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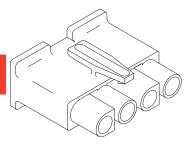
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Jameco Part Number 1960265

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

42179

Single Row



Circuits	Order No.
1	<u>03-12-1016</u>
2	<u>03-12-1026</u>
3	<u>03-12-1036</u>
4	<u>03-12-1046</u>

Features and Benefits

- The HCS-125 is an enhanced version of the Molex proven .125" system and meets the need for a connector system rated at greater than the industry standard 12.0A per circuit.
- 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 Mates with: 42179 Plug housing Use With: .125" terminals Designed In: Inches

Electrical

Voltage: 600V Current: 20.0A

Dielectric Withstanding Voltage: 1500V AC rms

Mechanica

Contact Retention to Housing: 88.96N min.

Physical

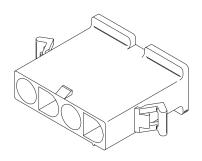
Housing: Nylon, UL 94V-2

Operating Temperature: -40 to +105°C Wire Accommodation: 10 to 18 AWG

8.38mm (.330") Pitch HCS-125 Pin and Socket Plug

42179

Single Row



Circuits	Orde	er No.
Circuits	Panel Mount	Free Hanging
1	03-12-2015	<u>03-12-2016</u>
2	<u>03-12-2025</u>	<u>03-12-2026</u>
3	<u>03-12-2035</u>	<u>03-12-2036</u>
4	03-12-2045	03-12-2046

Features and Benefits

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- 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 Mates With: 42179 Receptacle housing

Use With: .125" terminals Designed In: Inches

Electrical

Voltage: 600V Current: 20.0A max.

Dielectric Withstanding Voltage: 1500V AC rms

Mechanica

Contact Retention to Housing: 88.96N min.

Physical

Housing: Nylon, UL 94V-2

Operating Temperature: -40 to +105°C Wire Accommodation: 10 to 18 AWG



PRODUCT SPECIFICATION



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

Engineering Number
42179
1901
1900
2047
2046
8947
42554
42555
42546
42547

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 Drawing and the other sections of this specification for the necessary referenced documents and specifications.

4.0 Ratings:

PSX-42179

- 4.1 Voltage: 600 volts
- 4.2 Current rating in amperes per circuit:

			Circuit Size		
AWG			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 Non-operating -40 C to + 125 C

REVISION:			JCT SPECIFICATI		SHEET No.
2	EC No: 10394861 DATE: 2008 / 11 / 24	42179 PLUG AND RECEPTACLE .125" DIAMETER TERMINALS			1 of 4
DOCUMENT NUMBER:		CREATED / REVISED BY:	CHECKED BY:	APPROV	'ED BY:

AELHAG

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molex

PRODUCT SPECIFICATION

5.0 Performance Specification **Electrical Performance** 5.1

> ITEM **TEST CONDITION** REQUIREMENT 10 milliohms maximum

Contact resistance

(low level)

Mate connectors with a maximum voltage of 20

mV and a current of 10 mA

Insulation Mate connectors with a voltage of 500 VDC between adjacent terminals and between resistance

terminals to ground

Dielectric strength Mate connectors with a voltage of 2200 VAC for

1 minute between adjacent terminals and

between terminals and ground

1000 megaohms

minimum

No breakdown

Mechanical Performance 52

3.2 Mechanican e	enomance		
ITEM Terminal engagement and disengagement	TEST CONDITION Insert and withdraw terminals at a rate of 1 +/- 1/4 inch per minute (25 +/- 3mm per minute)	REQUIREMENT Avg engagement 5.75 lbf (2.8 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 (13.8 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 +/- 3mm 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)	
Terminal Insertion Force (Axial)	Apply in 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	20 milliohm max change from initial	

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_	DATE: 2008 / 11 / 24	.125" DIAMETER TERMINALS	2014

per minute

DOCUMENT NUMBER: CREATED / REVISED BY: **CHECKED BY:** APPROVED BY: PSX-42179 **AELHAG JBELL FSMITH**

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PRODUCT SPECIFICATION

Vibration Amplitude: .080" (1.5 mm) peak Appearance: no damage

to peak

Sweep: 10-55-10 Hertz in one

minute

Duration: 2 hours in each X-Y-Z

axis

discontinuity: 1 micro second

milliohm maximum change

Contact resistance: 20

maximum

from initial.

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: 1micro second

maximum.

5.3 Environmental Performance

ITEM	T	EST CONDITION	REQUIREMENT
Thermal shock	Mate connectors	exposed for 5 cycles of:	Appearance: No damage
	Temperature	Duration	Contact resistance: 20
	-55 +0/-3 C	30 minutes	milliohm maximum change
	+25 +/- 10 C	5 minute max	from initial
	+105 +3/-0 C	30 minutes	
	+25 +/- 10C	5 minutes max	

Thermal aging Mate connectors exposed for 96 hours at 105 +/-

2 C

Appearance: No damage Contact resistance: 20 milliohm maximum change

from initial

Humidity steady Mate connectors and expose to a temperature of

state

85 +/- 2C with a relative humidity of 90 to 95% for

98 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

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PRODUCT SPECIFICATION

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

REVISION: ECR/ECN INFORMATION: TITLE: **PRODUCT SPECIFICATION** SHEET No. EC No: 10394861 **42179 PLUG AND RECEPTACLE** 2 **4** of **4** .125" DIAMETER TERMINALS DATE: 2008 / 11 / 24 **DOCUMENT NUMBER:** CREATED / REVISED BY: CHECKED BY: APPROVED BY: PSX-42179 **AELHAG JBELL FSMITH**

TEMPLATE FILENAME: PRODUCT_SPEC[SIZE_A](V.1).DOC

