

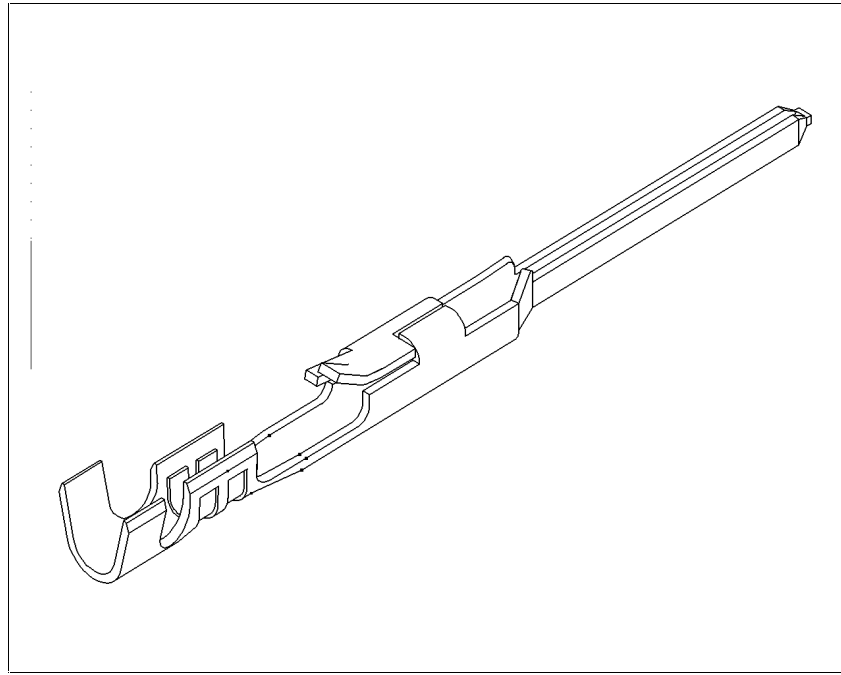


**PRODUCT SPECIFICATION  
MALE CRIMP CONNECTOR  
ASSEMBLY**



**LANGUAGE**

ENGLISH



**TABLE OF CONTENTS**

<u>SECTION</u>	<u>DESCRIPTION</u>	<u>PAGE NUMBER</u>
1.0	SCOPE	2
2.0	PRODUCT DESCRIPTION	2
3.0	RECOGNIZED AGENCY APPROVALS	2
4.0	MECHANICAL SPECIFICATIONS	2
5.0	ELECTRICAL SPECIFICATIONS	3
6.0	ENVIRONMENTAL SPECIFICATIONS	4

REV	E		
SHT	1-4		
REVISE ON PC ONLY		TITLE	
<b>E1</b>	REMOVE SALT SPRAY TEST UCP-2005-2745	<b>MALE CRIMP TERMINAL 70021</b>	
THIS DOCUMENT CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
REV	DESCRIPTION		
DESIGN CONTROL UDT	STATUS	WRITTEN BY: NDUNNE	CHECKED BY: SMILLER
		APPROVED BY: COMERCI	DATE: YR / MO / DAY 2005/06/15
<b>DOCUMENT NO. PS -70021</b>		FILE NAME PS70021.DOC	SHT NO. 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	
E1	SEE SHEET 1			
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REV	DESCRIPTION	DOCUMENT NO.	FILE NAME	SHEET
		PS - 70021	PS70021.DOC	2



# PRODUCT SPECIFICATION



LANGUAGE

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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.

