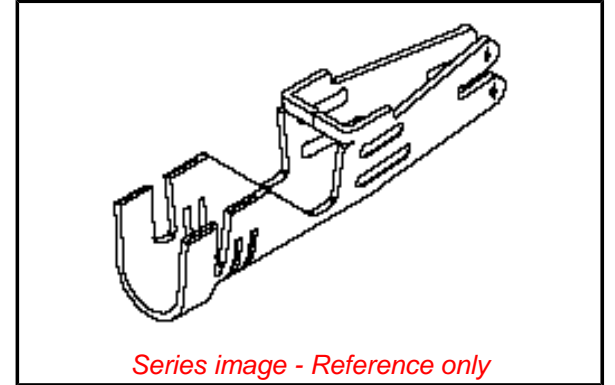


Part Number: [0428150011](#)
Status: **Active**
Overview: Mini-Fit Sr.™
Description: Mini-Fit Sr.™ Crimp Terminal, Female, 10 to 12 AWG, Tin (Sn)



Series image - Reference only

General

Product Family	Crimp Terminals
Series	<u>42815</u>
Comments	High Current/Low Force
Overview	<u>Mini-Fit Sr.™</u>
Product Name	Mini-Fit Sr.™

Physical

Gender	Female
Material - Metal	High Performance Alloy (HPA)
Material - Plating Mating	Tin
Material - Plating Termination	Tin
Packaging Type	Reel
Plating min: Mating (µin)	100
Plating min: Mating (µm)	2.5
Plating min: Termination (µin)	100
Plating min: Termination (µm)	2.5
Termination Interface: Style	Crimp or Compression
Wire Insulation Diameter	5.30mm (.209") max.
Wire Size AWG	10
Wire Size AWG	12
Wire Size mm²	N/A

Material Info

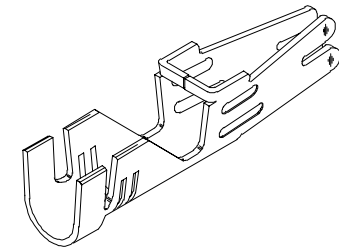
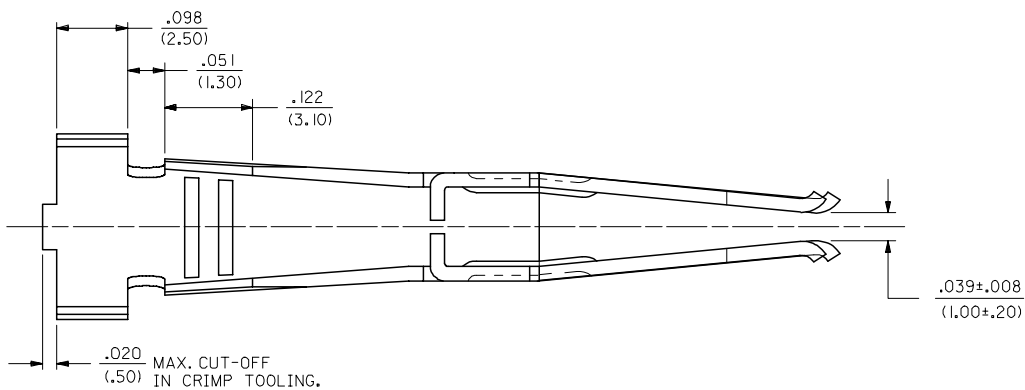
EU RoHS
ELV and RoHS
Compliant

