

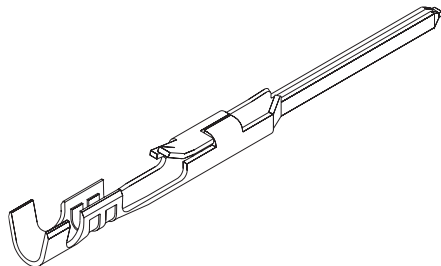
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Jameco Part Number 2018600

2.54mm (.100") Pitch**SL™
Terminal****70021
Male, Crimp****Features and Benefits**

- Dual tab strain relief
- Locking tang secures terminal in housing

Reference Information

Product Specification: PS-70021
 Packaging: Reel or bag
 Mates With: 70058 and 71851 female crimp terminals,
 and 70400 and 70430 connector assemblies
 Use With: 70066D and 70107 housings
 Designed In: Inches

Electrical

Voltage: 250V
 Current: 3.0A
 Contact Resistance: 15 milliohms max.
 Insulation Resistance: 10,000 Megohms min.

Mechanical

Wire Pull-Out Force: 17.79N (4.0 lb) min.
 Durability: Tin—25 cycles; Gold—50 cycles

Physical

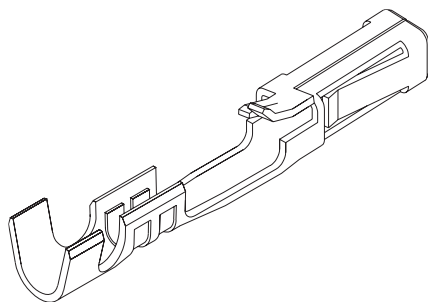
Contact: Copper Alloy
 Plating: See Table
 Operating Temperature: -40 to +105°C
 Wire Gauge: 22 to 24 and 24 to 30 AWG

Not For Use With C-Grid III™ Components

Reel				
Order No.	Plating	Wire Range (AWG) Stranded	Insulation Maximum Outside Diameter	Lead-free
16-02-0116	1	22-24	1.63 (.064)	Yes
16-02-0078		24-30	1.52 (.060)	
16-02-0081	2	22-24	1.63 (.064)	
16-02-0077		24-30	1.52 (.060)	
16-02-0107	3	22-24	1.63 (.064)	
16-02-0105		24-30	1.52 (.060)	

Plating No. 1: 30µm min. Gold in select area over 50µm min. Nickel overall with 75µm Tin in select area
 Plating No. 2: 15µm min. Gold in select area over 50µm min. Nickel overall with 75µm min. Tin in select area
 Plating No. 3: 150µm Tin over 50µm Nickel overall
 Each reel contains 20,000 terminals

Bag				
Order No.	Plating	Wire Range (AWG) Stranded	Insulation Maximum Outside Diameter	Lead-free
16-02-0117	1	22-24	1.63 (.064)	Yes
16-02-0110		24-30	1.52 (.060)	
16-02-0115	2	22-24	1.63 (.064)	
16-02-0109		24-30	1.52 (.060)	
16-02-0114	3	22-24	1.63 (.064)	
16-02-0108		24-30	1.52 (.060)	

2.54mm (.100") Pitch**SL™
Terminal****70058
Female Box, Crimp****Features and Benefits**

- Dual beam, fully-enclosed box contact
- Dual tab strain relief
- Locking tang secures terminal in housing

Reference Information

Product Specification: PS-70058
 Packaging: Reel or bag
 Mates With: 70021 male crimp terminals and
 0.64mm (.025") square pins
 Use With: All 70066 and 70450 housings
 Designed In: Inches

Electrical

Voltage 250V
 Current: 3.0A
 Contact Resistance: 15 milliohms max.
 Insulation Resistance: 10,000 Megohms min.

Mechanical

Contact Retention to Housing: 17.79N (4.0 lb) min.
 Wire Pull-Out Force: 17.79N (4.0 lb) min.
 Mating Force: 2.22N (.50 lb) max.
 Unmating Force: 0.28N (.06 lb) min.
 Normal Force: 0.98N (.22 lb) min.
 Durability: Tin—25 cycles; Gold—50 cycles

Physical

Contact: Copper Alloy
 Plating: See Table
 Operating Temperature: -40 to +105°C
 Wire Gauge: 22 to 24 and 24 to 30 AWG