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<b>E1</b>	SEE SHEET 1	<b>MALE CRIMP TERMINAL 70021</b>	
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REV	DESCRIPTION	FILE NAME	SHEET
<b>DOCUMENT NO. PS - 70021</b>		PS70021.DOC	3



# PRODUCT SPECIFICATION



LANGUAGE

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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		
<b>E1</b>	SEE SHEET 1	<b>MALE CRIMP TERMINAL 70021</b>		
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REV	DESCRIPTION		FILE NAME	SHEET
<b>DOCUMENT NO. PS - 70021</b>			PS70021.DOC	4

**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** [0016020077](#)  
**Status:** **Active**  
**Overview:** [SL](#)  
**Description:** SL™ Crimp Terminal, Series 70021, Male, with 0.38µm (15µ") Selective Gold (Au) Plated Contact, 24-30 AWG, Reel

**Documents:**

[Drawing \(PDF\)](#) [Related Catalog Page \(PDF\)](#)  
[Product Specification PS-70021 \(PDF\)](#)

**General**

Product Family	Crimp Terminals
Series	<a href="#">70021</a>
Overview	<a href="#">SL</a>
Product Name	SL™

**Physical**

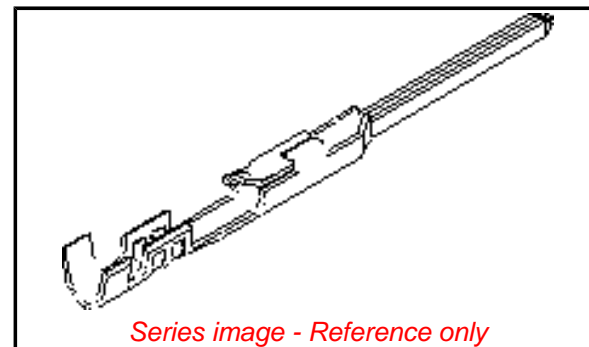
Gender	Male
Material - Metal	Phosphor Bronze
Material - Plating Mating	Gold
Material - Plating Termination	Tin
Packaging Type	Reel
Plating min: Mating (µin)	15
Plating min: Mating (µm)	0.375
Plating min: Termination (µin)	75
Plating min: Termination (µm)	1.875
Termination Interface: Style	Crimp or Compression
Wire Insulation Diameter	1.52mm (.060") max.
Wire Size AWG	24
Wire Size AWG	26
Wire Size AWG	28
Wire Size AWG	30
Wire Size mm²	N/A

**Material Info**

Old Part Number	70021-0006
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**Reference - Drawing Numbers**

Product Specification	<a href="#">PS-70021</a>
Sales Drawing	<a href="#">SD-70021-0*06_0*23</a>
Sales Drawing	<a href="#">SD-70021-0006</a>



Series image - Reference only

**EU RoHS**

**ELV and RoHS  
Compliant**

**China RoHS**



**Need more information on product  
environmental compliance?**

Email [productcompliance@molex.com](mailto:productcompliance@molex.com)  
Please visit the [Contact Us](#) section for any non-product compliance questions.

**Search Parts in this Series**

[70021](#) Series

**Application Tooling**

*Tooling specifications and manuals are found by selecting the products below. Crimp Height Specifications are then contained in the Application Tooling Specification document.*

**Global**

Description	Product #
T2 Terminator	<a href="#">0639103400</a>
Tooling Die	
Extraction Tool	<a href="#">0011030036</a>
Insertion Tool	<a href="#">0011020022</a>
Hand Crimp Tool, UL Approved	<a href="#">0638118800</a>
FineAdjust™	<a href="#">0639003400</a>
Applicator for SL™ Male Crimp Terminal, 24-30 AWG	

**Japan**

Description	Product #
Applicator for M21 1A Bench Press, 22-30 AWG, for 70021 Crimp Terminal	<a href="#">0570173000</a>

