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Jameco Part Number 462504

## FEATURES AND SPECIFICATIONS

### Features and Benefits

- Meets the need for a connector system rated at greater than the industry-standard 12.0A per circuit. The HCS-125 is an enhanced version of Molex's proven .125" system
- Positive locks prevent accidental unmating
- Fully isolated terminals protect terminals
- Pull tabs
- 1, 2, 3 and 4 circuit housings

### Reference Information

Packaging: Bag  
 UL File No.: E29179  
 CSA File No.: LR19980  
 TUV License No.: R9151436  
 Use With: .125" terminals  
 Designed In: Inches

### Electrical

Voltage: 600V  
 Current: 20.0A  
 Dielectric Withstanding Voltage: 1500V AC rms

### Mechanical

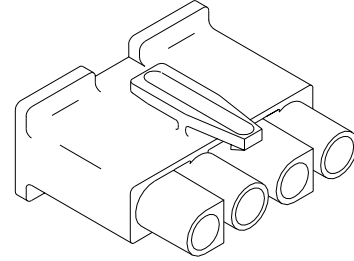
Contact Retention to Housing: 20 lb min.

### Physical

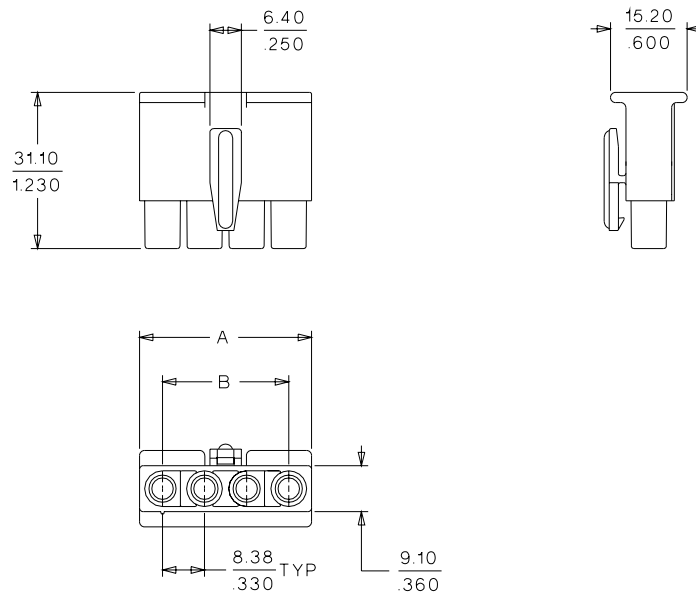
Housing: Nylon, UL 94V-2  
 Operating Temperature: -40 to +105°C  
 Wire Accommodation: 10 to 18 AWG

# molex® 8.38mm (.330") Pitch HCS-125 Pin and Socket Receptacle

## 42179 Single Row



## CATALOG DRAWING (FOR REFERENCE ONLY)



## ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
1	03-12-1016	9.10 (.360)	
2	03-12-1026	17.50 (.690)	8.38 (.330)
3	03-12-1036	25.90 (1.020)	16.76 (.660)
4	03-12-1046	34.30 (1.350)	25.14 (.990)



PRELIMINARY PRODUCT SPECIFICATION  
42179 PLUG AND RECEPTACLE, .125 DIA TERMINALS

1.0 Scope:  
This specification covers the .125 inch (3.18 mm) diameter tin plated connector series terminated to 10 to 18 AWG wire using crimp technology.

2.0 Product Description:  
2.1 Product Name and Engineering Number

Product Name	Engineering Number
housing, plug and receptacle	42179
terminal, socket, 10 - 14 AWG	1901
terminal, pin, 10 - 14 AWG	1900
terminal, socket, 16 - 18 AWG	2047
terminal, pin, 16 - 18 AWG	2046

2.2 Materials, Platings and Markings  
See the appropriate Sales Drawings for information on materials, platings and markings

3.0 Applicable Documents and Specifications:  
See the Sales Drawings and the other sections of this Specification for the necessary referenced Documents and Specifications.

