out Force	ハウジングに装着されたターミナルを 毎分25±3mmの速さで引っ張る。 Apply axial pull out force on the terminal assembled in the housing at a rate of 25+3/-3mm per minute.	0.98 N { 0.1kgf } MINIMUM

4-3. その他 Environmental Performance and Others

項目 Item	条件 Test Condition	規格 Requirement	
4-3-1 繰返し挿抜 Repeated Mate / Un-mate	1分間に10回以下の速さで挿入、 抜去を30回繰り返す。 When mate / un-mated up to 30 cycles repeatedly at a rate of 10 cycles / minute.	接触抵抗 Contact Resistance	60 milliohm MAXIMUM
4-3-2 温度上昇 Temperature Rise	コネクタを嵌合させ、最大許容電流を通電し、 コネクタの温度上昇分を測定する。 (UL 498) Mate connectors and measure the temperature rise of contact when the maximum AC rated current is passed. (UL 498)	温度上昇 Temperature Rise	30 °C MAXIMUM
4-3-3 耐振動性 Vibration	DC 1mA通電状態にて、嵌合軸を含む互いに 垂直な3方向に掃引割合10~55~10 Hz/分、 全振幅1.5mmの振動を各2時間加える。 (MIL-STD-202試験法 201) Mate connectors and subject to the following vibration conditions, for a period of 2 hours in each of 3 mutually perpendicular axes, passing DC 1mA during the test. Amplitude : 1.5 mm P-P Frequency : 10-55-10 Hz shall be traversed in 1 minute. (MIL-STD-202, Method 201)	外観 Appearance	異状なきこと No Damage
		接触抵抗 Contact Resistance	60 milliohm MAXIMUM
		瞬断 Discontinuity	0.1 microsecond MAXIMUM

REVISE ON PC ONLY		TITLE:	
B	SEE SHEET 1 OF 10	0.5 mm PITCH B TO B CONN.	
		-LEAD FREE- 製品仕様書	
REV.	DESCRIPTION	THIS DOCUMENT CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	
DOCUMENT NUMBER PS-54363-046		FILE NAME PS54363046.doc	SHEET 3 OF 10



PRODUCT SPECIFICATION



LANGUAGE

JAPANESE
ENGLISH

項目 Item		条件 Test Condition	規格 Requirement	
4-3-4	耐衝撃性 Shock	DC1mA通電状態にて、嵌合軸を含む互いに垂直な6方向に、490 m/s ² {50G}の衝撃を各3回加える。 (JIS C60068-2-27/MIL-STD-202 試験法 213) Mate connectors and subject to the following shock conditions. 3 times of shocks shall be applied for each 6 directions along 3 mutually perpendicular axes, passing DC 1mA current during the test. {Total of 18 shocks} Test pulse : Half Sine Peak value : 490 m/s ² {50 G} Duration : 11 ms (JIS C60068-2-27/MIL-STD-202 Method 213)	外観 Appearance	異常なきこと No Damage
			接触抵抗 Contact Resistance	60 milliohm MAXIMUM
			瞬断 Discontinuity	0.1 microsecond MAXIMUM
4-3-5	耐熱性 Heat Resistance	コネクタを嵌合させ、105±2°C の雰囲気中に96時間 放置後取り出し、1~2時間 室温に放置する。 (JIS C60068-2-2/MIL-STD-202 試験法 108) Mate connectors and expose to 105±2°C for 96 hours. Upon completion of the exposure period, the test specimens shall be conditioned at ambient room conditions for 1 to 2 hours, after which the specified measurements shall be performed. (JIS C60068-2-2/MIL-STD-202 Method 108)	外観 Appearance	異常なきこと No Damage
			接触抵抗 Contact Resistance	60 milliohm MAX.
4-3-6	耐寒性 Cold Resistance	コネクタを嵌合させ、-55±3°Cの雰囲気中に96時間放置後取り出し、1~2時間室温に放置する。 (JIS C60068-2-1) Mate connectors and expose to -55+3/-3 degree C for 96 hours. Upon completion of the exposure period, the test specimens shall be conditioned at ambient room conditions for 1 to 2 hours, after which the specified measurements shall be performed. (JIS C60068-2-1)	外観 Appearance	異常なきこと No Damage
			接触抵抗 Contact Resistance	60 milliohm MAXIMUM

REVISE ON PC ONLY		TITLE: 0.5 mm PITCH B TO B CONN.	
B	SEE SHEET 1 OF 10	-LEAD FREE- 製品仕様書	
		THIS DOCUMENT CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	
REV.	DESCRIPTION		
DOCUMENT NUMBER PS-54363-046		FILE NAME PS54363046.doc	SHEET 4 OF 10
EN-37-1(019)			



