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JAMECO[®]
ELECTRONICS

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Jameco Part Number 1300136

FEATURES AND SPECIFICATIONS

Features and Benefits

- Box-type spring contact for high normal force
- Locking tang secures terminal in housing

Reference Information

Product Specification: PS-43045/PS-43650

Packaging: Bag or reel

UL File No.: E29179

CSA File No.: LR19980

TUV License No.: R95107

Use With: [43020](#) and [43640](#) plugs

Designed In: Millimeters

Electrical

Voltage: 250V

Current: 5.0A max.

Contact Resistance: 10mΩ max.

Mechanical

Contact Insertion Force: 1.5kgf max. (3.30 lb)

Contact Retention to Housing: 2.5kgf min. (5.50 lb)

Crimping Pull-Out Force:

Wire Gauge	Kgf min. (lb)
20	6.0 (13.2)
22	4.5 (9.9)
24	3.6 (7.9)
26	2.7 (5.9)
28	1.8 (3.9)
30	1.4 (3.0)

Physical

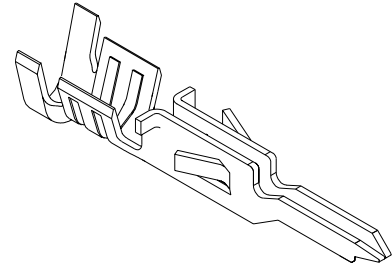
Contact: Phosphor Bronze

Plating: Tin or Gold

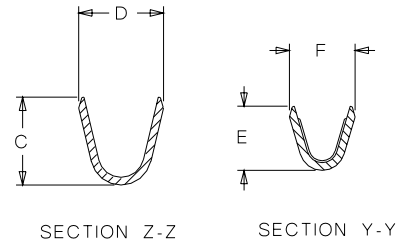
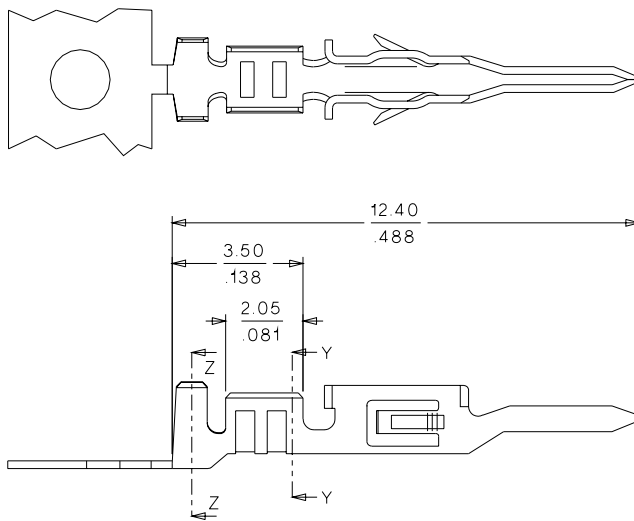


3.00mm (.118") Pitch Micro-Fit 3.0™ Terminal

43031 Male



CATALOG DRAWING (FOR REFERENCE ONLY)

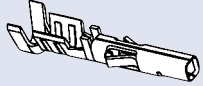


ORDERING INFORMATION AND DIMENSIONS

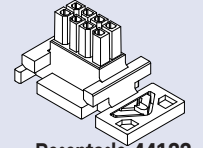
Wire Size AWG	Plating	Order No.		Dimension			
		Reel	Bag	C	D	E	F
20-24	Tin	• 43031-0001	• 43031-0007	2.29 (.090)	2.54 (.100)	1.91 (.075)	2.08 (.082)
26-30	Tin	• 43031-0004	• 43031-0010	1.91 (.075)	2.10 (.083)	1.47 (.058)	1.65 (.065)
20-24	15μ" Gold	• 43031-0002	• 43031-0008	2.29 (.090)	2.54 (.100)	1.91 (.075)	2.08 (.082)
26-30	15μ" Gold	• 43031-0005	• 43031-0011	1.91 (.075)	2.10 (.083)	1.47 (.058)	1.65 (.065)
20-24	30μ" Gold	• 43031-0003	• 43031-0009	2.29 (.090)	2.54 (.100)	1.91 (.075)	2.08 (.082)
26-30	30μ" Gold	• 43031-0006	• 43031-0012	1.91 (.075)	2.10 (.083)	1.47 (.058)	1.65 (.065)

