

FEATURES AND SPECIFICATIONS

Features and Benefits

- Complete line of terminal crimping equipment available (see Section W 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 (contact factory)
- Phosphor Bronze recommended for rated current

Reference Information

Product Specification: PS-40-02

Packaging: Chain or loose

Tooling Information: See pages J-199 and J-200

Use With: 6442 and 41695 crimp terminal housings, and 7660 and 7674 IDT housings

Designed In: Inches

Electrical

Voltage: 250V AC max.

Current: Phosphor Bronze—7.0A max.

Brass—5.0A max.

Contact Resistance: 6mΩ max.

Dielectric Withstanding Voltage: 1500V AC

Insulation Resistance: 50K MΩ 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

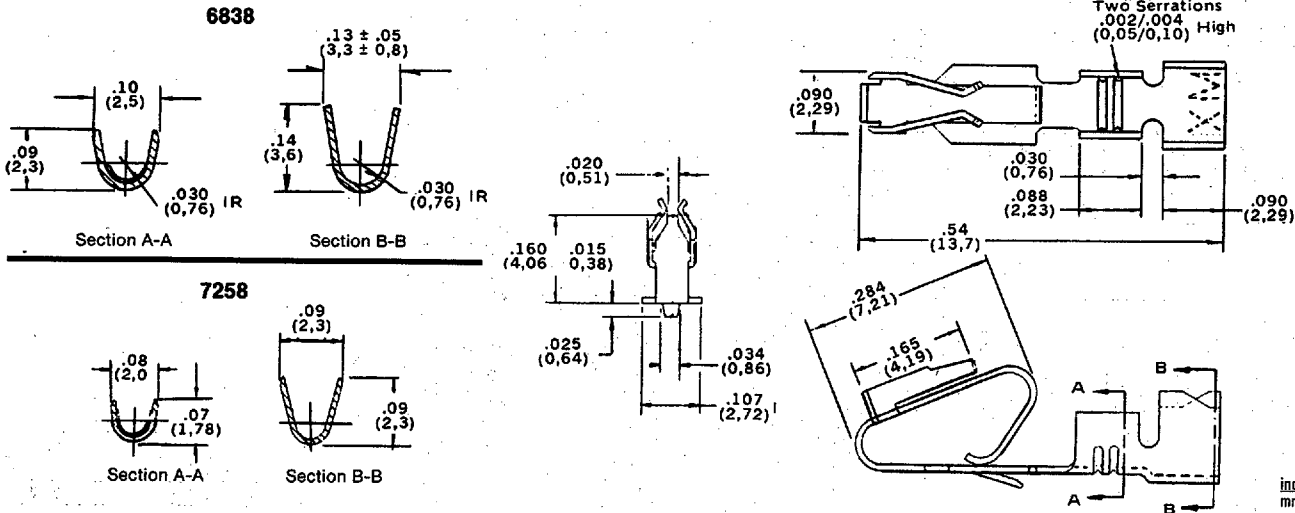
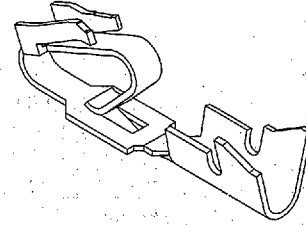
Temperature: Phosphor Bronze—0 to +75°C

Brass—0 to +50°C

molex® 3.96mm (.156") Pitch Trifurcon™ Crimp Terminal

6838/7258/6438

An ideal choice for situations in which flux contamination, high shock or vibration exist. This terminal incorporates the double cantilever design with contact wings in the vertical plane. Contact is achieved at 3 points on the mating pin. While insertion force of this combination is slightly increased, the extraction force is greatly increased and maintained through disconnect cycling.



ORDERING INFORMATION AND DIMENSIONS

Wire Size AWG	Insulation OD	Series	Material	Order No.					
				Tin Plating		Gold Plating		Select Gold Plating	
				Loose	Chain	Loose	Chain	Loose	Chain
18-20	2.79 (.110) max.	6838	Phosphor Bronze	• 08-52-0113	• 08-52-0112	• 08-58-0189	• 08-58-0187	• 08-58-0111	• 08-58-0110
18-20	2.79 (.110) max.	6838	Brass	08-50-0189	08-50-0187				
22-26	1.65 (.065) max.	7258	Phosphor Bronze	• 08-52-0125	• 08-52-0124	• 08-56-0124	• 08-56-0123	• 08-65-0122	• 08-65-0121
22-26	1.65 (.065) max.	7258	Brass	08-50-0185	08-50-0183				
18-20	2.41 (.095) max.	6438	Brass	08-50-0165	08-50-0164	08-56-0139	08-56-0137	08-56-0133	08-56-0135

• US Standard Product, available through Molex franchised distributors

PCB Connectors

2.50mm (.098") and 2.54mm (.100") Pitch

Reference Information

UL File No.: E29179
CSA File No.: LR19980

Electrical

Voltage: 250V
Current: 4.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V AC
Insulation Resistance: 50K MΩ min.

