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ELECTRONICS

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Jameco Part Number 879588

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Sizes 2 to 28 circuits
- Friction lock provides passive lock to connector with ramp
- Good in high vibration applications
- Higher backwall than the 6373 Series
- Various pin lengths available

### Reference Information

Product Specification: PS-10-07

Packaging: Bag

UL File No.: E29179

CSA File No.: LR19980

Mates With: 2695 with locking ramp, 6471 and 7880

Designed In: Inches

### Electrical

Voltage: 250V

Current: 4.0A

Contact Resistance: 20mΩ max.

Dielectric Withstanding Voltage: 1500V

Insulation Resistance: 50K MΩ min.

### Physical

Housing: Nylon, UL 94V-0

Contact: Brass, 0.64mm (.025") square

Plating: See Table

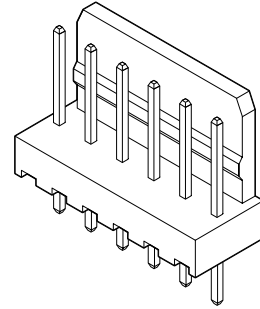
Operating Temperature: 0 to +75°C

**molex®** 2.54mm (.100") Pitch  
KK®

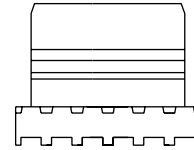
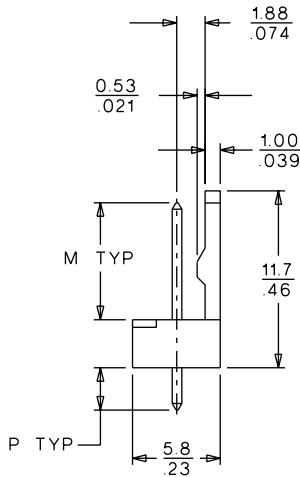
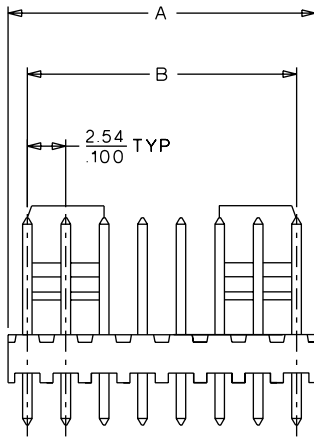
**Header**

**6410**

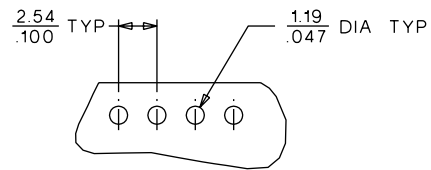
**Vertical  
Friction Lock**



## CATALOG DRAWING (FOR REFERENCE ONLY)



SINGLE RAMP ON 2-6 CIRCUITS  
TWO RAMPS ON 7-28 CCTS, AS SHOWN.



RECOMMENDED PCB LAYOUT

## ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension			
	Tin	Gold	A	B	M	P
2	• 22-27-2021	• 22-29-2021	5.08 (.200)	2.54 (.100)	7.50 (.295)	3.56 (.140)
3	• 22-27-2031	• 22-29-2031	7.62 (.300)	5.08 (.200)	7.50 (.295)	3.56 (.140)
4	• 22-27-2041	• 22-29-2041	10.16 (.400)	7.62 (.300)	7.50 (.295)	3.56 (.140)
5	• 22-27-2051	• 22-29-2051	12.70 (.500)	10.16 (.400)	7.50 (.295)	3.56 (.140)
6	• 22-27-2061	• 22-29-2061	15.24 (.600)	12.70 (.500)	7.50 (.295)	3.56 (.140)
7	• 22-27-2071	• 22-29-2071	17.78 (.700)	15.24 (.600)	7.50 (.295)	3.56 (.140)
8	• 22-27-2081	• 22-29-2081	20.32 (.800)	17.78 (.700)	7.50 (.295)	3.56 (.140)
9	• 22-27-2091	• 22-29-2091	22.86 (.900)	20.32 (.800)	7.50 (.295)	3.56 (.140)
10	• 22-27-2101	• 22-29-2101	25.40 (1.000)	22.86 (.900)	7.50 (.295)	3.56 (.140)
11	• 22-27-2111	• 22-29-2111	27.94 (1.100)	25.40 (1.000)	7.50 (.295)	3.56 (.140)
12	• 22-27-2121	• 22-29-2121	30.48 (1.200)	27.94 (1.100)	7.50 (.295)	3.56 (.140)
13	• 22-27-2131	• 22-29-2131	33.02 (1.300)	30.48 (1.200)	7.50 (.295)	3.56 (.140)
14	• 22-27-2141	• 22-29-2141	35.56 (1.400)	33.02 (1.300)	7.50 (.295)	3.56 (.140)
15	• 22-27-2151	• 22-29-2151	38.10 (1.500)	35.56 (1.400)	7.50 (.295)	3.56 (.140)