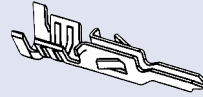
• US Standard Product, available through Molex franchised distributors

Wire-to-Wire BMI Connector System

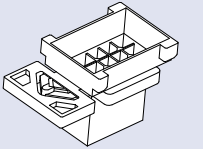
**Female Terminal 43030**

and

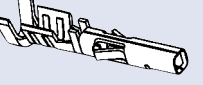
**Receptacle 44133**

Mate to: **Male Terminal 43031**

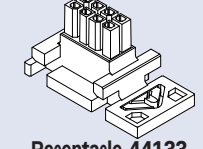
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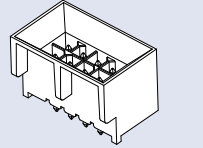
**Plug 44300**

Wire-to-Board BMI Connector System

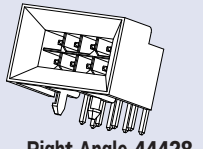
**Female Terminal 43030**

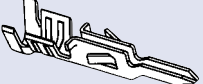
and

**Receptacle 44133**

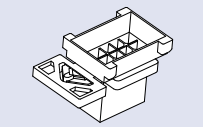
Mate to: **Vertical 44432 / 45280**

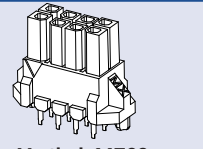
or

**Right Angle 44428**

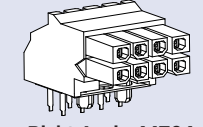
**Male Terminal 43031**

and

**Plug 44300**

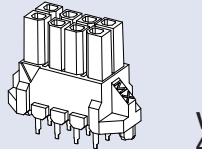
Mate to: **Vertical 44769**

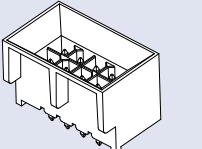
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**Right Angle 44764**

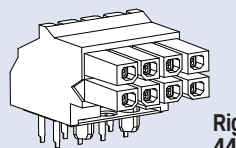
Board-to-Board BMI Connector System

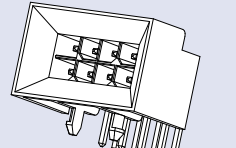
Horizontal Boards

**Vertical 44769**

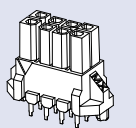
Mate to: **Vertical 44432 / 45280**

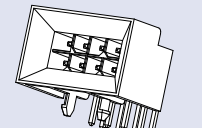
Coplanar Boards

**Right Angle 44764**

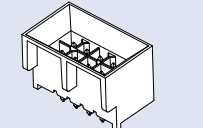
Mate to: **Right Angle 44428**

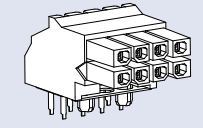
Right Angle Boards

**Vertical 44769**

Mate to: **Right Angle 44428**

OR

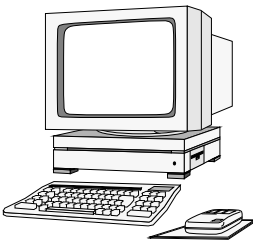
**Vertical 44432 / 45280**

Mate to: **Right Angle 44764**

MICRO-FIT 3.0 FAMILY APPLICATION EXAMPLES



- Personal Computers
- Mainframe Computers
- Handheld Computers
- Notebook PCs
- Fan Tray Assemblies
- Power Supplies



- Work Stations
- Satellites
- Cellular Telephones
- AC Power Line Cords
- Coffeemakers
- Fax Machines



- Vending Machines
- Pin Ball Machines
- Slot Machines
- Exercise Equipment
- Backplane Applications

Americas Headquarters
Lisle, Illinois 60532 U.S.A.
Tel: 1-800-78MOLEX
Fax: 630-969-1352

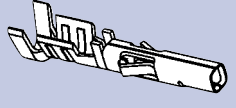
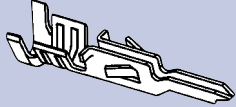
Far East North Headquarters
Yamato, Kanagawa, Japan
Tel: 81-462-65-2324
Fax: 81-462-65-2366