Not For Use With C-Grid III™ Components

Reel				
Order No.	Plating	Wire Range (AWG) Stranded	Insulation Maximum Outside Diameter	Lead-free
16-02-0088	1	22-24	1.63 (.064)	Yes
16-02-0083		24-30	1.52 (.060)	
16-02-0087	2	22-24	1.63 (.064)	
16-02-0082		24-30	1.52 (.060)	
16-02-0086	3	22-24	1.63 (.064)	
16-02-0069		24-30	1.52 (.060)	

Plating No. 1: 30µm min. Gold in select area over 50µm min. Nickel overall with 75µm Tin in select area
 Plating No. 2: 15µm min. Gold in select area over 50µm min. Nickel overall with 75µm min. Tin in select area
 Plating No. 3: 150µm Tin over 50µm Nickel overall
 Each reel contains 20,000 terminals

Bag				
Order No.	Plating	Wire Range (AWG) Stranded	Insulation Maximum Outside Diameter	Lead-free
16-02-0104	1	22-24	1.63 (.064)	Yes
16-02-0098		24-30	1.52 (.060)	
16-02-0103	2	22-24	1.63 (.064)	
16-02-0097		24-30	1.52 (.060)	
16-02-0102	3	22-24	1.63 (.064)	
16-02-0096		24-30	1.52 (.060)	



**PRODUCT SPECIFICATION
MALE CRIMP CONNECTOR
ASSEMBLY**



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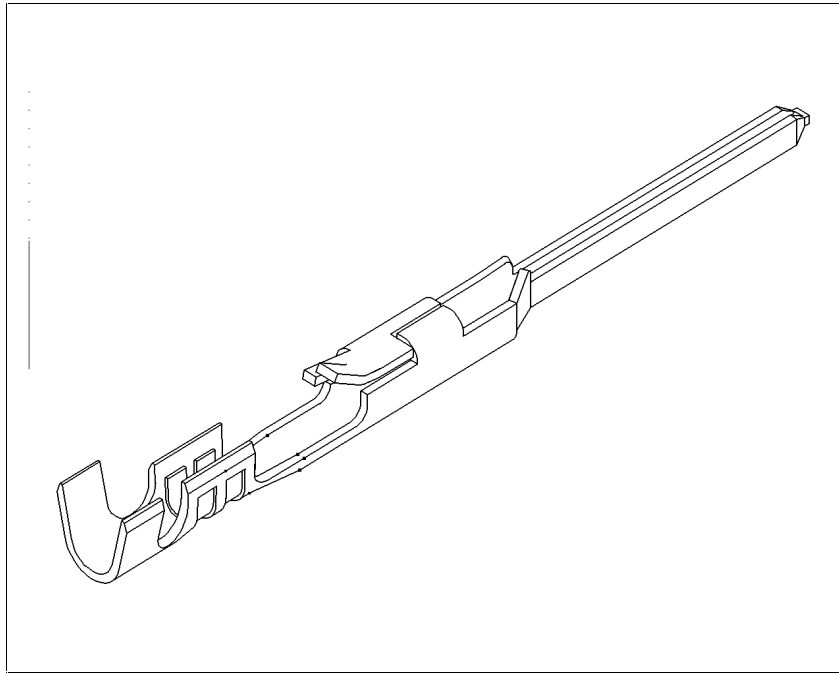


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REV	E							
SHT	1-4							
REVISE ON PC ONLY			TITLE					
E1	REMOVE SALT SPRAY TEST UCP-2005-2745		MALE CRIMP TERMINAL 70021					
THIS DOCUMENT CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION								
REV	DESCRIPTION							
DESIGN CONTROL		STATUS		WRITTEN BY:	CHECKED BY:	APPROVED BY:	DATE: YR / MO / DAY	
UDT				NDUNNE	SMILLER	COMERCI	2005/06/15	
DOCUMENT NO.						FILE NAME	SHT NO.	
PS -70021						PS70021.DOC	1 OF 4	



PRODUCT SPECIFICATION



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1.0 SCOPE:

This specification covers the crimp terminal 70021-**** used with housings 70066-**** and 70107-****.

2.0 PRODUCT DESCRIPTION:

- 2.1 Product is available in single row 2-25 circuits, on .100 centers.
- 2.2 Connector housings 70066-**** and 70107-**** are used with terminals 70021-****.
- 2.3 Connector assembly will mate with the following:
 - 2.3.1 Connector assemblies with terminals 70058-**** female crimp and 70028-**** female I.D.T.
- 2.4 Connectors are stackable end to end, or side to side, on .100" center pins when using option "A" housing.
- 2.5 Maximum pin height to be .300", minimum height to be .280", measured from top of housing.
- 2.6 Connector to accept wire range from:
 - 30 to 24 AWG stranded wire with .060" dia. max. insulation,
 - 36 to 32 AWG stranded wire with .025" dia. max. insulation,
 - 22 to 24 AWG stranded wire with .064" dia. max. insulation.