PRODUCT SPECIFICATION



LANGUAGE

JAPANESE
ENGLISH

項目 Item		条件 Test Condition	規格 Requirement	
4-3-7	耐湿性 Humidity	コネクタを嵌合させ、40±2℃、 相対湿度90～95%の雰囲気中に96時間 放置後、取り出し、1～2時間室温に放置する。 (JIS C60068-2-3/MIL-STD-202 試験法103) Mate connectors and expose to 40+2/-2 degree C, relative humidity 90 to 95% for 96 hours. Upon completion of the exposure period, the test specimens shall be conditioned at ambient room conditions for 1 to 2 hours, after which the specified measurements shall be performed. (JIS C60068-2-3/MIL-STD-202 Method 103)	外 観 Appearance	異常なきこと No Damage
			接 触 抵 抗 Contact	60 milliohm MAXIMUM
			Resistance 耐 電 圧 Dielectric Strength	4-1-3項 満足のこと Must meet 4-1-3
			絶縁抵抗 Insulation Resistance	100 megohms MINIMUM
4-3-8	温度サイクル Temperature Cycling	コネクタを嵌合させ、-55±3℃に30分、 +85±2℃に30分、これを1サイクルとし、 5サイクル繰り返す。 但し、温度移行時間は、5分以内とする。 試験後1～2時間室温に放置する。(JISC0025) Mate connectors and subject to the following conditions for 5 cycles. Upon completion of the exposure period, the test specimens shall be conditioned at ambient room conditions for 1 to 2 hours, after which the specified measurements shall be performed. 1 cycle a) -55+3/-3 degree C 30 minutes b) +85+2/-2 degree C 30 minutes (Transit time shall be with in 5 minutes) (JISC0025)	外 観 Appearance	異常なきこと No Damage
			接 触 抵 抗 Contact Resistance	60 milliohm MAXIMUM

REVISE ON PC ONLY		TITLE: 0.5 mm PITCH B TO B CONN.	製品仕様書
B	SEE SHEET 1 OF 10		
REV.	DESCRIPTION	THIS DOCUMENT CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	
DOCUMENT NUMBER PS-54363-046		FILE NAME PS54363046.doc	SHEET 5 OF 10
EN-37-1(019)			



PRODUCT SPECIFICATION



LANGUAGE

JAPANESE
ENGLISH

項目 Item		条件 Test Condition	規格 Requirement	
4-3-9	塩水噴霧 Salt Spray	コネクタを嵌合させ、35±2°Cにて、 重量比 5±1%の塩水を48±4時間噴霧し、 試験後常温で水洗いした後、室温で乾燥させる。 (JIS C60068-2-11/MIL-STD-202 試験法 101) Mate connectors and expose to the following salt mist conditions. Upon completion of the exposure period, salt deposits shall be removed by a gentle wash or dip in running water, after which the specified measurements shall be performed. NaCl solution Concentration : 5+1/-1% Spray time : 48+4/-4 hours Ambient temperature : 35+2/-2 degree C (JIS C60068-2-11/MIL-STD-202 Method 101)	外 観 Appearance	異常なきこと No Damage
			接 触 抵 抗 Contact Resistance	60 milliohm MAXIMUM
4-3-10	亜硫酸ガス SO ₂ Gas	コネクタを嵌合させ、40±2°C にて、 50±5ppmの亜硫酸ガス中に24時間放置する。 Mate connectors and expose to 50+5/-5ppm SO ₂ gas, ambient temperature 40+2/-2 degree C for 24 hours.	外 観 Appearance	異常なきこと No Damage
			接 触 抵 抗 Contact Resistance	60 milliohm MAXIMUM.
4-3-11	半田付け性 Solderability	端子先端より0.3mm、金具先端より0.3mmの 位置まで245±5°Cの半田に3±0.5秒浸す。 Dip terminal and fitting nail (held at 245±5°C) up to 0.3mm from the tip for 3±0.5seconds.	濡 れ 性 Solder Wetting	浸漬面積の95% 以上 95% of immersed area must show no voids, pin holes
4-3-12	半田耐熱性 Resistance to Soldering- Heat	(リフロー時) When reflowing 第8項の条件にて、2回リフローを行う。 Refer to paragraph 8, two times.	外 観 Appearance	端子ガタ 割れ等 異常なきこと No Damage
		(手半田) Soldering iron method 端子先端より0.3mm、金具先端より0.3mmの 位置まで370~400°Cの半田ゴテにて最大5秒 加熱する。 Dip terminal and fitting nail(held at 370~400°C) Up to 0.3mm from the tip for 5 seconds MAX.		