Circuits	Order No.		Dimension			
	Tin	Gold	A	B	M	P
16	• 22-27-2161	• 22-29-2161	40.64 (1.600)	38.10 (1.500)	7.50 (.295)	3.56 (.140)
17	• 22-27-2171	• 22-29-2171	43.18 (1.700)	40.64 (1.600)	7.50 (.295)	3.56 (.140)
18	• 22-27-2181	• 22-29-2181	45.72 (1.800)	43.18 (1.700)	7.50 (.295)	3.56 (.140)
19	• 22-27-2191	• 22-29-2191	48.26 (1.900)	45.72 (1.800)	7.50 (.295)	3.56 (.140)
20	• 22-27-2201	• 22-29-2201	50.80 (2.000)	48.26 (1.900)	7.50 (.295)	3.56 (.140)
21	• 22-27-2211	• 22-29-2211	53.34 (2.100)	50.80 (2.000)	7.50 (.295)	3.56 (.140)
22	• 22-27-2221	• 22-29-2221	55.88 (2.200)	53.34 (2.100)	7.50 (.295)	3.56 (.140)
23	• 22-27-2231	• 22-29-2231	58.42 (2.300)	55.88 (2.200)	7.50 (.295)	3.56 (.140)
24	• 22-27-2241	• 22-29-2241	60.96 (2.400)	58.42 (2.300)	7.50 (.295)	3.56 (.140)
25	• 22-27-2251	• 22-29-2251	63.50 (2.500)	60.96 (2.400)	7.50 (.295)	3.56 (.140)
26	• 22-27-2261	• 22-29-2261	66.04 (2.600)	63.50 (2.500)	7.50 (.295)	3.56 (.140)
27	• 22-27-2271	• 22-29-2271	68.58 (2.700)	66.04 (2.600)	7.50 (.295)	3.56 (.140)
28	• 22-27-2281	• 22-29-2281	71.12 (2.800)	68.58 (2.700)	7.50 (.295)	3.56 (.140)

• US Standard Product, available through Molex franchised distributors



# PRODUCT SPECIFICATION

## 1.0 SCOPE

This Product Specification covers the 2.54 mm (.100 inch) centerline (pitch) 0.64 mm (.025) square pin headers when mated with either printed circuit board (PCB) connectors or connectors terminated with 22 to 28 AWG wire using crimp technology.

## 2.0 PRODUCT DESCRIPTION

### 2.1 PRODUCT NAME AND SERIES NUMBERS

Crimp Terminals: 2759, 41572, 6459  
Crimp Housings: 2695  
PCB Connectors: 4455, 42625  
Headers: 4030, 4094, 6373, 7478, 42225, 42226, 42227, 42228, 42152, 42153, 42375, 42376, 42377, 42624.  
Other products conforming to this specification are noted on the individual drawings.

### 2.2 DIMENSIONS, MATERIALS, PLATINGS AND MARKINGS

Terminal Material: Brass or Phos. Bronze (for Max performance use phos bronze material.)  
Housing: Nylon or Polyester  
Pins: Brass or Phos. Bronze  
For more information on dimensions, materials, and plating see the individual drawings.

### 2.3 SAFETY AGENCY APPROVALS

UL File Number ..... E29179  
CSA .....LR19980

## 3.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS

None

## 4.0 RATINGS

### 4.1 VOLTAGE

250 Volts

**4.2 CURRENT AND APPLICABLE WIRES** (Current is dependent on connector size, contact material, plating, ambient temperature, printed circuit board characteristics and related factors. Actual current rating is application dependent and should be evaluated for each application.)

AWG	Amps (Max)	Outside Insulation Diameter
22	4.00	See Drawings
24	3.75	See Drawings
26	3.50	See Drawings
28	3.00	See Drawings

### 4.3 TEMPERATURE (ambient + 30° temp rise)

Operating: 0°C to +75°C  
Nonoperating: - 40°C to +105°C

<b>REVISION:</b> <b>P</b>	<b>EGR/ECN INFORMATION:</b> EC No: <b>UCR2002-0299</b> DATE: <b>2001 / 09 / 18</b>	<b>TITLE:</b> <b>PRODUCT SPECIFICATION</b> <b>.100 CENTER KK CONNECTORS</b>	<b>SHEET No.</b> <b>1 of 5</b>
<b>DOCUMENT NUMBER:</b> <b>PS-10-07</b>	<b>CREATED / REVISED BY:</b> <b>SAMIEC</b>	<b>CHECKED BY:</b> <b>MUELLER</b>	<b>APPROVED BY:</b> <b>MARGULIS</b>



# PRODUCT SPECIFICATION

## 5.0 PERFORMANCE

### 5.1 ELECTRICAL REQUIREMENTS

DESCRIPTION	TEST CONDITION	REQUIREMENT
Contact Resistance (Low Level)	Mate connectors: apply a maximum voltage of 20 mV and a current of 100 mA.	10 milliohms MAXIMUM [initial]
Contact Resistance of Wire Termination (Low Level)	Terminate the applicable wire to the terminal and measure wire using a voltage of 20 mV and a current of 100 mA.	2 milliohms MAXIMUM [initial]
Insulation Resistance	Unmate & unmount connectors: apply a voltage of 500 VDC between adjacent terminals and between terminals to ground.	1000 Megohms MINIMUM
Dielectric Withstanding Voltage	Unmate connectors: apply a voltage of {two times the rated voltage plus 1000 volts} VAC for 1 minute between adjacent terminals and between terminals to ground.	No breakdown
Capacitance	Measure between adjacent terminals at 1 MHz.	2 picofarads MAXIMUM
Temperature Rise (via Current Cycling)	Mate connectors: measure the temperature rise at the rated current after: 1) 96 hours (steady state) 2) 240 hours (45 minutes ON and 15 minutes OFF per hour) 3) 96 hours (steady state)	Temperature rise: +30°C MAXIMUM

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DOCUMENT NUMBER: <b>PS-10-07</b>	CREATED / REVISED BY: <b>SAMIEC</b>	CHECKED BY: <b>MUELLER</b>	APPROVED BY: <b>MARGULIS</b>



