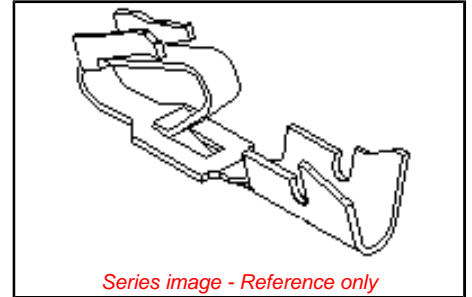


**Part Number:** [0008520113](#)  
**Status:** **Active**  
**Description:** Trifurcon™ Crimp Terminal 6838, 18-20 AWG, Bag, Phosphor Bronze Tin (Sn)



**General**

Product Family	Crimp Terminals
Series	6838
Product Name	Trifurcon™

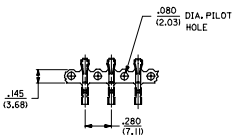
**Physical**

Gender	Female
Material - Metal	Phosphor Bronze
Material - Plating Mating	Tin
Material - Plating Termination	Tin
Packaging Type	Bag
Plating min: Mating (µin)	100
Plating min: Mating (µm)	2.50
Plating min: Termination (µin)	100
Plating min: Termination (µm)	2.50
Termination Interface: Style	Crimp or Compression
Wire Insulation Diameter	2.79mm (.110") max.
Wire Size AWG	18
Wire Size AWG	20
Wire Size mm²	N/A

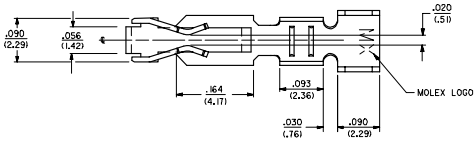
**Material Info**

Old Part Number	6838-A(P909)L
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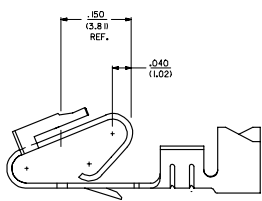




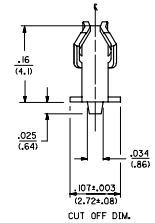
CARRIER STRIP DETAIL



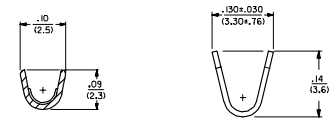
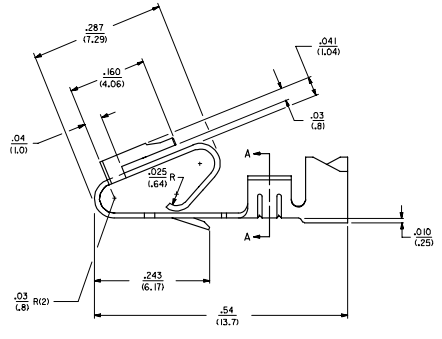
- NOTES:  
 1. MATERIAL: SEE LEGEND  
 2. FINISH  
 409 - OVERALL HOT TN DP<sub>3</sub> .000100/0.00254) MN.  
 402 - OVERALL TN<sub>1</sub> .000200/0.00508) MN.  
 OVERALL COPPER .000100/0.00254) MN.  
 432 - OVERALL TN<sub>2</sub> .000200/0.00508) MN.  
 OVERALL COPPER .000200/0.00508) MN.  
 503 - OVERALL HARD GOLD<sub>1</sub> .000050/0.00127) MN.  
 OVERALL NICKEL<sub>1</sub> .000050/0.00127) MN.  
 550 - SELECT HARD GOLD<sub>1</sub> .000050/0.00127) MN.  
 OVERALL NICKEL<sub>1</sub> .000050/0.00127) MN.  
 OVERALL HARD GOLD FLASH<sub>1</sub> .000022/0.00055) MN.  
 555 - SELECT HARD GOLD<sub>1</sub> .000050/0.00127) MN.  
 OVERALL NICKEL<sub>1</sub> .000050/0.00127) MN.  
 558 - SELECT HARD GOLD<sub>1</sub> .000050/0.00127) MN.  
 OVERALL NICKEL<sub>1</sub> .000050/0.00127) MN.  
 OVERALL HARD GOLD FLASH<sub>1</sub> .000022/0.00055) MN.  
 561 - SELECT HARD GOLD<sub>1</sub> .000050/0.00127) MN.  
 OVERALL NICKEL<sub>1</sub> .000050/0.00127) MN.  
 \* 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 TN-LEAD PLATING.  
 3. PRODUCT SPECIFICATION: PS-42-02  
 4. PACKAGING SPECIFICATION: CHAIN FORM SEE PK-8838-001  
 5. TERMINAL FOR USE IN HOUSING NOS. 6442 AND 47695  
 6. THIS PART WITH CRIMP FOR 22-28 AWG. WIRE. SEE DWS. NO. 7268  
 7. CRIMP FOR 18 TO 20 GA. WIRE WITH MAX. INSULATION DIA. OF .300(2.78). STRIP LENGTH OF .125(100 / 3.18(2.54))  
 8. DIMENSIONS GIVEN ACROSS CENTERLINES ARE SYMMETRICAL ABOUT THOSE CENTERLINES WITHIN HALF THE TOTAL TOLERANCE.  
 9. THIS PART CONFORMS TO CLASS B REQUIREMENTS OF COSMETIC SPECIFICATION PS-45499-002.