(): 参考規格 Reference Standard
{ }: 参考単位 Reference Unit

REVISE ON PC ONLY		TITLE: 0.5 mm PITCH B TO B CONN.	
B	SEE SHEET 1 OF 10	-LEAD FREE- 製品仕様書	
	REV.	DESCRIPTION	THIS DOCUMENT CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION
DOCUMENT NUMBER PS-54363-046		FILE NAME PS54363046.doc	SHEET 6 OF 10
EN-37-1(019)			



PRODUCT SPECIFICATION



LANGUAGE

JAPANESE
ENGLISH**【5. 外観形状、寸法及び材質 PRODUCT SHAPE, DIMENSIONS AND MATERIALS】**

図面参照 Refer to the drawing.

【6. 挿入力及び抜去力 INSERTION/WITHDRAWAL FORCE】

極数 No of CKT	単位 UNIT	挿入力（最大値） Insertion (MAXIMUM)			抜去力（最小値） Withdrawal (MINIMUM)		
		初回 1st	6回目 6th	30回目 30th	初回 1st	6回目 6th	30回目 30th
20	N {kgf}	29.4 {3.0}	29.4 {3.0}	34.3 {3.5}	4.9 {0.5}	2.9 {0.3}	2.9 {0.3}
30	N {kgf}	39.2 {4.0}	39.2 {4.0}	44.1 {4.5}	5.9 {0.6}	3.9 {0.4}	3.9 {0.4}
40	N {kgf}	49.0 {5.0}	49.0 {5.0}	53.9 {5.5}	6.9 {0.7}	4.9 {0.5}	4.9 {0.5}
50	N {kgf}	49.0 {5.0}	49.0 {5.0}	53.9 {5.5}	6.9 {0.7}	4.9 {0.5}	4.9 {0.5}
60	N {kgf}	49.0 {5.0}	49.0 {5.0}	53.9 {5.5}	6.9 {0.7}	4.9 {0.5}	4.9 {0.5}
70	N {kgf}	49.0 {5.0}	49.0 {5.0}	53.9 {5.5}	6.9 {0.7}	4.9 {0.5}	4.9 {0.5}
80	N {kgf}	49.0 {5.0}	49.0 {5.0}	53.9 {5.5}	6.9 {0.7}	6.9 {0.7}	6.9 {0.7}
110	N {kgf}	63.7 {6.5}	63.7 {6.5}	68.6 {7.0}	13.5 {1.375}	13.5 {1.375}	13.5 {1.375}
120	N {kgf}	68.6 {7.0}	68.6 {7.0}	73.5 {7.5}	14.7 {1.5}	14.7 {1.5}	14.7 {1.5}
140	N {kgf}	78.4 {8.0}	78.4 {8.0}	83.3 {8.5}	17.2 {1.75}	17.2 {1.75}	17.2 {1.75}

REVISE ON PC ONLY

B

SEE SHEET 1 OF 10

TITLE:

0.5 mm PITCH B TO B CONN.

-LEAD FREE-

製品仕様書

THIS DOCUMENT CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

REV.

DESCRIPTION

DOCUMENT NUMBER

PS-54363-046

FILE NAME

PS54363046.doc

SHEET

7 OF 10

EN-37-1(019)

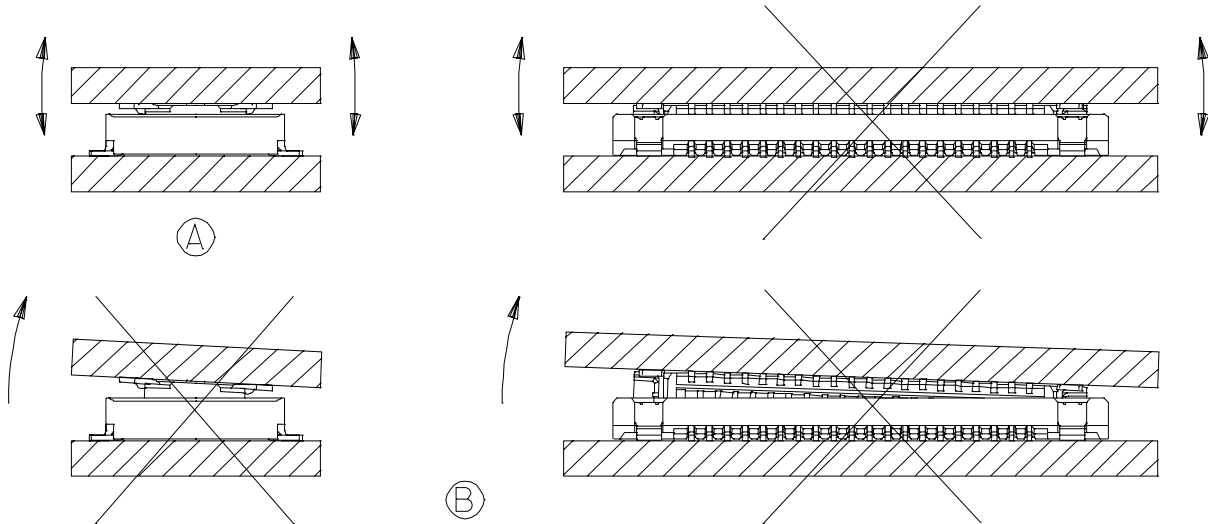


【7. 取り扱いの注意事項 INSTRUCTION UPON USAGE】

抜去に関しては極力嵌合軸に沿って行って下さい。又は、下図のA方向で左右に少しずつ振りながら行って下さい。
(過度のこじり抜去には注意願います。[図B])

