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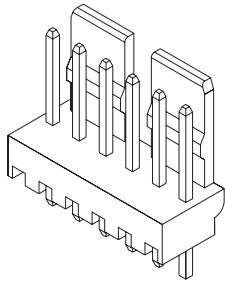
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Jameco Part Number 1965795

2.50mm (.098") Pitch Header

5045

Vertical, Square Pin Polarizing Lock



Features and Benefits

- Sizes 2 to 20 circuits
- 0.64mm (.025") square wire pins

Reference Information

Packaging: Bulk
 UL File No.: E29179
 CSA File No.: LR19980
 Mates With: 5051 housings, KK® 2.50mm (.098") and 5102-N
 Designed In: Millimeters

Electrical

Voltage: 250V

Current:

AWG	22	24	26	28
	3.0A	2.5A	2.0A	1.5A

Contact Resistance: 20 milliohms max.

Dielectric Withstanding Voltage: 1000V AC/1 min.

Insulation Resistance: 1000 Megohms min.

Physical

Housing: 6/6 nylon, UL 94V-0

Contact: Brass

Plating: See Table

Operating Temperature: -40 to +105°C

Circuits	Order No.		Lead-free
	Tin	Gold	
2	22-04-1021	22-11-1021	Yes
3	22-04-1031	22-11-1031	
4	22-04-1041	22-11-1041	
5	22-04-1051	22-11-1051	
6	22-04-1061	22-11-1061	
7	22-04-1071	22-11-1071	
8	22-04-1081	22-11-1081	
9	22-04-1091	22-11-1091	
10	22-04-1101	22-11-1101	
11	22-04-1111	22-11-1111	

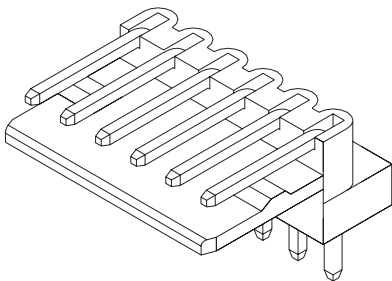
Circuits	Order No.		Lead-free
	Tin	Gold	
12	22-04-1121	22-11-1121	Yes
13	22-04-1131	22-11-1131	
14	22-04-1141	22-11-1141	
15	22-04-1151	22-11-1151	
16	22-04-1161	22-11-1161	
17	22-04-1171	22-11-1171	
18	22-04-1181	22-11-1181	
19	22-04-1191	22-11-1191	
20	22-04-1201	22-11-1201	

www.molex.com/customer.html?seriesNumber=5045

2.50mm (.098") Pitch Mini-Latch™ Header

5046

Right Angle Friction Lock



Features and Benefits

- Sizes 2 to 15 circuits
- 0.64mm (.025") square wire pins

Reference Information

Packaging: Bulk
 UL File No.: E29179
 CSA File No.: LR19980
 Mates With: 5051 and 51191 housings
 Designed In: Millimeters

Electrical

Voltage: 250V

Current:

AWG	22	24	26	28
	3.0A	2.5A	2.0A	1.5A

Contact Resistance: 20 milliohms max.

Dielectric Withstanding Voltage: 1000V AC/1 min.

Insulation Resistance: 1000 Megohms min.

Physical

Housing: 6/6 nylon, UL 94V-0

Contact: Brass

Plating: Tin

Operating Temperature: -40 to +105°C

Circuits	Order No.	Lead-free
2	22-05-1022	Yes
3	22-05-1032	
4	22-05-1042	
5	22-05-1052	
6	22-05-1062	
7	22-05-1072	
8	22-05-1082	

Circuits	Order No.	Lead-free
9	22-05-1092	Yes
10	22-05-1102	
11	22-05-1112	
12	22-05-1122	
13	22-05-1132	
14	22-05-1142	
15	22-05-1152	



PRODUCT SPECIFICATION



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項 目 Item	規 格 Standard
最大定格 電圧電流 Rated Voltage (MAX.)	AC 250 V 3A DC 250V 3A
使用温度範囲 Ambient Temperature Range (Operating and Non-operating)	-40 °C ~ +105 °C *1

*1: 通電による温度上昇分も含む。
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 にて測定する。 Mate connectors, measure by dry circuit, 20mV MAX., 10mA.	20 milliohm MAX.
4-1-2	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 1000V（実効値）を 1分間 印加する。 Mate connectors, apply 1500V AC(rms) between for 1 minute between adjacent terminal or ground.	異状なきこと No Damage
4-1-3	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、DC 500V を印加し測定 する。 Mate connectors, apply 500V DC between adjacent terminal or ground.	1000 Megohm MIN.