SELECTIVE PLATING LOCATION

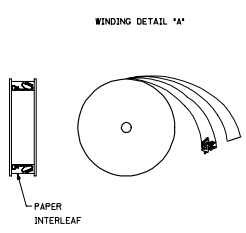


CUT OFF DIM.

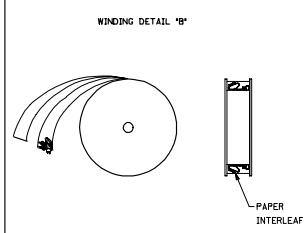


SECTION A-A

- LEGEND: 6838- ( )  
 MATERIAL: L27/.0106 THK  
 BLANK=BRASS  
 A=PHOS BRONZE  
 WINDING  
 A1 PER DETAIL A  
 BLANK= PER DETAIL B  
 FORM  
 BLANK= CHAIN  
 L= LOOSE  
 PLATING  
 SEE NOTE 2



WINDING DETAIL 'A'



WINDING DETAIL 'B'

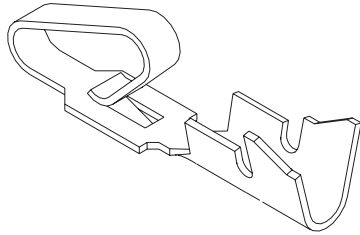
ADD. NOTE 9 DEC. NO. LCP2008-0005 2007/07/08 DRAWN BY 2 CHANDRABELL 2007/07/08 APPROVED BY 2007/07/08 DATE	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	▽=0	mm INCH	IN/MM	---	INCH	PROJECTION
	4 PLACES ±.010	±.010	DRAWN BY	DATE	TITLE	
	3 PLACES ±.010	±.010	CHECKED BY	DATE	TRIFURCON TERMINAL CRIMP TYPE .156 CENTERS 18 TO 20 AWG WIRE	
2 PLACES ±0.25	±.015	APPROVED BY	DATE	MATERIAL NO.	DOCUMENT NO.	SHEET NO.
1 PLACE ±0.36	±.015	ENG.	11/15/89	6838	MOLEX INCORPORATED	1 OF 2
ANGULAR ±1/2°		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE CHART	SD-6838		

6838-(*)**		6838-A(*)**																	
PART NO.	ENG. NO.	PART NO.	ENG. NO.	PART NO.	ENG. NO.	PART NO.	ENG. NO.	PART NO.	ENG. NO.	PART NO.	ENG. NO.	PART NO.	ENG. NO.	PART NO.	ENG. NO.	PART NO.	ENG. NO.	PART NO.	ENG. NO.
08-50-0187	6838-(P909)																		
08-50-0189	6838-(P909L)	08-58-0187	6838-A(P558)																
08-50-0275	6838-(P909)-A	08-58-0189	6838-A(P558L)																
08-50-0026	6838-(P102)	08-60-0001	6838-A(132)																
08-50-0028	6838-(P102L)	08-60-0002	6838-A(132L)																
08-50-0029	6838-(102)	08-58-0102	6838-A(558)																
			6838-A(558L)																
		08-58-0108	6838-A(503)																
		08-58-0109	6838-A(503L)																
		08-52-0112	6838-A(P909)																
		08-52-0113	6838-A(P909L)																
		08-50-0024	6838-A(102)																
		08-50-0251	6838-A(102L)																
		08-58-0105	6838-A(P555)																
		08-58-0106	6838-A(P555L)																
		08-58-0110	6838-A(P561)																
		08-58-0111	6838-A(P561L)																
		08-58-0118	6838-A(561)																
		08-58-0119	6838-A(561L)																
		08-58-0131	6838-A(550)																
		08-58-0132	6838-A(550L)																