4.0 Ratings:

4.1 Voltage: 600 Volts

4.2 Current rating in amperes per circuit:

AWG	Circuit Size		
	1,2,3,4	6,8	10,12
10 - 14	20	TBD	TBD
16 - 18	12	TBD	TBD

4.3 Temperature: Operating - 40 C to + 105 C  
Nonoperating - 40 C to + 125 C

DRAWING NO. PSX42179

DRAWING NO. PSX42179

REV.	1	1	1	1	1
SHT.	1	2	3	4	5

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PRELIMINARY PRODUCT SPECIFICATION  
42179 PLUG AND RECEPTACLE, .125 DIA TERMINALS

5.0 Performance Specifications  
5.1 Electrical Performance

ITEM	TEST CONDITION	REQUIREMENT
Contact Resistance [Low Level]	Mate connectors with a maximum voltage of 20 mV and a current of 10 mA	10 milliohms Maximum
Insulation Resistance	Mate connectors with a voltage of 500 VDC between adjacent terminals and between terminals to ground	1000 Megohms Minimum
Dielectric Strength	Mate connectors with a voltage of 2200 VAC for 1 minute between adjacent terminals and between terminals and ground	No Breakdown

5.2 Mechanical Performance

ITEM	TEST CONDITION	REQUIREMENT
Terminal Engagement and Dis-engagement	Insert and withdraw terminals at a rate of 1 +/- 1/4 inch per minute (25 +/- 3mm per minute)	Avg Engagement 5.75 lbf (2.6 kgf) Avg Dis-engagement 3.4 lbf (1.53 kgf)
Retention Force in Housing	Axial pull out force on the terminal in the housing at a 1 +/- 1/4 inch per minute (25 +/- 3mm per minute)	30.0 lbf (13.6 kgf) Minimum
Wire Pullout Force (Axial)	Apply an axial pullout force on the wire at a rate of 1 +/- 1/4 inch per minute (25 +/- 3 mm per minute)	AWG Pullout Force 10 78 lbf(35.4 kgf) 12 70 lbf(31.7 kgf) 14 50 lbf(22.7 kgf) 16 45 lbf(20.4 kgf) 18 30 lbf(13.6 kgf)

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PRELIMINARY PRODUCT SPECIFICATION  
42179 PLUG AND RECEPTACLE, .125 DIA TERMINALS

5.2 Mechanical Performance (continued)

ITEM	TEST CONDITION	REQUIREMENT
Terminal Insertion Force (Axial)	Apply an axial insertion force on the terminal at a rate of 1 +/- 1/4 inch per minute (25 +/- mm per minute)	9.25 lbf (4.2 kgf)Max
Durability	Mate connectors up to 25 cycles at a maximum rate of 10 cycles per minute	20 milliohm Max change from Initial
Vibration	Amplitude: .060" (1.5 mm) peak to peak Sweep: 10-55-10 Hertz in one minute Duration: 2 hours in each X-Y-Z axis	Appearance: No Damage Contact Resistance: 20 milliohm Maximum change from Initial Discontinuity: 1 micro second Maximum
Mechanical Shock	50 G's with three shocks in each X-Y-Z axis	Appearance: No Damage Contact Resistance: 20 milliohm Maximum change from Initial Discontinuity: 1 micro second Maximum

5.3 Environmental Performance

ITEM	TEST CONDITION	REQUIREMENT
Thermal Shock	Mate connectors exposed for 5 cycles of: Temperature      Duration -55 +0/-3 C      30 minutes +25 +/- 10 C      5 minutes Max +105 +3/-0 C      30 minutes +25 +/- 10 C      5 minutes Max	Appearance: No Damage Contact Resistance: 20 milliohm Maximum change from Initial
Thermal Aging	Mate connectors exposed for 96 hours at 105 +/- 2 C	Appearance: No Damage Contact Resistance: 20 milliohm Maximum change from Initial

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# MOLEX INCORPORATED

LITTLE ROCK, ILL.

60532

U.S.A.

## PRELIMINARY PRODUCT SPECIFICATION 42179 PLUG AND RECEPTACLE, .125 DIA TERMINALS

### 5.3 Environmental Performance (continued)

ITEM	TEST CONDITION	REQUIREMENT
Humidity Steady State	Mate connectors and expose to a Temperature of 65 +/- 2 C with a Relative Humidity of 90 to 95% for 96 hours	Appearance: No Damage Contact Resistance: 20 milliohm Maximum change from Initial
Temperature Rise	Mate the connectors and measure the contact temperature at the rated current load	Maximum Temperature of the terminal of 30 C above ambient

### 6.0 Packaging

Parts shall be packaged to protect against damage during handling, transit, and storage. No Styrofoam shall be used in any packaging that comes in direct contact with the connectors.