China RoHS

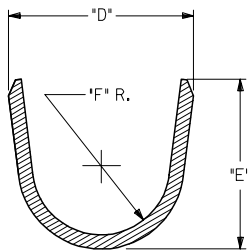
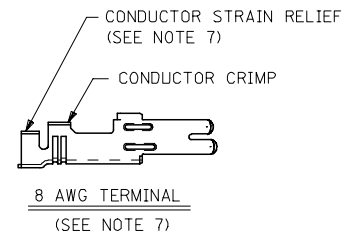
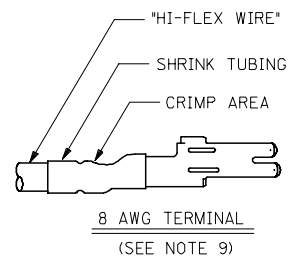
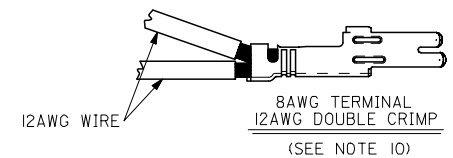
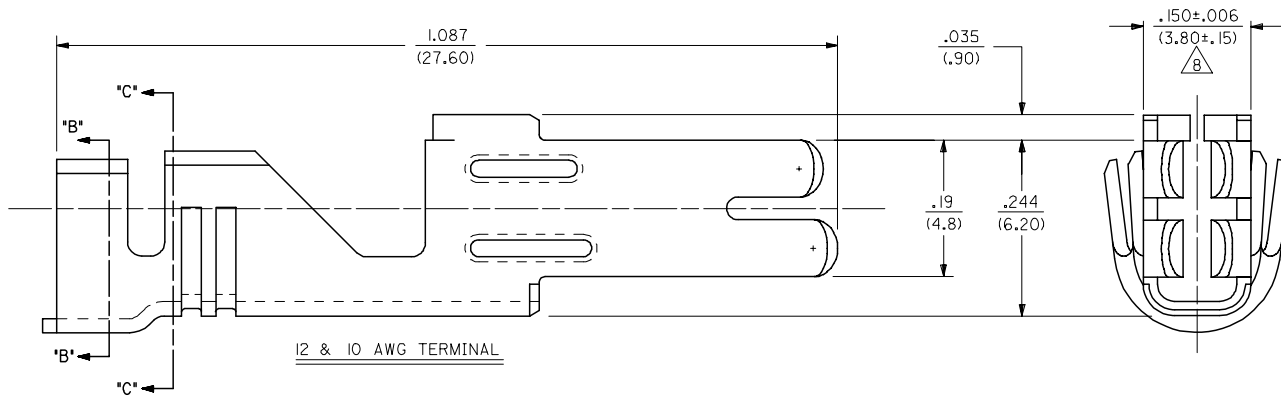


13 12 11 10 9 8 7 6 5 4 3 2 1

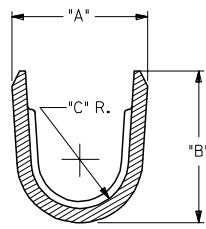
J
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ISOMETRIC VIEW
(SCALE 4:1)



SECTION B-B



SECTION C-C
(BACKGROUND OMITTED)

REDRAWN IN ME10 EC NO: UCP2005-2769 DRAWN: JCOMERC 2005/06/17 CHKD: 2005/06/17 APPR: JCOMERC 2005/06/17 H1	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± .010 2 PLACES ± 0.25 ± .016 1 PLACE ± 0.40 ± --- ANGULAR ±1/2°	DIMENSION STYLE IN/MM DRAWN BY DATE R/JF 1/16/92 CHECKED BY DATE R/JF 1/16/92 APPROVED BY DATE RAS 1/16/92	SCALE 8:1 DESIGN UNITS METRIC THIRD ANGLE PROJECTION
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			MATERIAL NO. SEE CHART DOCUMENT NO. SD-42815-* SHEET NO. 1 OF 2
	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
	MOLEX INCORPORATED			