UPDATE TITLE BLOCK REC. NO. LCP2008-0005 2007/07/03 DRAWN BY 2 CHODURELL 2007/07/09 APPROVED BY 11/15/89 2007/07/02 11/15/89 2007/07/02	QUALITY SYMBOLS 	GENERAL TOLERANCES (UNLESS SPECIFIED) <table border="1"> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> <tr> <td>4 PLACES</td> <td>±.005</td> <td>±.0002</td> </tr> <tr> <td>3 PLACES</td> <td>±.008</td> <td>±.0003</td> </tr> <tr> <td>2 PLACES</td> <td>±.015</td> <td>±.0005</td> </tr> <tr> <td>1 PLACE</td> <td>±.030</td> <td>±.0010</td> </tr> </table>		mm	INCH	4 PLACES	±.005	±.0002	3 PLACES	±.008	±.0003	2 PLACES	±.015	±.0005	1 PLACE	±.030	±.0010	DIMENSION STYLE IN/MM DRAWN BY DATE 11/15/89 CHECKED BY DATE 11/15/89 APPROVED BY DATE 11/15/89 MATERIAL NO. DOCUMENT NO.	SCALE DESIG. UNITS INCH THIRD ANGLE PROJECTION 
		mm	INCH																
	4 PLACES	±.005	±.0002																
	3 PLACES	±.008	±.0003																
2 PLACES	±.015	±.0005																	
1 PLACE	±.030	±.0010																	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE CHART THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	TITLE TRIFURCON TERMINAL CRIMP TYPE, .156 CENTERS 18 TO 20 AWG WIRE MOLEX INCORPORATED	SHEET NO. 2 OF 2															
			DOCUMENT NO. SD-6838																

# 3.96mm (.156") Pitch KK<sup>®</sup> Crimp Terminal

2478/2578



### Features and Benefits

- Double cantilever design
- Single beam terminal is available for low insertion force 7821 Series (contact Molex)
- For low-level current and voltage use Gold plating
- Phosphor Bronze is recommended for rated current
- Complete line of terminal crimping equipment available (see Application Tooling section of this catalog)

### Reference Information

Product Specification: PS-08-50  
Packaging: Reel or bag  
Tooling Information: See crimp tooling section  
UL File No.: E29179  
CSA File No.: LR19980  
Use With: 2139, 3069 and 41695  
Designed In: Inches

### Electrical

Voltage: 250V AC max.  
Current: Max.

AWG	18	20	22	24	26
Phosphor Bronze	7.00A	6.25A	5.50A	5.00A	4.50A
Brass	5.00A	4.75A	4.50A	4.25A	4.00A

Contact Resistance: 6 milliohms max.  
Dielectric Withstanding Voltage: 1500V AC  
Insulation Resistance: 50K Megohms min.

### Mechanical

Contact Insertion Force: 1.8kg (4 lb) max.  
Contact Retention to Housing: 3.6kg (8 lb) min.  
Wire Pull-Out Force: 20 lb max./18 AWG  
Normal Force: 0.75kg (1.65 lb)  
Durability: 25 cycles max.