Mechanical

Engagement Force: 199g (7 oz) max.
Disengagement Force: 57g (2 oz) min.
Terminal Retention to Housing: 3.63kg (8 lb) min.
Wire Pull-Out Force (Crimp):

AWG	22	24	26	28	30
kg (lb)	4.54 (10)	3.63 (8)	2.72 (6)	1.81 (4)	1.36 (3)

Physical

Storage Temperature: -40 to +105°C
Operating Temperature: 0 to +75°C

3.96mm (.156") and 5.08mm (.200")

Reference Information

UL File No.: E29179
CSA File No.: LR19980

Electrical

Voltage: 250V
Current: 7.0A max. for Phosphor Bronze (18 AWG)
5.0A max. for Brass (18 AWG)
5.0A max. for PCB connector dependent on PCB traces
Initial Contact Resistance: 6mΩ max. nR
Dielectric Withstanding Voltage: 1500V AC
Insulation Resistance: 50K MΩ min.

Mechanical

Engagement Force: Square pin—1.02kg (2.25 lb)
Round pin—0.73kg (1.60 lb)
Disengagement Force: Square pin—0.38kg (0.84 lb)
Round pin—0.27kg (0.60 lb)
Normal Force: 0.75kg (1.65 lb) for double beam contact mated to .045" pin
Terminal Retention to Housing: 3.63kg (8 lb) min.
Wire Pull-Out Force (Crimp):

AWG	18	20	22	24	26
kg (lb)	9.07 (20)	6.81 (15)	5.45 (12)	3.63 (8)	2.27 (5)

Physical

Storage Temperature: -40 to +105°C
Operating Temperature: 0 to +75°C

KK® Crimp and PCB Connectors

PCB Connectors

**2.54mm (.100") Pitch
7720**

Reference Information

UL File No.: E29179
CSA File No.: LR19980

Electrical

Voltage: 250V
Current: 3.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V AC
Insulation Resistance: 200K MΩ min.

Mechanical

Engagement Force: 255g (9 oz) max.
Disengagement Force: 85g (3 oz) min.
Terminal Retention to Housing: 3.63kg (8 lb) min.
Wire Pull-Out Force (without cap):

AWG	Vertical	Horizontal
24	1.13kg (2.5 lb)	3.62kg (8.0 lb)
26	0.91kg (2.0 lb)	3.17kg (7.0 lb)
28	0.59kg (1.3 lb)	2.04kg (4.5 lb)

Physical

Housing: Nylon, UL 94V-2
Minimum Pin Insertion: 6.10mm (.240")
Recommended Mating Life: 25 cycles
Operating Temperature: 0 to +75°C

**3.96mm (.156") Pitch
7674, 7675**

Reference Information

UL File No.: E29179
CSA File No.: LR19980

Electrical

Voltage: 250V
Current: 5.0A max.
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 2000V AC
Insulation Resistance: 200K MΩ min.

Mechanical

Engagement Force: 2.5 lb max.
Disengagement Force: 0.23kg (0.5 lb) min.
Terminal Retention to Housing: 3.63kg (8 lb) min.
Wire Pull-Out Force (without cap):

AWG	Vertical	Horizontal
18	2.27kg (5.0 lb)	9.07kg (20.0 lb)
20	1.72kg (3.8 lb)	7.71kg (17.0 lb)
22	1.58kg (3.5 lb)	5.76kg (12.7 lb)
24	1.10kg (2.4 lb)	3.63kg (8.0 lb)

Physical

Housing: Nylon, UL 94V-2
Minimum Pin Insertion: 11.43mm (.450")
Recommended Mating Life: 25 cycles
Operating Temperature: 0 to +75°C

**Insulation Displacement
Connectors
Standard, Single Row
IDT Connectors**

* Detailed product specifications should be requested for approval testing and final specification