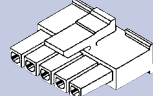
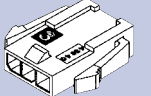
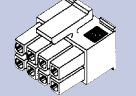
Far East South Headquarters
Jurong, Singapore
Tel: 65-6-268-6868
Fax: 65-6-265-2985

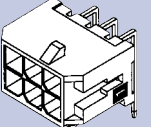
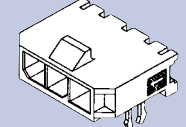
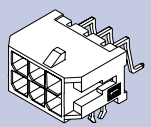
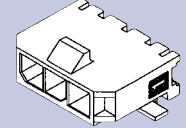
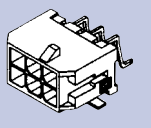
European Headquarters
Munich, Germany
Tel: 49-89-413092-0
Fax: 49-89-401527

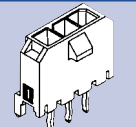
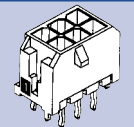
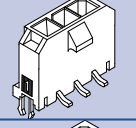
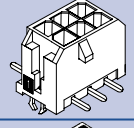
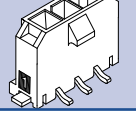
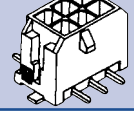
Corporate Headquarters
2222 Wellington Ct.
Lisle, IL 60532 U.S.A.
Tel: 630-969-4550
Fax: 630-969-1352

- Fully isolated contacts
 - Full polarization
 - Positive locks
- Up to 5.0A per circuit
 - 250V AC rating
 - UL 94V-0, CSA, TUV approved

	Description	Order No.		Wire Gauge	Plating
		Reel	Bag		
	Female Terminal	43030-0001	43030-0007	20 - 24	Tin
		43030-0004	43030-0010	26 - 30	
		43030-0002	43030-0008	20 - 24	15µ" Gold
		43030-0005	43030-0011	26 - 30	
		43030-0003	43030-0009	20 - 24	30µ" Gold
		43030-0006	43030-0012	26 - 30	
	Male Terminal	43031-0001	43031-0007	20 - 24	Tin
		43031-0004	43031-0010	26 - 30	
		43031-0002	43031-0008	20 - 24	15µ" Gold
		43031-0005	43031-0011	26 - 30	
		43031-0003	43031-0009	20 - 24	30µ" Gold
		43031-0006	43031-0012	26 - 30	

Description		Order No.	Material	Description		Order No.	Material
Receptacles (Use with 43030 terminals)				Plugs (Use with 43031 terminals)			
	Single Row	43645-XX00	Black Polyester		Single Row, Free Hanging	43640-XX01	Black Polyester
					Single Row, Panel Mount	43640-XX00	
	Dual Row	43025-XX00	Black Polyester		Dual Row, Free Hanging	43020-XX01	Black Polyester
					Dual Row, Panel Mount	43020-XX00	

Single Row	Description	Order No.	Plating	Material	Dual Row	Description	Order No.	Plating	Material
	Surface Mount Compatible with Pegs	43650-XX00	Tin	High Temperature, Black LCP		Surface Mount Compatible with Pegs	43045-XX00	Tin	High Temperature, Black LCP
		43650-XX01	15µ" Gold				43045-XX01	15µ" Gold	
		43650-XX02	30µ" Gold				43045-XX02	30µ" Gold	
	SMT with Solderable Retention Clip	43650-XX09	Tin	High Temperature, Black LCP		SMT with Solderable Retention Clip	43045-XX06	Tin	High Temperature, Black LCP
		43650-XX10	15µ" Gold				43045-XX07	15µ" Gold	
		43650-XX11	30µ" Gold				43045-XX08	30µ" Gold	
	SMT with Solder Tabs	43650-XX12	Tin	High Temperature, Black LCP		SMT with Solder Tabs	43045-XX09	Tin	High Temperature, Black LCP
		43650-XX13	15µ" Gold				43045-XX10	15µ" Gold	
		43650-XX14	30µ" Gold				43045-XX11	30µ" Gold	