3.0 RECOGNIZED AGENCY APPROVALS:

- 3.1 Underwriters Laboratories: UL #E29179
- 3.2 Canadian Standards Association: CSA #LR19980

4.0 MECHANICAL SPECIFICATIONS:

- 4.1 Housing 70066-**** is molded of black, glass-filled polyester 94V-0.
- 4.2 Terminal 70021-**** is a high strength copper alloy.
 - 4.2.1 Finish, Tin: .000200" min. electrotin plate over .000050" min. nickel plate overall.
 - 4.2.2 Finish, Select Gold: .000015" min. gold plate in selected area over .000050" min. nickel overall, with .000075" min. tin plate in selected area.
 - 4.2.3 Finish, Select Gold: .000030" min. gold in selected area over .000050" min. nickel plate overall, with .000075" min. tin plate in selected area.
 - 4.2.4 For special finish requirements, consult with your local Molex sales representative.

REVISE ON PC ONLY		TITLE MALE CRIMP TERMINAL 70021	THIS DOCUMENT CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	
E1	SEE SHEET 1			
REV	DESCRIPTION	DOCUMENT NO. PS - 70021		FILE NAME PS70021.DOC
				SHEET 2



PRODUCT SPECIFICATION



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- 4.3 Strain Relief Strength: E.I.A. RS-186-D, method 6; and Mil. Std. 202E, Method 211A.
- 4.4 Temperature rating of materials: G.F. polyester, 94V-0, black -40°C to +120°C.
- 4.5 Terminal pull-out force from housing must withstand gradually applied force of 4 pounds for 15 seconds.

5.0 ELECTRICAL SPECIFICATIONS:

- 5.1 Rated voltages, currents:
Dry circuit: Open circuit voltage 20 mV max.
Short circuit current 20 mA max.
- 5.2 Contact resistance @ rated current, 30°C temperature rise after 25 cycles of engage/disengage. Contact resistance must be less than 15 milliohms.

Rated current:	36 AWG - 0.21A
	34 AWG - 0.32A
	32 AWG - 0.45A
	30 AWG - 0.7A
	28 AWG - 1.2A
	26 AWG - 1.8A
	24 AWG - 3.0A
	22 AWG - 3.0A

- 5.3 Dielectric Strength: AC voltage increased until breakdown. Voltage measured to be no less than 600 volts AC R.M.S. for 1 minute at sea level to 5,000 feet.
- 5.4 Insulation Resistance: 1,000 megohms minimum Mil. Std. 202, Method 302, Condition B.

REVISE ON PC ONLY		TITLE	
E1	SEE SHEET 1	MALE CRIMP TERMINAL 70021	
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PRODUCT SPECIFICATION