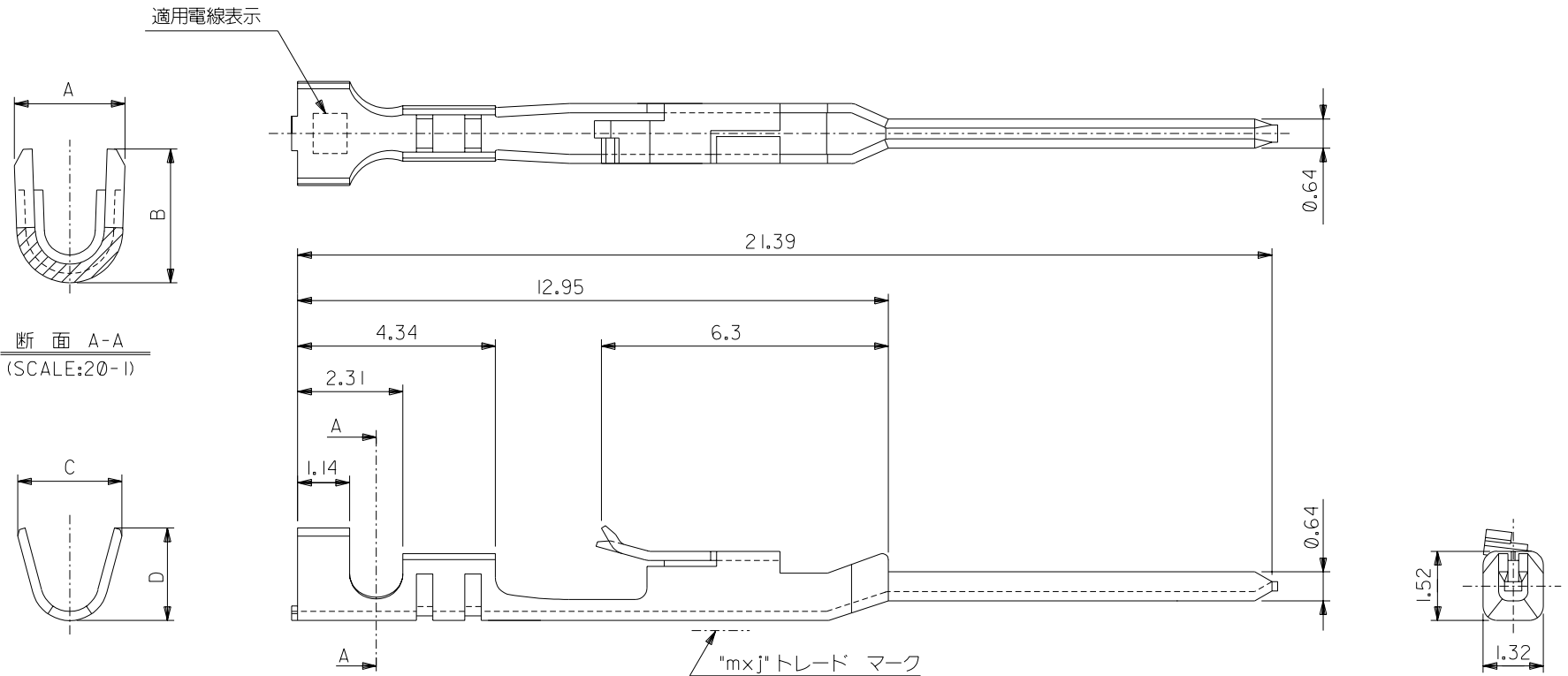
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ENG. NO.  
SD-70021-0\*06  
0\*23