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4-2. 機械的性能 Mechanical Performance

項 目 Item		条 件 Test Condition	規 格 Requirement	
4-2-1	挿入力 及び抜去力 Insertion and Withdrawal Force	毎分 25±3mm の速さで挿入、抜去を行う。 Insert and withdraw connectors at the speed rate of 25±3mm/minute.	第 6 項参照 Refer to paragraph 6	
4-2-2	繰り返し動作 Repeated Insertion / Withdrawal	無通電状態にて1分間 10回以下 の速さで挿入、抜去を 30回 繰り返す。 When mated up to 30 cycles repeatedly by the rate of 10 cycles/minute.	接触抵抗 Contact Resistance	40 milliohm MAX.
			挿入力 Insertion Force	第 6 項参照 Refer to paragraph 6
			抜去力 Withdrawal Force	第 6 項参照 Refer to paragraph 6
4-2-3	端子保持力 Terminal Retention Force	圧着されたターミナルをハウジングに装着し、 電線を軸方向に 毎分 25±3mm の速さで引張る。 Apply axial pull out force at the speed rate of 25±3mm / minute on the terminal assembled in the housing.	9.8 N {1.0kgf} MIN.	
4-2-4	端子強度 Terminal intensity	全ての方向に 1分間、500gf の力を加え Apply axial push force at the speed rate of 25±3mm/minute.	割れ、折れのないこと。 No Damage	

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4-3. その他 Environmental Performance and Others

項 目 Item		条 件 Test Condition	規 格 Requirement	
4-3-1	端子温度上昇 Terminal Temperature Rise	コネクタを嵌合させ、最大定格電流を通電し、コネクタの温度上昇分を測定する。 Carrying rated current load.	30°C MAX.	
4-3-2	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 10~55~10Hz/分、相対振幅 1.5mm の振動を 各2時間 加える。 Amplitude: 1.5 mm P-P Sweep time: 10-55-10 Hz in 1 minute Duration: 2 hours in each X.Y.Z axes	外 観 Appearance	異状なきこと No Damage
			接触抵抗 Contact Resistance	40 milliohm MAX.
			瞬 断 Discontinuity	1.0 microsecond MAX.
4-3-3	耐衝撃性 Shock	DC 1mA 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。 490 m/s ² {50 G}, 3 strokes in each X,Y,Z axes.	外 観 Appearance	異状なきこと No Damage
			瞬 断 Discontinuity	1.0 microsecond MAX.
4-3-4	半田付け性 Solderability	ターミナルまたはピンをフラックスに浸し、本体の取付け基準面より 1.2mm迄、230±5°C の半田に 3±0.5秒 浸す。 Soldering Time : 3±0.5 sec. Solder Temperature: 230±5°C	濡 れ 性 Solder Wetting	浸漬面積の 3/4以上 3/4 of immersed area must show no voids, pin holes
4-3-5	半田耐熱性 Resistance to Soldering Heat	ターミナルまたはピンをフラックスに浸し、本体の取付け基準面より 1.2mm迄、260±5°C の半田に 5±0.5秒 浸す。 Soldering Time : 5±0.5 sec. Solder Temperature: 260±5°C	外 観 Appearance	端子のガタ、割れ等 異状なきこと No Damage

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項 目 Item		条 件 Test Condition	規 格 Requirement	
4-3-6	耐 熱 性 Heat Resistance	コネクタを嵌合させ、85±2℃ 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。 85±2℃, 96 hours	外 観 Appearance	異状なきこと No Damage
			接触抵抗 Contact Resistance	40 milliohm MAX.
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、30 分以内に測定する。水滴は拭き取る。 Temperature: 40±2℃ Relative Humidity: 90~95% Duration: 96 hours	外 観 Appearance	異状なきこと No Damage
			接触抵抗 Contact Resistance	40 milliohm MAX.
			耐 電 圧 Dielectric Strength	4-1-2項満足こと Must meet 4-1-2
			絶縁抵抗 Insulation Resistance	100 Megohm MIN.
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、常温常湿に 10~15分、105±2℃に30分、常温常湿に 10~15分、これを 1サイクル とし、5サイクル繰り返す。 5 cycles of : a) -55±3℃ 30 minutes Normal temperature and Humidity 10~15 minutes b) +105±2℃ 30 minutes Normal temperature and Humidity 10~15 minutes	外 観 Appearance	異状なきこと No Damage
			接触抵抗 Contact Resistance	40 milliohm MAX.
4-3-9	塩水噴霧 Salt Spray	コネクタを嵌合させ、35±2℃ 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。 48±4 hours exposure to a salt spray from the 5±1% solution at 35±2℃.	外 観 Appearance	割れ、 著しい腐食等 異状なきこと No Damage
			接触抵抗 Contact Resistance	40 milliohm MAX.