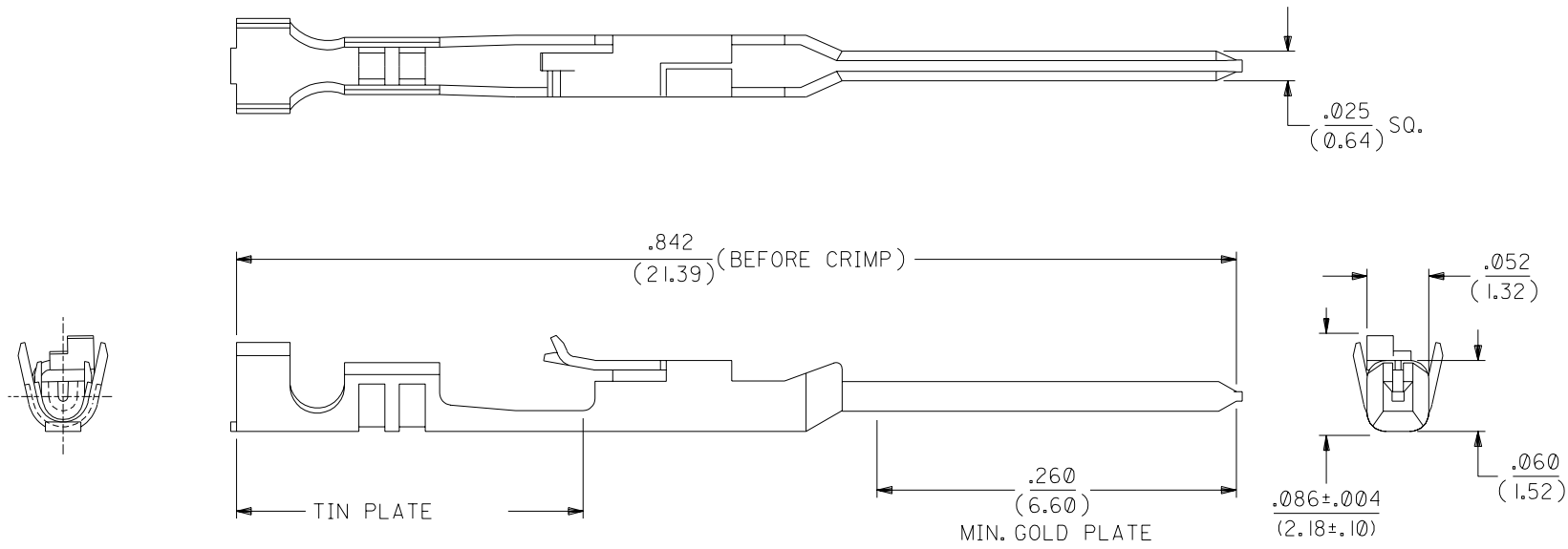
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6.0 ENVIRONMENTAL SPECIFICATIONS:

- 6.1 Thermal Aging: Heat soak @ 105°C for 7 days. Measured contact resistance must be less than 15 milliohms.
- 6.2 Thermal Shock: Mil. Std. 202E, Method 107C, condition A. Measured contact resistance must be less than 15 milliohms.
- 6.3 Shock: Mil. Std. 202, Method 205, Condition A (15G). Measured contact resistance must be less than 15 milliohms.
- 6.4 Humidity: Mil. Std. 202E, Method 103B, Condition A. Measured contact resistance must be less than 15 milliohms.

REVISE ON PC ONLY		TITLE		
E1	SEE SHEET 1	MALE CRIMP TERMINAL 70021		
		THIS DOCUMENT CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		
REV	DESCRIPTION		FILE NAME	SHEET
DOCUMENT NO. PS - 70021			PS70021.DOC	4



NOTES:

1. TERMINAL FOR USE WITH HOUSING PART NO. 70066-**** & 70107-****.
2. MATERIAL: .008/(0.20) THK. PHOSPHOR BRONZE.
3. TERMINAL TO BE USED WITH 24-30 AWG STRANDED WIRE WITH .060 DIA. MAX. INSULATION.
4. REFER TO MOLEX OPERATIONAL AND SERVICE MANUAL FOR DETAILS.
5. REFER TO PRODUCT SPECIFICATION NO. PS-70021.
6. PARTS SUPPLIED LOOSE PER DRAWING PK-70873-0822.

PLATING:

15 GOLD - .000015 MIN. GOLD PLATE IN SELECT AREA,
 .000075 MIN. TIN PLATE IN SELECT AREA,
 OVER .000050 MIN. NICKEL PLATE OVERALL.

*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 LEAD.

E	LEAD FREE UCP2004-1769 RWHITE 04/03/15
D2	REVISED PER ECR #U80270 MCGRATH 97/07/31
D1	REVISED PER ECR #U70928 MCGRATH 97/06/26
D	REVISED PLTG. SPEC. PER ECR # U31149 08/19/93 REED
C	REVISED PER ECR# U82220 11-07-88 MJM/MGB
B	REDRAWN ON CAD PER E.C.R. #9509 11/10/86 WJF/MJM

MFG. SH.	REV.	LTR.	REVISIONS
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DIMENSIONS SHOWN (METRIC) INCH		▽ = 0 ▼ = 0		REVISE ONLY ON CAD SYSTEM	
UNLESS OTHERWISE SPECIFIED TOLERANCES: ANGULAR ± 1/2°					
		INCH		METRIC	
3 PLACE	± .010	---		---	
2 PLACE	± .015	± 0.25		---	
1 PLACE	---	± 0.35		---	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS					
DRWG. BY: WJF		CHK'D. BY: MJM		FILE NAME: S70021X6 DGN	
APP'D. BY: WAZ		SCALE: 10:1		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION.	
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PART NO. 16-02-0109		DRWG. NO. SD-70021-0206		DIV. DA	
SIZE B					