# PRODUCT SPECIFICATION

## 5.2 MECHANICAL REQUIREMENTS

DESCRIPTION	TEST CONDITION	REQUIREMENT
Connector Mate and Unmate Forces	Per circuit when mated to an .025 Sq. pin. Mate and unmate connector (male to female) at a rate of 25 ± 6 mm (1 ± ¼ inch) per minute.	1.95 N (0.438 lbf) MAXIMUM insertion force & 0.56 N (0.125 lbf) MINIMUM withdrawal force
Terminal Retention Force (in Housing)	Axial pullout force on the terminal in the housing at a rate of 25 ± 6 mm (1 ± ¼ inch) per minute. (Forces will change with platings and materials.)	17.8 N (4.0 lbf) MINIMUM withdrawal force
Terminal Insertion Force (into Housing)	Apply an axial insertion force on the terminal at a rate of 25 ± 6 mm (1 ± ¼ inch). (Forces will change with platings and materials.)	6.67 N (1.5 lbf) MAXIMUM insertion force
Durability	Mate connectors up to 25 cycles at a maximum rate of 10 cycles per minute prior to Environmental Tests.	10 milliohms MAXIMUM (change from initial)
Vibration (Random)	Mate connectors and vibrate per EIA 364-28, test condition VII.	10 milliohms MAXIMUM (change from initial) & Discontinuity < 1 microsecond
Shock (Mechanical)	Mate connectors and shock at 50 g's with ½ sine wave (11 milliseconds) shocks in the ±X,±Y,±Z axes (18 shocks total).	10 milliohms MAXIMUM (change from initial) & Discontinuity < 1 microsecond
Wire Pullout Force (Axial)	Apply an axial pullout force on the wire at a rate of 25 ± 6 mm (1 ± ¼ inch). (For maximum performance use Molex application tooling with stranded tinned copper wire)	22 awg = 44 N (10 lbf) 24 awg = 35 N (8 lbf) 26 awg = 26 N (6 lbf) 28 awg = 17 N (4 lbf) 30 awg = 13 N (3 lbf)
Normal Force	Apply a perpendicular force.	2.94 N (300 grams) average

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DOCUMENT NUMBER: <b>PS-10-07</b>	CREATED / REVISED BY: <b>SAMIEC</b>	CHECKED BY: <b>MUELLER</b>	APPROVED BY: <b>MARGULIS</b>



# PRODUCT SPECIFICATION

## 5.3 ENVIRONMENTAL REQUIREMENTS

DESCRIPTION	TEST CONDITION	REQUIREMENT										
Shock (Thermal)	Mate connectors; expose to 5 cycles of: <table border="1"> <thead> <tr> <th>Temperature °C</th> <th>Duration (Minutes)</th> </tr> </thead> <tbody> <tr> <td>-40 +0/-3</td> <td>30</td> </tr> <tr> <td>+25 ±10</td> <td>5 MAXIMUM</td> </tr> <tr> <td>+105 +3/-0</td> <td>30</td> </tr> <tr> <td>+25 ±10</td> <td>5 MAXIMUM</td> </tr> </tbody> </table>	Temperature °C	Duration (Minutes)	-40 +0/-3	30	+25 ±10	5 MAXIMUM	+105 +3/-0	30	+25 ±10	5 MAXIMUM	10 milliohms MAXIMUM (change from initial) & Visual: No Damage
Temperature °C	Duration (Minutes)											
-40 +0/-3	30											
+25 ±10	5 MAXIMUM											
+105 +3/-0	30											
+25 ±10	5 MAXIMUM											
Thermal Aging	Mate connectors; expose to: 96 hours at 105 ± 2°C	10 milliohms MAXIMUM (change from initial)] & Visual: No Damage										
Humidity (Steady State)	Mate connectors: expose to a temperature of 40 ± 2°C with a relative humidity of 90-95% for 96 hours.  Note: Remove surface moisture and air dry for 1 hour prior to measurements.	10 milliohms MAXIMUM (change from initial) & Dielectric Withstanding Voltage: No Breakdown at 500 VAC & Insulation Resistance: 1000 Megohms MINIMUM & Visual: No Damage										
Humidity (Cyclic)	Mate connectors: cycle per EIA-364-31: 24 cycles at temperature 25 ± 3°C at 80 ± 5% relative humidity and 65 ± 3°C at 50 ± 5% relative humidity; dwell time of 1.0 hour; ramp time of 0.5 hours.  {Note: Remove surface moisture and air dry for 1 hour prior to measurements.}	10 milliohms MAXIMUM (change from initial) & Dielectric Withstanding Voltage: No Breakdown at 500 VAC & Insulation Resistance: 1000 Megohms MINIMUM & Visual: No Damage										
Solderability	Per SMES-152	Solder coverage: 95% MINIMUM (per SMES-152)										

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# PRODUCT SPECIFICATION

## 5.3 ENVIRONMENTAL REQUIREMENTS

DESCRIPTION	TEST CONDITION	REQUIREMENT
Solder Resistance	Dip connector terminal tails in solder: Solder Duration: 5 ± 0.5 seconds; Solder Temperature: 230 ± 5°C	Visual: No Damage to insulator material
Salt Spray	Mate connectors: Duration: 48 hours exposure; Atmosphere: salt spray from a 5% solution; Temperature: 35 +1/-2°C	10 milliohms MAXIMUM (change from initial) & Visual: No Damage
Cold Resistance	Mate connectors: Duration: 96 hours; Temperature: -40 ± 3°C	10 milliohms MAXIMUM (change from initial) & Visual: No Damage
Corrosive Atmosphere: Flowing Mixed Gas (FMG)	Mate connectors: Test per EIA-364-65, method 2A	10 milliohms MAXIMUM (change from initial) & Visual: No Damage