As regards extraction is straight at mating axis to the utmost, or swing right to left slightly.

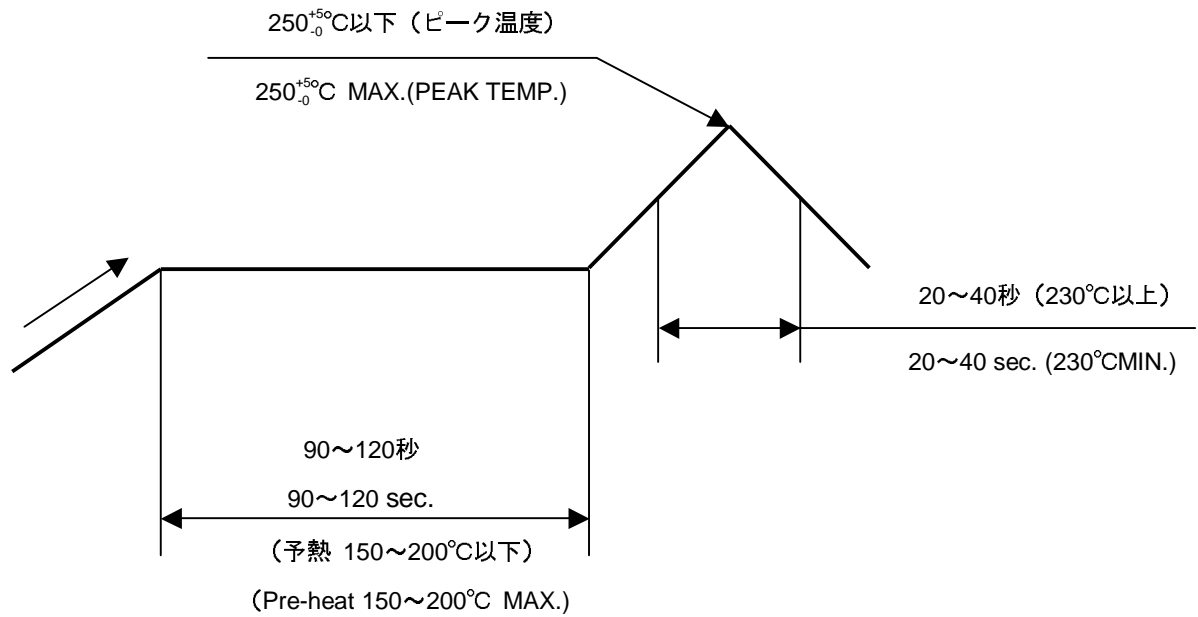
(direction of following figure A) [Please take care of excess twist extraction.(refer to following figure B)]



B	REVISE ON PC ONLY	TITLE: 0.5 mm PITCH B TO B CONN. -LEAD FREE- 製品仕様書	
	SEE SHEET 1 OF 10		
	REV.	DESCRIPTION	THIS DOCUMENT CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION
DOCUMENT NUMBER PS-54363-046		FILE NAME PS54363046.doc	SHEET 8 OF 10
EN-37-1(019)			



【8. 赤外線リフロー条件 INFRARED REFLOW CONDITION】



温度条件グラフ
TEMPERATURE CONDITION GRAPH
 (基板表面温度)
 (TEMPERATURE ON BOARD PATTERN SIDE)

注記：本リフロー条件に関しては、リフロー装置及び基板などにより条件が異なりますので
 事前に実装評価(リフロー評価)の御確認を御願ひ致します。

NOTE : Please check the mount condition (reflow soldering condition) by your own devices beforehand,
 because the condition changes by the soldering devices, p.c.boards, and so on.

REVISE ON PC ONLY		TITLE: 0.5 mm PITCH B TO B CONN.	
B	SEE SHEET 1 OF 10	-LEAD FREE- 製品仕様書	
REV.	DESCRIPTION	THIS DOCUMENT CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	
DOCUMENT NUMBER PS-54363-046		FILE NAME PS54363046.doc	SHEET 9 OF 10
EN-37-1(019)			