EDP NO.  
—#—

:MM DIMENSIONS IN METRIC DO NOT SCALE DRAWING



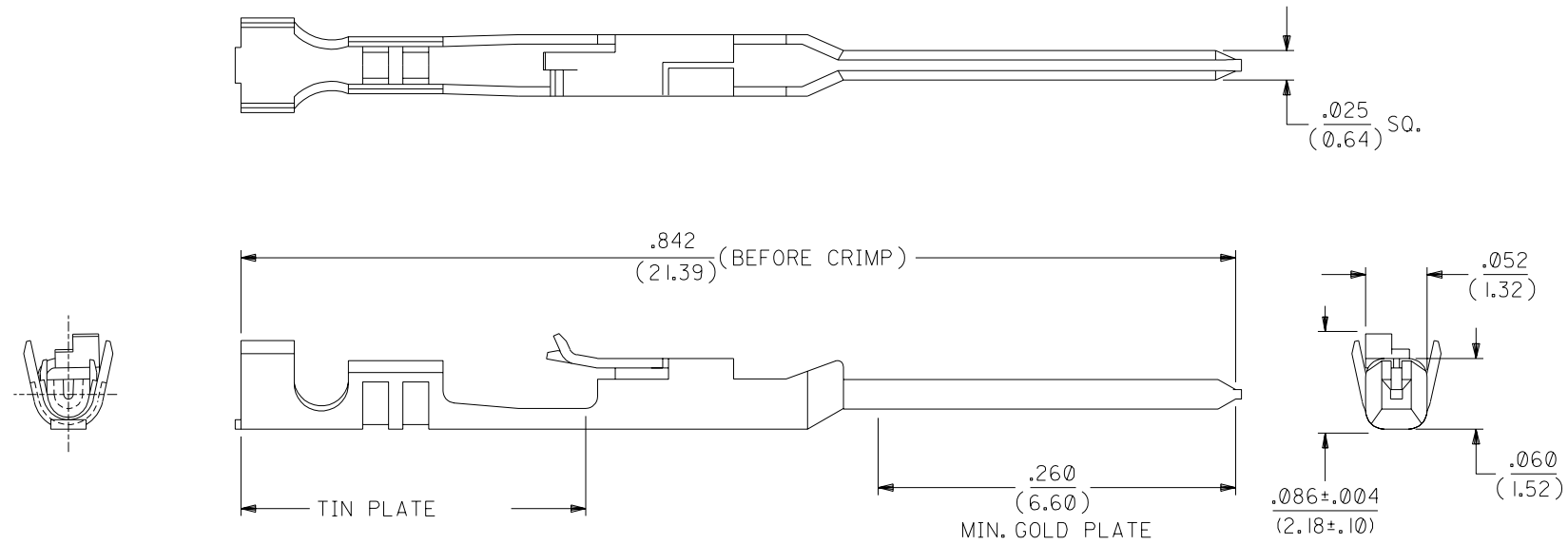
注記:

- 適合ハウジング: 70066-\*\*\*\*, 70107-\*\*\*\*
- メッキ仕様:
  - 接点部 : 金メッキ, 0.38 μmMIN.
  - 圧着部 : 錫メッキ, 1.91 μmMIN.
  - 下地メッキ: ニッケルメッキ, 1.27 μmMIN.

1.91	2.1	1.47	1.22	A	φ 1.6 MAX.	AWG#24-#30	連鎖状	70021-0006
1.91	2.1	1.65	1.84	C		AWG#22-#24	バラ状	70021-0223
D	C	B	A	適用電線表示	被覆外径	適用電線範囲	端子形状	MATERIAL No.

				材料 MATERIAL 磷青銅	molex MOLEX-JAPAN CO.,LTD. 日本モレックス株式会社
				t 0.203	
				仕上げ FINISH 注記参照	EDP. NO. —#—
角度 ANGLE	±3°	B 変更 (J2004-4519)	適用電線範囲 WIRE RANGE 表参照	ENG. NO. SD-70021-0*06	REV B
30以上 OVER	+0.3	A 変更 (JD60398)	被覆外径 INS. RANGE 表参照	0*23	
10以上 OVER	+0.25	0 新規作成 (T00110)	DRAWN BY A. Arita	TITLE 名称 SL MALE CRIMP TERMINAL -LEAD FREE-	
10未満 UNDER	+0.2	記号 変更内容 LTR REVISION RECORD	CHK'D BY M. Kuro		
一般公差 GENERAL TOLERANCES	REVISE ONLY ON CAD SYSTEM	DR. DATE	APP'D BY S. Yamada	尺度 SCALE 10-1	

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**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 IN REEL FORM.

**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.

G	LEAD FREE LUCP2004-1769 RWHITE 04/03/12
FI	REVISED ECR #U80270 MCGRATH 97/07/31
F	REVISED PLTG. SPEC. PER ECR # U31149 08/19/93 REED
E	REVISED PER ECR# U82200 11-07-88 MJM/MGB
D	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		
APP'D. BY	WAZ	SCALE	10:1		
FILE NAME		SHEET NO.		DATE	
S70021X5 DGN		1		10/30/86	
PART NO.		DRWG. NO.			
16-02-0077		SD-70021-0006			
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				DIV.	SIZE
				DA	B