## 6.0 PACKAGING

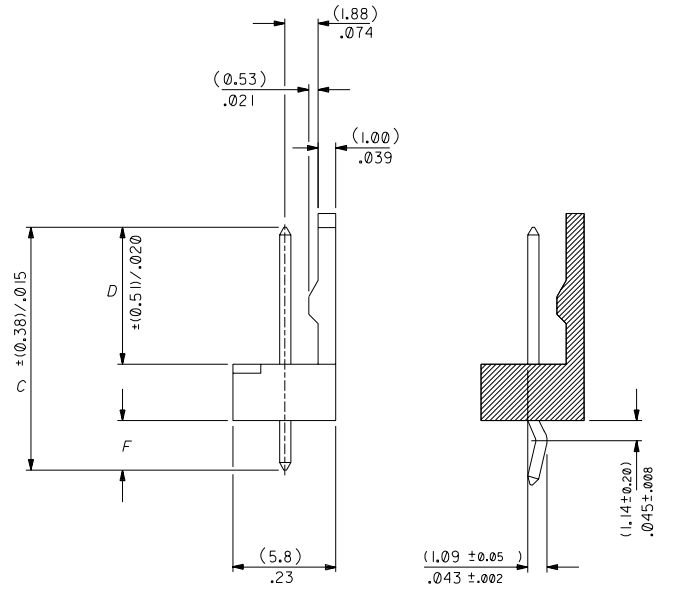
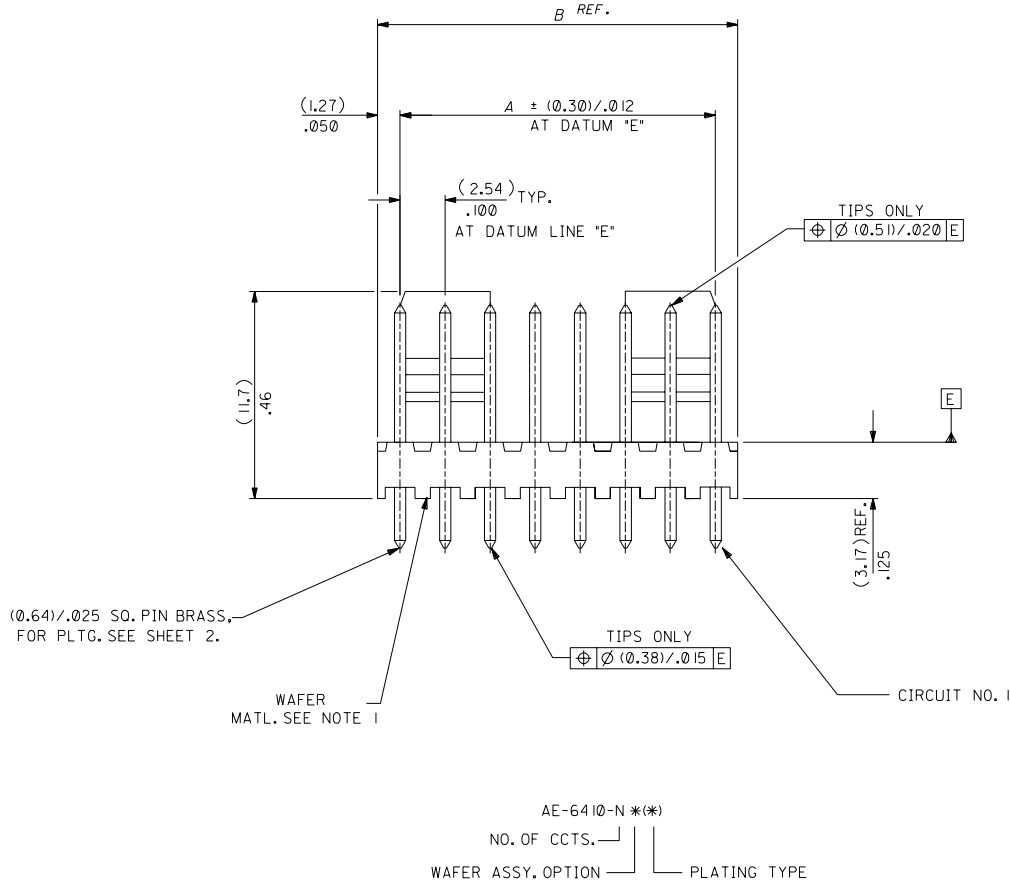
Parts shall be packaged to protect against damage during handling, transit and storage.

## 7.0 GAGES AND FIXTURES

## 8.0 OTHER

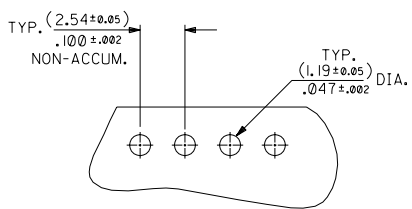
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NO. OF CCTS	DIMN. "A"	DIMN. "B"
2	( 2.54 ) .100	( 5.08 ) .200
3	( 5.08 ) .200	( 7.62 ) .300
4	( 7.62 ) .300	(10.16) .400
5	(10.16) .400	(12.70) .500
6	(12.70) .500	(15.24) .600
7	(15.24) .600	(17.78) .700
8	(17.78) .700	(20.32) .800
9	(20.32) .800	(22.86) .900
10	(22.86) .900	(25.40) 1.000
11	(25.40) 1.000	(27.94) 1.100
12	(27.94) 1.100	(30.48) 1.200
13	(30.48) 1.200	(33.02) 1.300
14	(33.02) 1.300	(35.56) 1.400
15	(35.56) 1.400	(38.10) 1.500
16	(38.10) 1.500	(40.64) 1.600
17	(40.64) 1.600	(43.18) 1.700
18	(43.18) 1.700	(45.72) 1.800
19	(45.72) 1.800	(48.26) 1.900
20	(48.26) 1.900	(50.80) 2.000
21	(50.80) 2.000	(53.34) 2.100
22	(53.34) 2.100	(55.88) 2.200
23	(55.88) 2.200	(58.42) 2.300
24	(58.42) 2.300	(60.86) 2.400
25	(60.86) 2.400	(63.50) 2.500
26	(63.50) 2.500	(66.04) 2.600
27	(66.04) 2.600	(68.58) 2.700
28	(68.58) 2.700	(71.12) 2.800