Single Row	Description	Order No.	Plating	Material	Dual Row	Description	Order No.	Plating	Material
	Surface Mount Compatible with Pegs	43650-XX15	Tin	High Temperature, Black LCP		Surface Mount Compatible with Pegs	43045-XX12	Tin	High Temperature, Black LCP
		43650-XX16	15µ" Gold				43045-XX13	15µ" Gold	
		43650-XX17	30µ" Gold				43045-XX14	30µ" Gold	
	SMT with Solderable Retention Clip	43650-XX21	Tin	High Temperature, Black LCP		SMT with Solderable Retention Clip	43045-XX15	Tin	High Temperature, Black LCP
		43650-XX22	15µ" Gold				43045-XX16	15µ" Gold	
		43650-XX23	30µ" Gold				43045-XX17	30µ" Gold	
	SMT with Solder Tabs	43650-XX24	Tin	High Temperature, Black LCP		SMT with Solder Tabs	43045-XX18	Tin	High Temperature, Black LCP
		43650-XX25	15µ" Gold				43045-XX19	15µ" Gold	
		43650-XX26	30µ" Gold				43045-XX20	30µ" Gold	

Replace XX with number of circuits, 02 to 24

MICRO-FIT 3.0

molex® 3.00mm (.118") Pitch
Micro-Fit 3.0™ Family

The Micro-Fit 3.0 is a unique connector system that incorporates many of the features previously found only on large power connectors. These connectors are the perfect choice when you need compact connectors that can carry up to 5.0A of current. Micro-Fit 3.0 is available in circuit sizes 2 to 24 for wire-to-board and wire-to-wire applications. With more than 500 part numbers and still growing, this expansive product line offers through hole and SMT options. SMT versions are available in tape and reel packaging for robotic placement on the PCB.

Wire-to-Wire Single Row Connector System



Wire-to-Board Single Row Connector System



Wire-to-Wire Dual Row Connector System



Wire-to-Board Dual Row Connector System



MICRO-FIT 3.0, CPI AND MICRO-FIT 3.0, BMI CPI

The Micro-Fit 3.0, CPI (Compliant Pin Interface) and Micro-Fit 3.0, BMI CPI (Blind Mate Version with Compliant Pin Interface) are vertical header product extensions featuring press-fit PC tails.

- CPI style (Press-Fit) pins require no soldering to the PCB
- 2.36mm (.093") minimum PCB thickness

Standard CPI

	Description	Order No.	Plating	Material
	Standard Vertical CPI	44914-XX01	Tin	High Temperature, Black LCP
		44914-XX02	12μ" Gold	
		44914-XX03	30μ" Gold	

BMI CPI

	Blind Mate Vertical CPI	45280-XX01	Tin	High Temperature, Black Glass-Filled Nylon
		45280-XX02	12μ" Gold	
		45280-XX03	30μ" Gold	

MICRO-FIT 3.0, BMI

molex® 3.00mm (.118") Pitch
Micro-Fit 3.0™ Family

Micro-Fit 3.0, BMI™ (Blind Mate Interface) features an innovative panel mounting design that securely locks the plugs and receptacles in place in the panel cutout, while allowing for removal. The plugs and headers feature a funnel entry to guide the mating receptacle or receptacle header into place. Micro-Fit 3.0, BMI housings and headers mate exclusively with the BMI components shown here.

- Full polarization
- Fully isolated contacts
- Dual row
- Sizes 4 to 24 circuits
- Up to 5.0A per circuit
- Up to 1500V AC dielectric withstand voltage
- UL 94V-0, CSA, TUV approved

Crimp Housings

- Use standard Micro-Fit terminals
- Receptacle floats in panel cutout up to 1.27mm (.050") in any direction
- Can be utilized with BMI board-to-board connectors
- Panel thickness: 1.57mm (.062")

	Description	Order No.	Material
	Panel Mount Receptacle	44133-XX00	Black, Polyester
	Panel Mount Plug	44300-XX00	Black, Polyester

Headers

- Can be utilized with BMI wire-to-wire connectors
- 1.57mm (.062") PCB thickness
- Surface mount compatible (SMC)
- Black, glass filled nylon housings