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項 目 Item		条 件 Test Condition	規 格 Requirement	
4-3-10	亜硫酸ガス SO ₂ Gas	コネクタを嵌合させ、40±2℃ にて 50±5ppm の亜硫酸ガス中に 24時間 放置する。 24 hours exposure to 50±5ppm. SO ₂ gas at 40±2℃.	接触抵抗 Contact Resistance	40 milliohm MAX.

() : 参考規格 Reference Standard

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

図面参照 Refer to the drawing.

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【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 Force (MAX.)			抜去力（最小値） Withdrawal Force (MIN.)		
		初回 1st	6回目 6th	30回目 30th	初回 1st	6回目 6th	30回目 30th
2	N {kgf}	35.28 {3.60}	33.3 {3.40}	33.3 {3.40}	6.5 {0.65}	5.5 {0.55}	5.5 {0.55}
3	N {kgf}	43.1 {4.4}	40.1 {4.1}	40.1 {4.1}	7.0 {0.70}	6.0 {0.60}	6.0 {0.60}
4	N {kgf}	50.9 {5.2}	47.0 {4.8}	47.0 {4.8}	7.5 {0.75}	6.5 {0.65}	6.5 {0.65}
5	N {kgf}	58.8 {6.0}	53.9 {5.5}	53.9 {5.5}	8.0 {0.80}	7.0 {0.70}	7.0 {0.70}
6	N {kgf}	64.6 {6.6}	58.8 {6.0}	58.8 {6.0}	9.0 {0.90}	8.0 {0.80}	8.0 {0.80}
7	N {kgf}	70.5 {7.2}	63.7 {6.5}	63.7 {6.5}	10.0 {1.00}	9.0 {0.90}	9.0 {0.90}
8	N {kgf}	76.4 {7.8}	68.6 {7.0}	68.6 {7.0}	11.5 {1.15}	10.0 {1.00}	10.0 {1.00}
9	N {kgf}	82.3 {8.4}	73.5 {7.5}	73.5 {7.5}	13.0 {1.30}	11.5 {1.15}	11.5 {1.15}
10	N {kgf}	88.2 {9.0}	78.4 {8.0}	78.4 {8.0}	14.5 {1.45}	13.0 {1.30}	13.0 {1.30}
11	N {kgf}	94.0 {9.6}	83.3 {8.5}	83.3 {8.5}	16.0 {1.60}	14.5 {1.45}	14.5 {1.45}
12	N {kgf}	99.9 {10.2}	88.2 {9.0}	88.2 {9.0}	18.5 {1.85}	16.0 {1.60}	16.0 {1.60}
13	N {kgf}	105.8 {10.8}	93.1 {9.5}	93.1 {9.5}	20.0 {2.00}	17.5 {1.75}	17.5 {1.75}
14	N {kgf}	111.7 {11.4}	98.0 {10.0}	98.0 {10.0}	21.5 {2.15}	19.0 {1.90}	19.0 {1.90}
15	N {kgf}	117.6 {12.0}	102.9 {10.5}	102.9 {10.5}	23.0 {2.30}	20.5 {2.05}	20.5 {2.05}
16	N {kgf}	123.4 {12.6}	107.8 {11.0}	107.8 {11.0}	24.5 {2.45}	22.0 {2.20}	22.0 {2.20}
17	N {kgf}	129.3 {13.2}	112.7 {11.5}	112.7 {11.5}	26.0 {2.60}	23.5 {2.35}	23.5 {2.35}
18	N {kgf}	135.2 {13.8}	117.6 {12.0}	117.6 {12.0}	27.5 {2.75}	25.0 {2.50}	25.0 {2.50}
19	N {kgf}	141.1 {14.4}	122.5 {12.5}	122.5 {12.5}	29.0 {2.90}	26.5 {2.65}	26.5 {2.65}
20	N {kgf}	147.0 {15.0}	127.4 {13.0}	127.4 {13.0}	30.5 {3.05}	28.0 {2.80}	28.0 {2.80}

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注記
NOTES :

1. そりは長さ25.4に対して0.2MAX.
CAMBER MUST BE WITHIN 0.2MAX.
PER 25.4 .
2. 材料(MATERIAL)
- ウエハー：66ナイロン，UL94V-O
WAFER: 66NYLON , UL94V-O
- ピン： ϕ 0.635 黄銅、銅下地錫メッキ
PIN: ϕ 0.635 BRASS, TIN OVER COPPER
PLATING.
- △ 全極数が偶数の場合のみ適用。
APPLY FOR EVEN CIRCUITS PRODUCT ONLY.