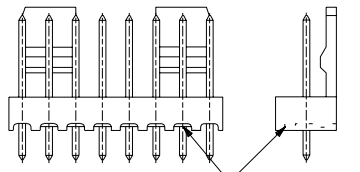


KINK OPTIONS:  
SEE SHEET 4 FOR KINK  
PIN POSITIONS  
(SECTION SHOWING STANDARD KINKED  
PIN ONLY)

- NOTES:-
1. WAFER MATERIAL: NYLON, 94V-0
  2. PIN PUSH OUT FORCE (0.907 KG)/2LBS. MIN.
  3. WAFERS STACKABLE END TO END WITH (2.54)/.100 BETWEEN END PINS.
  4. THIS PART CONFORMS TO MOLEX PROD. SPEC. 10-07.
  5. PIN SOLDERABILITY PER MOLEX SPEC. NO. 152.
  6. FOR KINKED OPTIONS, KINKED ON 1st AND LAST CCT.



RECOMMENDED P.C.B. HOLE DIMENSIONS  
(STANDARD SERIES)



ALTERNATIVE WAFER CONFIGURATION

FOR PREVIOUS DRAWING ISSUES SEE MRI.	ADDED OPTIONS ECL E80438 98.04.01 GM	REVISIONS	DIMENSIONS SHOWN ( METRIC ) INCH UNLESS OTHERWISE SPECIFIED TOLERANCES ANGULAR ± °	DRWG BY MCC	REVISE ONLY ON CAD SYSTEM CAD/CAM FILE NAME S464REV1 DGN	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. & SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	
	AN	LTR	3 PLACE # ± .010 2 PLACE # ± .014 ± .025 1 PLACE # ± .035 DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	CHK'D BY	TITLE WAFER , FRICTION LOCK , KK (2.54)/.100 FOR (0.64)/.025 SQ. PINS.	SHEET NO. DATE 1 OF 5 26/6 /86	SH. REV.
	DESIGN DIMENSION <input type="checkbox"/> (MM) (PRIMARY) <input type="checkbox"/> IN.	EQUIVALENT DIMENSION (SECONDARY) <input type="checkbox"/> (MM) <input type="checkbox"/> IN.	SCALE 5:1	MOLEX EUROPE	PART NO. SEE CHART	DWG NO. SDAE-6410-N	SIZE C