Right Angle

	Description	Order No.	Plating		Description	Order No.	Plating
	Right Angle Header with Pegs	44428-XX01	Tin		Right Angle Receptacle	44764-XX01	Tin
		44428-XX02	15μ" Gold			44764-XX02	15μ" Gold
		44428-XX03	30μ" Gold			44764-XX03	30μ" Gold

Vertical

	Vertical Header with Pegs	44432-XX01	Tin		Vertical Receptacle	44769-XX01	Tin
		44432-XX02	15μ" Gold			44769-XX02	15μ" Gold
		44432-XX03	30μ" Gold			44769-XX03	30μ" Gold

Replace XX with number of circuits, 04 to 24

13 12 11 10 9 8 7 6 5 4 3 2 1

J

I

H

G

F

E

D

C

B

A

J

I

H

G

F

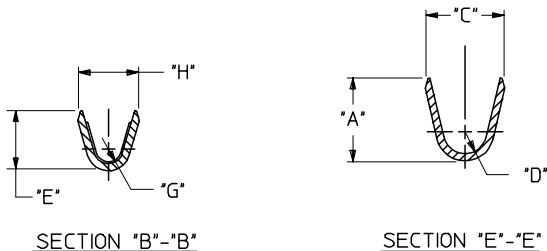
E

D

C

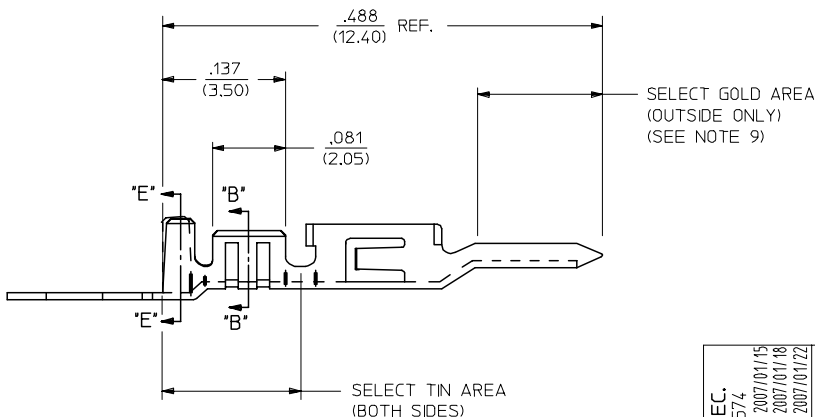
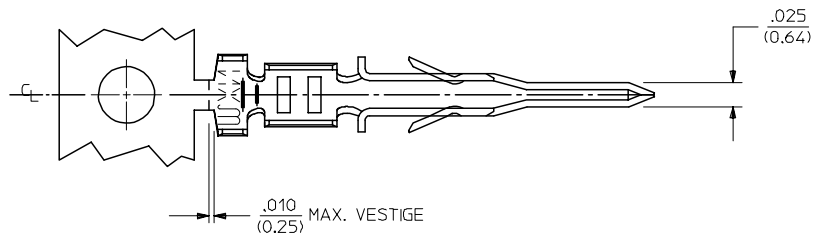
B

A



AWG:	MAX. INSULATION
20-24	.073/(1.85)
26-30	.050/(1.27)