### 7.0 Gages and Fixtures

### 8.0 Other Information

#### 8.1 Agency Approval and Listings

UL File # E29179  
CSA File # 19980  
VDE File # Applied For

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 LISLE, ILL. 60532 U.S.A.

PRELIMINARY PRODUCT SPECIFICATION  
 42179 PLUG AND RECEPTACLE, .125 DIA TERMINALS

REV.	DESCRIPTION	DATE
1	Preliminary release. ERO #30476	10/3/90 <i>pp</i>

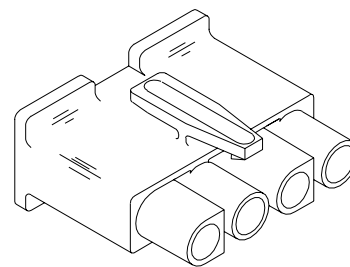
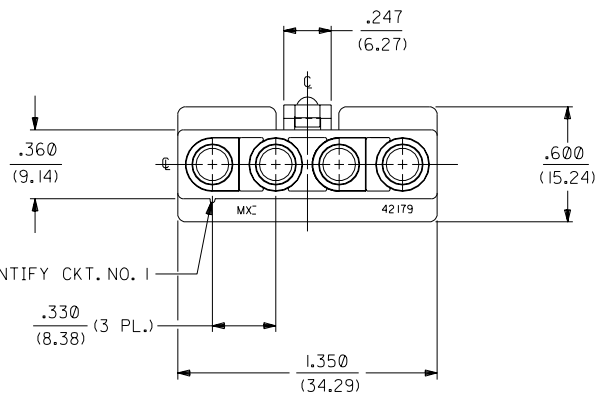
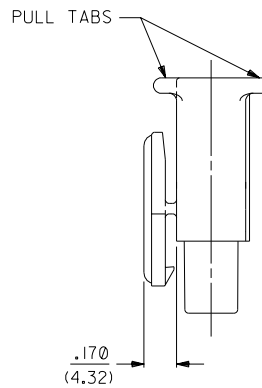
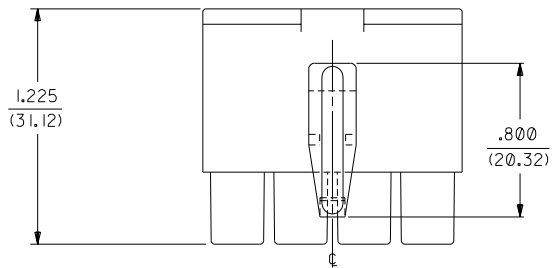
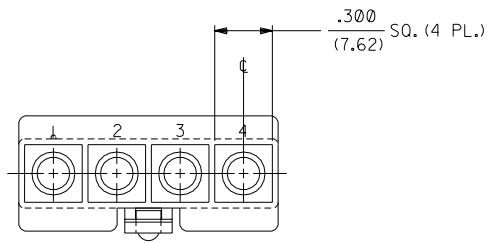
DRAWING NO. PSX-42179

DRAWING NO. PSX-42179

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SHT.	5
REV.	1

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RECEPTACLE

HI	REV -P2 OPTION UCR #2002-0773 3-20-02 BW
H	ADD PLUG OPTION UCR #2002-0715 2-25-02 RW
G	REVISED UCR1999-0301 WANG 98-11-10
F2	REVISED UCR1998-0128 WANG 98-04-08
F1	ADD -4P IRD W/EDP ECR U3 0034 GAC 1/8/93 RW
F	DEL 94V-0 MAT'L ECR U2-1699 AFC 92-11-20 RW
E	REVISE PER ECR U2 0211 GAC 2/10/92 RW
D	REVISED PER ECR #U00189 7-5-90 TRM
C	REVISED LATCH ECR #U90011 KBW 03-31-89 RW
B	REV. PICTORIALLY ECR U8 2272 GEP 12-15-88 RW
A	ADDED OPTIONS ERO 27336 KBW 10-10-88 RW
I	*X REL PER ERO 27234 GEP 9-21-88 RW