PART NO. SEE CHART  
DWG NO. SDAE-6410-N

5	AL
4	AN
3	AM
2	Z
1	AN
	SH. REV.

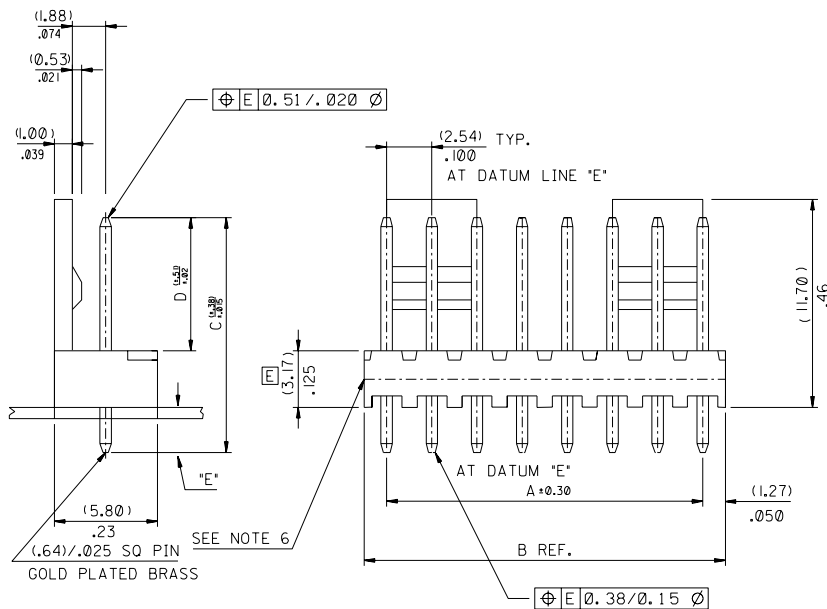


	13	12	11	10	9	8	7	6	5	4	3	2	1
J	ENG. NO.	AE-6410-NA 0501	AE-6410-NA 0516	AE-6410-NK 0516	AE-6410-NC 0501	AE-6410-NA 0509	AE-6410-NA 0509	AE-6410-NS 0501				AE-6410-NA 0503	
I	DIMN. "D"	7.50 ± 0.25 .295 ± .010	7.50 ± 0.25 .295 ± .010	9.22 REF .363	7.14 ± 0.25 .281 ± .010	7.50 ± 0.25 .295 ± .010	7.50 ± 0.25 .295 ± .010	7.50 ± 0.25 .295 ± .010				7.50 ± 0.25 .295 ± .010	
H	DIMN. "C"	14.22 560	14.22 560	5.88 625	20.32 800	14.22 560	14.22 560	16.15 636				14.22 560	
G	DIMN. "F"	3.56 140 REF	3.56 140 REF	3.48 ± 0.25 .137 ± .010	10.00 394 REF	3.56 140 REF	3.56 140 REF	5.48 216 REF				3.56 140 REF	
F	PLATING	GOLD MIN. (0.0005)/.000020 OVER (0.00076)/.000030 NICKEL MIN.	GOLD MIN. (0.00025)/.000010 OVER (0.00076)/.000030 NICKEL MIN.	GOLD MIN. (0.00025)/.000010 OVER (0.00076)/.000030 NICKEL MIN.	GOLD MIN. (0.00051)/.000020 OVER (0.00076)/.000030 NICKEL MIN.	GOLD MIN. (0.00127)/.000050 OVER (0.00076)/.000030 NICKEL MIN.	GOLD MIN. (0.00127)/.000050 OVER (0.00076)/.000030 NICKEL MIN.	GOLD MIN. (0.0005)/.000020 OVER (0.00076)/.000030 NICKEL MIN.				GOLD MIN. (0.00076)/.000030 OVER (0.00127)/.000050 NICKEL MIN.	
E	NO. OF CIRCUITS	AE-6410-2A(501) 22-29-2021	AE-6410-2A(516) 22-29-2022	AE-6410-2K(516) 38-00-0932	AE-6410-2C(501) NOT TOOLED	AE-6410-2A(509) 38-00-7250	AE-6410-2A(509) 38-00-7251	AE-6410-4S(501) 38-00-7666				AE-6410-2A(503) 38-00-7062	
D		3 A(501) 2031	4 A(516) 2032	4 K(516) 0933	4 C(501) NOT TOOLED	4 A(509) 38-00-7251	4 A(509) 38-00-7251	4 A(509) 38-00-7666				3 A(503) 7063	
C		4 A(501) 2041	4 A(516) 2042	4 K(516) 0934	4 C(501) NOT TOOLED	4 A(509) 38-00-7251	4 A(509) 38-00-7251	4 A(509) 38-00-7666				4 A(503) 7064	
B		5 A(501) 2051	5 A(516) 2052	5 K(516) 0935	5 C(501) NOT TOOLED	5 A(509) 38-00-7251	5 A(509) 38-00-7251	5 A(509) 38-00-7666				5 A(503) 7065	
A		6 A(501) 2061	6 A(516) 2062	6 K(516) 0936	6 C(501) NOT TOOLED	6 A(509) 38-00-7251	6 A(509) 38-00-7251	6 A(509) 38-00-7666				6 A(503) 7066	
		7 A(501) 2071	7 A(516) 2072	7 K(516) 0937	7 C(501) NOT TOOLED	7 A(509) 38-00-7251	7 A(509) 38-00-7251	7 A(509) 38-00-7666				7 A(503) 7067	
		8 A(501) 2081	8 A(516) 2082	8 K(516) 0938	8 C(501) NOT TOOLED	8 A(509) 38-00-7251	8 A(509) 38-00-7251	8 A(509) 38-00-7666				8 A(503) 7068	
		9 A(501) 2091	9 A(516) 2092	9 K(516) 0939	9 C(501) NOT TOOLED	9 A(509) 38-00-7251	9 A(509) 38-00-7251	9 A(509) 38-00-7666				9 A(503) 7069	
		10 A(501) 2101	10 A(516) 2102	10 K(516) 0940	10 C(501) NOT TOOLED	10 A(509) 38-00-7251	10 A(509) 38-00-7251	10 A(509) 38-00-7666				10 A(503) 7070	
		11 A(501) 2111	11 A(516) 2112	11 K(516) 0941	11 C(501) NOT TOOLED	11 A(509) 38-00-7251	11 A(509) 38-00-7251	11 A(509) 38-00-7666				11 A(503) 7071	
		12 A(501) 2121	12 A(516) 2122	12 K(516) 0942	12 C(501) NOT TOOLED	12 A(509) 38-00-7251	12 A(509) 38-00-7251	12 A(509) 38-00-7666				12 A(503) 7072	
		13 A(501) 2131	13 A(516) 2132	13 K(516) 0943	13 C(501) NOT TOOLED	13 A(509) 38-00-7251	13 A(509) 38-00-7251	13 A(509) 38-00-7666				13 A(503) 7073	
		14 A(501) 2141	14 A(516) 2142	14 K(516) 0944	14 C(501) NOT TOOLED	14 A(509) 38-00-7251	14 A(509) 38-00-7251	14 A(509) 38-00-7666				14 A(503) 7074	
		15 A(501) 2151	15 A(516) 2152	15 K(516) 0945	15 C(501) NOT TOOLED	15 A(509) 38-00-7251	15 A(509) 38-00-7251	15 A(509) 38-00-7666				15 A(503) 7075	
		16 A(501) 2161	16 A(516) 2162	16 K(516) 0946	16 C(501) NOT TOOLED	16 A(509) 38-00-7251	16 A(509) 38-00-7251	16 A(509) 38-00-7666				16 A(503) 7076	
		17 A(501) 2171	17 A(516) 2172	17 K(516) 0947	17 C(501) NOT TOOLED	17 A(509) 38-00-7251	17 A(509) 38-00-7251	17 A(509) 38-00-7666				17 A(503) 7077	
		18 A(501) 2181	18 A(516) 2182	18 K(516) 0948	18 C(501) NOT TOOLED	18 A(509) 38-00-7251	18 A(509) 38-00-7251	18 A(509) 38-00-7666				18 A(503) 7078	
		19 A(501) 2191	19 A(516) 2192	19 K(516) 0949	19 C(501) NOT TOOLED	19 A(509) 38-00-7251	19 A(509) 38-00-7251	19 A(509) 38-00-7666				19 A(503) 7079	
		20 A(501) 2201	20 A(516) 2202	20 K(516) 0950	20 C(501) NOT TOOLED	20 A(509) 38-00-7251	20 A(509) 38-00-7251	20 A(509) 38-00-7666				20 A(503) 7080	
		21 A(501) 2211	21 A(516) 2212	21 K(516) 0951	21 C(501) NOT TOOLED	21 A(509) 38-00-7251	21 A(509) 38-00-7251	21 A(509) 38-00-7666				21 A(503) 7081	
		22 A(501) 2221	22 A(516) 2222	22 K(516) 0952	22 C(501) NOT TOOLED	22 A(509) 38-00-7251	22 A(509) 38-00-7251	22 A(509) 38-00-7666				22 A(503) 7082	
		23 A(501) 2231	23 A(516) 2232	23 K(516) 0953	23 C(501) NOT TOOLED	23 A(509) 38-00-7251	23 A(509) 38-00-7251	23 A(509) 38-00-7666				23 A(503) 7083	
		24 A(501) 2241	24 A(516) 2242	24 K(516) 0954	24 C(501) NOT TOOLED	24 A(509) 38-00-7251	24 A(509) 38-00-7251	24 A(509) 38-00-7666				24 A(503) 7084	
		25 A(501) 2251	25 A(516) 2252	25 K(516) 0955	25 C(501) NOT TOOLED	25 A(509) 38-00-7251	25 A(509) 38-00-7251	25 A(509) 38-00-7666				25 A(503) 7085	
		26 A(501) 2261	26 A(516) 2262	26 K(516) 0956	26 C(501) NOT TOOLED	26 A(509) 38-00-7251	26 A(509) 38-00-7251	26 A(509) 38-00-7666				26 A(503) 7086	
		27 A(501) 2271	27 A(516) 2272	27 K(516) 0957	27 C(501) NOT TOOLED	27 A(509) 38-00-7251	27 A(509) 38-00-7251	27 A(509) 38-00-7666				27 A(503) 7087	
		AE-6410-28A(501) 22-29-2281	AE-6410-28A(516) 22-29-2282	AE-6410-28K(516) 38-00-0958	AE-6410-28C(501) NOT TOOLED	AE-6410-28A(509) 38-00-7251	AE-6410-28A(509) 38-00-7251	AE-6410-28A(509) 38-00-7666				AE-6410-28A(503) 38-00-7062	