ITEM NUMBER	PLATING OPTION	WIRE SIZE	ASSEMBLY OPTION	'A' $\frac{+.016}{(\pm 0.41)}$	'C' $\frac{+.012}{(\pm 0.30)}$	'D' $\frac{+.005}{(\pm 0.13)}$	'E' $\frac{+.016}{(\pm 0.41)}$	'G' $\frac{+.005}{(\pm 0.13)}$	'H' $\frac{+.012}{(\pm 0.30)}$
43031-0001	A	20-24	CHAIN	.090/(2.29)	.100/(2.54)	.030/(0.76) R.	.075/(1.91)	.025/(0.64) R.	.082/(2.08)
43031-0002	B	20-24	CHAIN	.090/(2.29)	.100/(2.54)	.030/(0.76) R.	.075/(1.91)	.025/(0.64) R.	.082/(2.08)
43031-0003	C	20-24	CHAIN	.090/(2.29)	.100/(2.54)	.030/(0.76) R.	.075/(1.91)	.025/(0.64) R.	.082/(2.08)
43031-0004	A	26-30	CHAIN	.075/(1.91)	.083/(2.10)	.025/(0.64) R.	.058/(1.47)	.020/(0.51) R.	.065/(1.65)
43031-0005	B	26-30	CHAIN	.075/(1.91)	.083/(2.10)	.025/(0.64) R.	.058/(1.47)	.020/(0.51) R.	.065/(1.65)
43031-0006	C	26-30	CHAIN	.075/(1.91)	.083/(2.10)	.025/(0.64) R.	.058/(1.47)	.020/(0.51) R.	.065/(1.65)
43031-0007	A	20-24	LOOSE	.090/(2.29)	.100/(2.54)	.030/(0.76) R.	.075/(1.91)	.025/(0.64) R.	.082/(2.08)
43031-0008	B	20-24	LOOSE	.090/(2.29)	.100/(2.54)	.030/(0.76) R.	.075/(1.91)	.025/(0.64) R.	.082/(2.08)
43031-0009	C	20-24	LOOSE	.090/(2.29)	.100/(2.54)	.030/(0.76) R.	.075/(1.91)	.025/(0.64) R.	.082/(2.08)
43031-0010	A	26-30	LOOSE	.075/(1.91)	.083/(2.10)	.025/(0.64) R.	.058/(1.47)	.020/(0.51) R.	.065/(1.65)
43031-0011	B	26-30	LOOSE	.075/(1.91)	.083/(2.10)	.025/(0.64) R.	.058/(1.47)	.020/(0.51) R.	.065/(1.65)
43031-0012	C	26-30	LOOSE	.075/(1.91)	.083/(2.10)	.025/(0.64) R.	.058/(1.47)	.020/(0.51) R.	.065/(1.65)



NOTES:

- 1) MATERIAL : PHOSPHOR BRONZE ALLOY
- 2) TERMINAL PLATING:
"A"= HOT TIN DIP: .000040/(0.00102) MIN.
"B"= .000015/(0.00038) MIN. SELECT GOLD
.000100/(0.002543) MIN. SELECT TIN
OVER .000050/(0.00127) MIN. NICKEL
"C"= .000030/(0.00076) MIN. SELECT GOLD
.000100/(0.002543) MIN. SELECT TIN
OVER .000050/(0.00127) MIN. NICKEL
* MATERIAL NUMBERS WITH SELECT PLATING ARE POST-PLATED AFTER FORMING.
- 3) PRODUCT SPECIFICATION : PS-43045, PS-43650, PS-44300-001
- 4) PACKAGING SPECIFICATION: PK-43031-001
- 5) TERMINAL FOR USE IN MICRO FIT PLUG 43020-****, 43640-****, AND 44300-****.
- 6) FOR TERMINAL ORIENTATION IN PLUG SEE DRAWING SDA-43020-**** OR SD-43640-****.
- 7) THIS TERMINAL IS DESIGNED IN METRIC.
- 8) THE PRIMARY SHIPPING CARTON WILL BE LABELED "COMPLIANT TO RoHS DIRECTIVE 2002/95/EC AND ELV ANNEX II OF DIRECTIVE 2000/53/EC." CARTONS WITHOUT THIS LABEL MAY CONTAIN PRODUCT WITH TIN/LEAD IN THE PC TAIL AREA.
- 9) SOME GOLD MAY BE PRESENT ON INSIDE SURFACE.

PACKAGING SPEC. EC NO: UCP2007-1574 DRAWN:KIPPER 2007/01/15 CHKD:SSOUSEK 2007/01/18 APPR:FSM TH 2007/01/22	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) mmINCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± .014 2 PLACES ± 0.25 ± .010 1 PLACE ± 0.35 ± --- ANGULAR ±1/2° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DIMENSION STYLE IN/MM		SCALE	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
			DRAWN BY MUELLER	DATE 2002/08/13	TITLE MICRO-FIT (3.0) MALE TERMINAL MOLEX INCORPORATED SD-43031-****		
			CHECKED BY MUELLER	DATE 2002/08/13			
			APPROVED BY MARGULIS	DATE 2002/08/13			
			MATERIAL NO.			DOCUMENT NO.	SHEET NO.
			SEE CHART			1 OF 1	
			THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				
			SIZE				

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