### Physical

Contact: Brass or Phosphor Bronze  
Plating: See Table  
Operating Temperature: Phosphor Bronze—0 to +75°C  
Brass—0 to +50°C

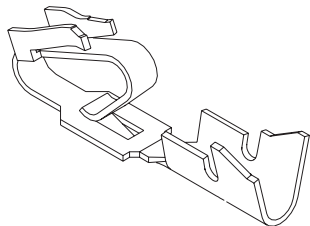
Wire Size AWG	Insulation OD	Series	Material	Order No.						Lead-free
				Tin Plating		Gold Plating No. 1		Gold Plating No. 2		
				Reel	Bag	Reel	Bag	Reel	Bag	
18-20	2.79 (.110)	max. 2478	Phosphor Bronze	<a href="#">08-52-0071</a>	<a href="#">08-52-0072</a>	<a href="#">08-58-0121</a>	<a href="#">08-58-0122</a>	<a href="#">08-65-0114</a>	<a href="#">08-65-0115</a>	Yes
			Brass	<a href="#">08-50-0105</a>	<a href="#">08-50-0106</a>	<a href="#">08-56-0105</a>	<a href="#">08-56-0106</a>	<a href="#">08-55-0103</a>	<a href="#">08-55-0104</a>	
22-26	1.65 (.065)	max. 2578	Phosphor Bronze	<a href="#">08-50-0133</a>	<a href="#">08-50-0134</a>	<a href="#">08-58-0125</a>	<a href="#">08-58-0126</a>	<a href="#">08-65-0116</a>	<a href="#">08-65-0117</a>	
			Brass	<a href="#">08-50-0107</a>	<a href="#">08-50-0108</a>	<a href="#">08-56-0107</a>	<a href="#">08-56-0108</a>	<a href="#">08-55-0105</a>	<a href="#">08-55-0106</a>	

Recommended wire range assumes stranded wire  
Plating No. 1: 20µ" min. Gold in contact area with a flash overall  
Plating No. 2: 15µ" min. Gold in contact area only

# 3.96mm (.156") Pitch KK<sup>®</sup> Crimp Terminal

6838/7258

Trifurcon<sup>™</sup>



### Features and Benefits

- Complete line of terminal crimping equipment available (see Application Tooling section of this catalog)
- Accommodates 18 to 26 AWG
- Trifurcon design provides 3 distinct points of contact
- Ideal choice where high shock or vibration exists
- For low current/voltage, Gold is recommended
- Phosphor Bronze recommended for rated current

### Reference Information

Product Specification: PS-40-02  
Packaging: Reel or bag  
Tooling Information: See crimp tooling section  
Use With: 6442 and 41695 crimp terminal housings  
Designed In: Inches

### Electrical

Voltage: 250V AC max.  
Current: Max.

AWG	18	20	22	24	26
Phosphor Bronze	7.00A	6.25A	5.50A	5.00A	4.50A
Brass	5.00A	4.75A	4.50A	4.25A	4.00A

Contact Resistance: 6 milliohms max.  
Dielectric Withstanding Voltage: 1500V AC  
Insulation Resistance: 50K Megohms min.

### Mechanical

Contact Insertion Force: 1.8kg (4 lb) max.  
Contact Retention to Housing: 3.6kg (8 lb) min.  
Wire Pull-Out Force: 20 lb max./18 AWG  
Normal Force: 0.75kg (1.65 lb)  
Durability: 25 cycles max.

### Physical

Contact: Brass or Phosphor Bronze  
Plating: See Table  
Operating Temperature: Phosphor Bronze—0 to +75°C  
Brass—0 to +50°C

Wire Size AWG	Insulation OD	Series	Material	Order No.						Lead-free
				Tin Plating		Gold Plating		Select Gold Plating		
				Reel	Bag	Reel	Bag	Reel	Bag	
18-20	2.79 (.110) max.	6838	Phosphor Bronze	<a href="#">08-52-0112</a>	<a href="#">08-52-0113</a>	<a href="#">08-58-0187</a>	<a href="#">08-58-0189</a>	<a href="#">08-58-0110</a>	<a href="#">08-58-0111</a>	Yes
			Brass	<a href="#">08-50-0187</a>	<a href="#">08-50-0189</a>					
22-26	1.65 (.065) max.	7258	Phosphor Bronze	<a href="#">08-52-0124</a>	<a href="#">08-52-0125</a>	<a href="#">08-56-0123</a>	<a href="#">08-56-0124</a>	<a href="#">08-65-0121</a>	<a href="#">08-65-0122</a>	
			Brass	<a href="#">08-50-0183</a>	<a href="#">08-50-0185</a>					