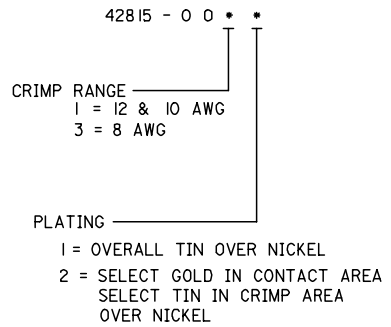
12 11 10 9 8 7 6 5 4 3 2 1

ITEM NUMBER	WIRE RANGE	DIM. A	DIM. B	DIM. C	DIM. D	DIM. E	DIM. F	MAX. INSULATION DIAMETER	PLATING
42815-0011	12 & 10 AWG	.213±.024 (5.40±.60)	.240±.016 (6.10±.40)	.067 R. (1.70)	.232±.024 (5.90±.60)	.260±.016 (6.60±.40)	.087 R. (2.20)	.209 DIA. (5.30)	OVERALL TIN
42815-0031	8 AWG	.229±.024 (5.83±.60)	.292±.016 (7.42±.40)	.067 R. (1.70)	.236±.024 (6.00±.60)	.216±.016 (5.50±.40)	.087 R. (2.20)	.260 DIA. (6.60)	
42815-0012	12 & 10 AWG	.213±.024 (5.40±.60)	.240±.016 (6.10±.40)	.067 R. (1.70)	.232±.024 (5.90±.60)	.260±.016 (6.60±.40)	.087 R. (2.20)	.209 DIA. (5.30)	SELECT GOLD
42815-0032	8 AWG	.229±.024 (5.83±.60)	.292±.016 (7.42±.40)	.067 R. (1.70)	.236±.024 (6.00±.60)	.216±.016 (5.50±.40)	.087 R. (2.20)	.260 DIA. (6.60)	

NOTES:

- 1) MATERIAL: COPPER ALLOY 151, .020/(.50) THICK.
- 2) PLATING:
 - 1 = .000100/(.00254) MIN. *TIN OVER
.000050/(.00127) MIN. NICKEL.
 - 2 = .000030/(.00076) MIN. SELECT GOLD IN CONTACT AREA.
.000100/(.00254) MIN. SELECT *TIN ON SOLDER TAILS
OVER .000050/(.00127) MIN. NICKEL.
- * 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.
- 3) PRODUCT SPEC.: PS-42815-001
- 4) PART IS DESIGNED IN METRIC.
- 5) TERMINALS FOR USE WITH STRANDED WIRE ONLY.
- 6) ITEM NUMBERS PRECEDED BY AN 'X' IN THE CHART ARE NOT AVAILABLE.
- 7) THE 8 AWG TERMINAL HAS NO INSULATION CRIMP. THE SECONDARY CRIMP SECTION
ACTS AS A STRAIN RELIEF ON THE BARE CONDUCTOR ONLY. SEE MOLEX CRIMP
SPECIFICATION FOR DETAILS.
- 8) AFTER CRIMPING, THIS DIMENSION IS .140/(3.55) MINIMUM.
- 9) WHEN USING THE 8 AWG TERMINAL WITH "SUPERFLEX WIRE",
MOLEX STRONGLY RECOMMENDS THAT THE APPROPRIATELY
RATED HEAT SHRINK INSULATION BE APPLIED OVER THE WIRE
INSULATION AND CRIMP AREA, AS SHOWN, TO MINIMIZE WIRE
INSULATION CREEPAGE OUTSIDE OF HOUSING.
- 10) THE 8AWG TERMINAL WILL ALSO ACCOMODATE 2 I2AWG WIRES
SEE CRIMP SPEC FOR DETAILS.
- 11) CRIMP SPECS.:
638210000 FOR 10AWG & 12AWG
638300000 FOR 8AWG, 8AWG HI-FLEX & DOUBLE I2AWG

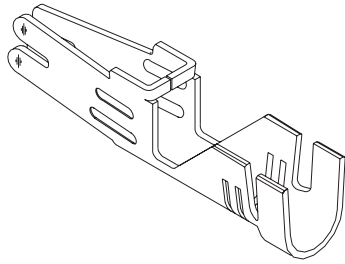
LEGEND:



SEE SHEET 1 EC NO: UCP2005-2769 DRAWN: JCOMERC CHKD: JCOMERC APPR: JCOMERC H1	2005/06/17 2005/06/17 2005/06/17	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE IN/MM		SCALE 8:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
			4 PLACES ± --- ± ---	3 PLACES ± --- ± .010	2 PLACES ± 0.25 ± .016	1 PLACE ± 0.40 ± ---	mm	INCH	DRAWN BY RJF	DATE 1/6/92	TITLE FEMALE CRIMP TERMINAL 10-12 AWG & 8 AWG MINIFIT SR. SERIES
			ANGULAR ±1/2°		DRAWN BY RJF		CHECKED BY RJF		DATE 1/6/92		MOLEX INCORPORATED
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. SEE CHART		DOCUMENT NO. SD-42815-*		SHEET NO. 2 OF 2		