FOR MANUF. IN  
THE US ONLY

SEE CHART  
DAE-6410-N

FOR PREVIOUS DRAWING ISSUES SEE MRL.	AM SEE SHEET 1.	LTR REVISIONS <input type="checkbox"/> IN. <input type="checkbox"/> DIM. <input type="checkbox"/> IN. <input type="checkbox"/> DIM.	DIMENSIONS SHOWN (METRIC) INCH UNLESS OTHERWISE SPECIFIED TOLERANCES ANGULAR ± 9° INCH (METRIC) 3 PLACE # ± .00 2 PLACE # ± .01 1 PLACE # ± .05 0 PLACE # ± .05 DIMENSIONS MUST REMAIN WITHIN DIMENSIONS	DRWG BY <b>MCC</b> CHK'D BY APP'D BY SCALE	REVISE ONLY ON CAD SYSTEM	
					CAD/CAM FILE NAME SMA4103.DGN	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. & SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION
					TITLE <b>WAFFER, FRICTION LOCK, KK (2.54)/.100 FOR (0.64)/.025 SQ. PINS</b>	
PART NO. <b>SEE CHART</b>		SHEET NO. DATE <b>30F 26/9 /86</b>		SIZE <b>C</b>		



- NOTES:
- PIN SOLDERABILITY PER MOLEX SOLDERABILITY SPEC. NO. I52
  - PIN PUSH OUT FORCE (.907KG)/2 LBS MIN
  - WAFERS STACKABLE END TO END WITH (2.54)/.100 BETWEEN END PINS
  - CODE LETTER 'I' PRECEDING PART NO. DESIGNATES MANUFACTURING LOCATION IRELAND
  - THIS PART CONFORMS TO MOLEX PROD. SPEC. SPEC. NO. 10-07
  - BLACK COLOUR STRIPE RUNNING LENGHT OF WAFER IS OPTIONAL