3	HI
2	H
1	HI

DIMENSIONS SHOWN (METRIC) INCH UNLESS OTHERWISE SPECIFIED TOLERANCES: ANGULAR ± .000°		▽ = 0    ▼ = 0    REVISE ONLY ON CAD SYSTEM	
INCH    METRIC		TITLE	
3 PLACE ± .007	---	.125/(3.17) HOUSING, PLUG AND RECEPTACLE, 4 CKT., .330/(8.38) CTRS.	
2 PLACE ± .010	± 0.18	MOLEX INCORPORATED	
1 PLACE ---	± 0.25	LITSE,ILL.    60532    SHEET NO.    DATE	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		U.S.A.    1 OF 3    9/21/88	
DRWG. BY    GEP    CHK'D. BY    RW		PART NO.    DRWG. NO.	
APP'D. BY    RAS    SCALE    2 : 1		SEE CHART    SD-42179-4*	
FILE NAME    S421794X1		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	
DCN		DIV.    SIZE	
		CP    C	

42179



PLUG	
PART NO.	ENG. NO.
03-12-2046	42179-4PI
03-12-2045	42179-4P
03-12-7042	42179-4PYW
03-12-7043	42179-4PIYW
03-12-7040	42179-4PBK
03-12-7041	42179-4PIBK
03-12-7044	42179-4PIRD
03-12-7045	42179-4P2

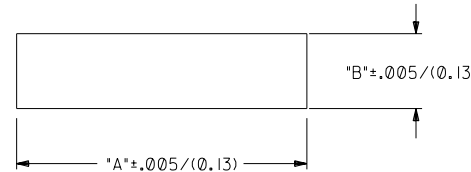
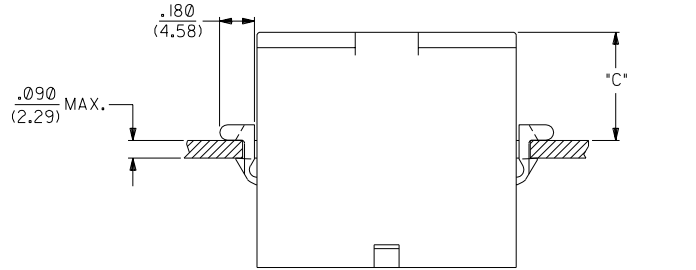
RECEPTACLE	
PART NO.	ENG. NO.
03-12-1046	42179-4RI
03-12-6040	42179-4RIBK
03-12-6041	42179-4RIYW

LEGEND:

42179-4\*\*\*

CIRCUIT SIZE: \_\_\_\_\_  
 HOUSING TYPE: \_\_\_\_\_  
 P = PLUG  
 R = RECEPTACLE  
 FEATURE OPTIONS: \_\_\_\_\_  
 BLANK = WITH MOUNTING EARS (PLUG ONLY)  
 1 = WITHOUT MOUNTING EARS  
 2 = WITH MOUNTING EARS (PLUG ONLY);  
 WITHOUT LOCKING RAMP

COLOR: \_\_\_\_\_  
 BLANK = 94V-2: TRANSLUCENT NATURAL COLOR  
 AM=AMBER BK=BLACK BU=BLUE  
 BN=BROWN GY=GRAY GN=GREEN  
 OR=ORANGE RD=RED YW=YELLOW



RECOMMENDED PANEL OPENING

HOUSING	DIM. "A"	DIM. "B"	DIM. "C"
PLUG	1.511/(38.38)	.440/(11.18)	.57/(14.5)

NOTES:

1. MATERIAL: NYLON (PA), UL94V-2, COLOR-NATURAL (TRANSLUCENT)
2. FINISH: NONE
3. PRODUCT SPECIFICATION: NONE
4. PART ACCEPTS A MAXIMUM .250/(6.35) INSULATION DIAMETER WIRE.
5. FOR USE WITH ALL MOLEX .125/(3.17) DIAMETER SERIES TERMINALS EXCEPT THE I219/I220 SERIES.

REV.	BY	DATE	DESCRIPTION
F2			SEE SHEET I
F1			SEE SHEET I
F			SEE SHEET I
D			SEE SHEET I
B			SEE SHEET I
HI			SEE SHEET I
H			SEE SHEET I
LTR.			REVISIONS

DRWG. BY: GEP	CHK'D. BY: RW
APP'D. BY: RAS	SCALE: 2 : 1

DIMENSIONS SHOWN (METRIC) INCH  
 UNLESS OTHERWISE SPECIFIED  
 TOLERANCES: ANGULAR ± .5°

INCH	METRIC
3 PLACE ± .007	---
2 PLACE ± .010	± 0.18
1 PLACE ---	± 0.25

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

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FILE NAME: 5421794X3  
 U.S.A. 68532

SEE CHART SD-42179-4\*

NO P.S.1