49.5	47.5	22-05- I202	5046-20A	20
47	45	↗ - I192	↗ - 19A	19
44.5	42.5	- I182	- 18A	18
42	40	- I172	- 17A	17
39.5	37.5	- I162	- 16A	16
37	35	- I152	- 15A	15
34.5	32.5	- I142	- 14A	14
32	30	- I132	- 13A	13
29.5	27.5	- I122	- 12A	12
27	25	- I112	- 11A	11
24.5	22.5	- I102	- 10A	10
22	20	- I092	- 09A	9
19.5	17.5	- I082	- 08A	8
17	15	- I072	- 07A	7
14.5	12.5	- I062	- 06A	6
12	10	- I052	- 05A	5
9.5	7.5	↘ - I042	↘ - 04A	4
7	5	↘ - I032	↘ - 03A	3
4.5	2.5	22-05- I022	5046-02A	2
(B)	(A)	EDP NO.	ENG.NO.	極數 CKT.

材料 MATERIAL	注記参照 SEE NOTE
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仕上げ

適用電線範圍 _____ //

被覆外径 INS. RANGE	—H—
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10	DRAWN BY '92/1/9 Y.MIZUNO	CHK'D BY ' Y.M H.HIRA
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APP'D BY '94/11/1	尺度
M.FUKUSHIMA	SCALE 5

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日本モレックス株式会社

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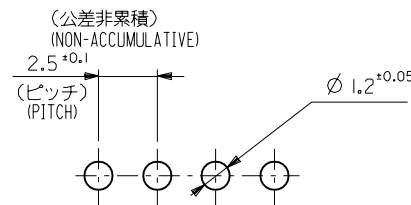
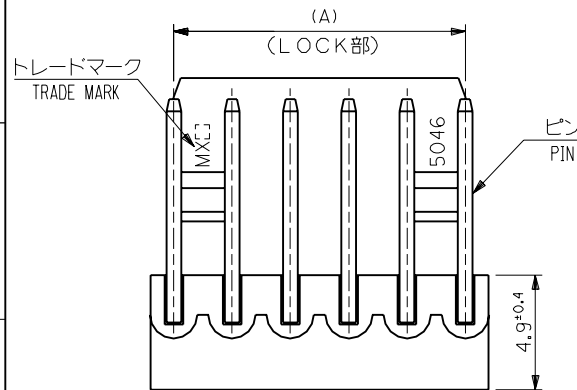
TITLE 名称
KK2.5 RIGHT ANGLE
WAFER ASS'Y

DWG. NO.	RE
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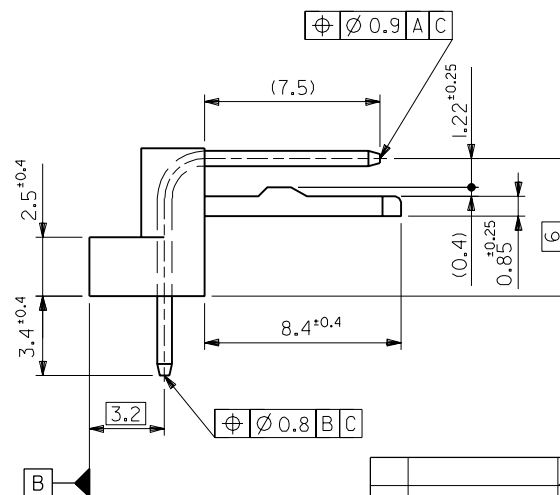
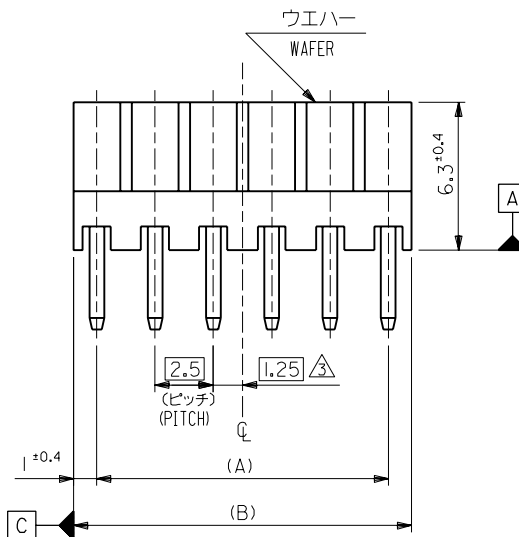
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極數
CKT

5046.S20



基板取付穴推奨寸法 (t1.6)
RECOMMENDED P.C.BOARD HOLE DIM.

[illegible]