WAFER MATERIAL:  
NYLON,94V.0

ENGINEERING NO.		AE-6410 NAG	AEX-6410-NCG	AEX-6410-NCG	AE-6410-NAG	AE-6410-NKG	AEX-6410-NAGS2	AEX-6410-NLG			
DIMENSION "D"		(7.50) .295	(5.72) .293	(5.72) .225	(7.50) .295	(9.22) REF.	(7.50) .295	(7.50) .295			
DIMENSION "C"		(2.766-1G) (14.22)/.560	(2.766-7C) (14.22)/.560	(2.766-5C) (11.10)/.560	(2.766-(5.16)) (11.10)/.437	(2.766-(5.16)) (15.88)/.625	(2.766-1G) (14.22)/.560	(2.766-41C) (18.69)/.736			
NO. OF CCT'S	DIM. "A"	DIM. "B"	PART NO.			PART NO.					
2	(2.54) .100	(5.08) .200	22-29-202I	NOT TOOLED	NOT TOOLED	I	22-29-2022	I	38-00-0932	NOT TOOLED	NOT TOOLED
3	(5.08) .200	(7.62) .300	22-29-203I				22-29-2032		38-00-0933		
4	(7.62) .300	(10.16) .400	22-29-204I				22-29-2042		38-00-0934		
5	(10.16) .400	(12.70) .500	22-29-205I				22-29-2052		38-00-0935		
6	(12.70) .500	(15.24) .600	22-29-206I				22-29-2062		38-00-0936		
7	(15.24) .600	(17.78) .700	22-29-207I				22-29-2072		38-00-0937		
8	(17.78) .700	(20.32) .800	22-29-208I				22-29-2082		38-00-0938		
9	(20.32) .800	(22.86) .900	22-29-209I				22-29-2092		38-00-0939		
10	(22.86) .900	(25.40) 1.000	22-29-210I				22-29-2102		38-00-0940		
11	(25.40) 1.000	(27.94) 1.100	22-29-211I				22-29-2112		38-00-0941		
12	(27.94) 1.100	(30.49) 1.200	22-29-212I				22-29-2122		38-00-0942		
13	(30.49) 1.200	(33.02) 1.300	22-29-213I				22-29-2132		38-00-0943		
14	(33.02) 1.300	(35.56) 1.400	22-29-214I				22-29-2142		38-00-0944		
15	(35.56) 1.400	(38.10) 1.500	22-29-215I				22-29-2152		38-00-0945		
16	(38.10) 1.500	(40.64) 1.600	22-29-216I				22-29-2162		38-00-0946		
17	(40.64) 1.600	(43.18) 1.700	22-29-217I				22-29-2172		38-00-0947		
18	(43.18) 1.700	(45.72) 1.800	22-29-218I				22-29-2182		38-00-0948		
19	(45.72) 1.800	(48.26) 1.900	22-29-219I				22-29-2192		38-00-0949		
20	(48.26) 1.900	(50.80) 2.000	22-29-220I				22-29-2202		38-00-0950		
21	(50.80) 2.000	(53.34) 2.100	22-29-221I				22-29-2212		38-00-0951		
22	(53.34) 2.100	(55.88) 2.200	22-29-222I				22-29-2222		38-00-0952		
23	(55.88) 2.200	(58.42) 2.300	22-29-223I				22-29-2232		38-00-0953		
24	(58.42) 2.300	(60.96) 2.400	22-29-224I				22-29-2242		38-00-0954		
25	(60.96) 2.400	(63.50) 2.500	22-29-225I				22-29-2252		38-00-0955		
26	(63.50) 2.500	(66.04) 2.600	22-29-226I				22-29-2262		38-00-0956		
27	(66.04) 2.600	(68.58) 2.700	22-29-227I				22-29-2272		38-00-0957		
28	(68.58) 2.700	(71.12) 2.800	22-29-228I	NOT TOOLED	NOT TOOLED	I	22-29-2282	I	38-00-0958	NOT TOOLED	NOT TOOLED
DIMENSION "E"		(3.56) REF. .140	(3.10) REF. .122	(2.21) REF. .087	(3.56) REF. .140	3.48 ± 0.25 .137 ± 0.10	(3.56) REF. .140	(8.02) REF. .316			
PLATING		GOLD PLATE (5UM)/(7.5UM) -2UM/.3UM OVER (7.6UM)/(15UM) -3UM/.6UM *NICKEL	GOLD PLATE (5UM)/(7.5UM) -2UM/.3UM OVER (7.6UM)/(15UM) -3UM/.6UM *NICKEL	GOLD PLATE (5UM)/(7.5UM) -2UM/.3UM OVER (7.6UM)/(15UM) -3UM/.6UM *NICKEL	GOLD PLATE (2.5UM)/(7.5UM) -1UM/.3UM OVER (7.6UM)/(15UM) -3UM/.6UM *NICKEL	GOLD PLATE (2.5UM)/(7.5UM) -1UM/.3UM OVER (7.6UM)/(15UM) -3UM/.6UM *NICKEL	GOLD PLATE (1.2UM)/(1.5UM) -1UM/.3UM OVER (2.5UM)/(3UM) -1UM/.3UM *NICKEL	GOLD PLATE (5UM)/(7.5UM) -2UM/.3UM OVER (7.6UM)/(15UM) -3UM/.6UM *NICKEL			

REDRAWN ON CAD EC NO. E2000-821 DRWNO.COSTEL 98/02/09

QUALITY SYMBOLS: MAJOR, CRITICAL

GENERAL TOLERANCES: (UNLESS SPECIFIED)

mm		INCH
4 PLACES	±0.010	±.
3 PLACES	±0.014	±.025
2 PLACES	±.	±.035
1 PLACE	±0.	±.

SCALE: 5:1 DESIGN UNITS:  mm  INCH

DRAWN BY & DATE: 0.COSTEL 98/02/09

CHECKED BY & DATE: PWHITE 98/09/25

APPROVED BY & DATE: MWILHITE 98/09/25

CAD FILENAME: S6410X1.DGN MATERIAL NO.: SEE CHART DRAWING NO.: SDAE-6410 -N\*G\* SHEET NO.: 1 OF 1

TITLE: WAFER FRACTION LOCK, KK (2.54)/.100 FOR (.64)/.025 SQ. PINS

MOLEX INCORPORATED

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PART NO. SEE CHART  
DWG. NO. SDAE-6410-N\*G\*