10.00mm (.393") Pitch Mini-Fit Sr.™ Terminal

42815 Female



Features and Benefits

- High current
- Low engagement force
- Wire-to-wire, wire-to-board
- Four points of electrical contact

Reference Information

Product Specification: PS-42815-0001
 Packaging: Reel
 UL File No.: E29179
 CSA File No.: LR19980
 TUV License No.: R9751144
 Use With: 42816 and 43914 receptacle housings
 Designed In: Millimeters

Electrical

Voltage: 600V
 Current: 50.0A max.*
 Contact Resistance: 1.5 milliohms max.
 Dielectric Withstanding Voltage: 2200V
 Insulation Resistance: 1000 Megohms min.

Mechanical

Contact Insertion Force: 29.4N max.
 Contact Retention to Housing: 98.1N min.
 Mating Force: 29.4N max.
 Unmating Force: 4.9N min.
 Normal Force: 1.96N min.
 Durability: Tin—30 cycles; Gold—100 cycles

Physical

Contact: Copper Alloy
 Plating: Tin or Select Gold
 Operating Temperature: -40 to +105°C
 Wire gauge: 8, 10, 12, 14, 16 AWG

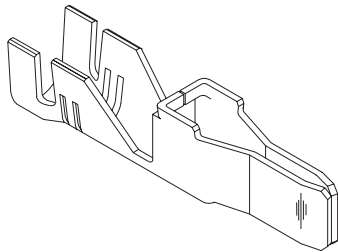
* Depending on circuit size, wire gauge and PCB. Please refer to product specification.

Order No.	Plating*	Wire Size (AWG)	Lead-free
42815-0041	Tin	14-16	Yes
42815-0042	Select Gold		
42815-0011	Tin	10-12	
42815-0012	Select Gold		
42815-0031	Tin	8	
42815-0032	Select Gold		

* Select Gold plated terminals recommended. See product specification for additional information.

10.00mm (.393") Pitch Mini-Fit Sr.™ Terminal

42817 Male



Features and Benefits

- High current
- Four points of electrical contact
- Low engagement force
- Wire-to-wire
- Grounding contacts available

Reference Information

Product Specification: PS-42815-0001
 Packaging: Reel
 UL File No.: E29179
 CSA File No.: LR19980
 TUV License No.: R9751144
 Use With: 42818 and 43938 plug housings
 Designed In: Millimeters

Electrical

Voltage: 600V
 Current: 50.0A max.*
 Contact Resistance: 1.5 milliohms max.
 Dielectric Withstanding Voltage: 2200V
 Insulation Resistance: 1000 Megohms min.

Mechanical

Contact Insertion Force: 29.4N max.
 Contact Retention to Housing: 98.1N min.
 Mating Force: 29.4N max.
 Unmating Force: 4.9N min.
 Normal Force: 1.96N min.
 Durability: Tin—30 cycles; Select Gold—100 cycles

Physical

Contact: Copper Alloy
 Plating: Tin or Select Gold
 Operating Temperature: -40 to +105°C
 Wire gauge: 8, 10, 12, 14 and 16 AWG

* Depending on circuit size and wire gauge. Please refer to product specification.

Standard Contacts			
Order No.	Plating*	Wire Gauge	Lead-free
42817-0041	Tin	14-16	Yes
42817-0042	Select Gold		
42817-0011	Tin	10-12	
42817-0012	Select Gold		
42817-0031	Tin	8	
42817-0032	Select Gold		

* Select Gold plated terminals recommended. See product specification for additional information.

Grounding Contacts			
Order No.	Plating*	Wire Gauge	Lead-free
42817-0141	Tin	14-16	Yes
42817-0142	Select Gold		
42817-0111	Tin	10-12	
42817-0112	Select Gold		
42817-0131	Tin	8	
42817-0132	Select Gold		