
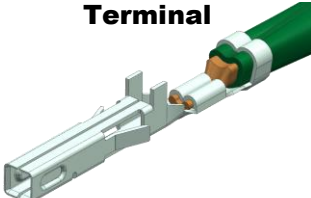
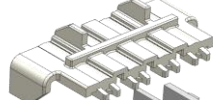
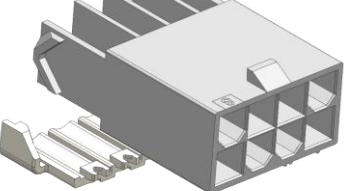
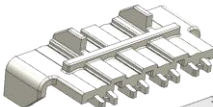
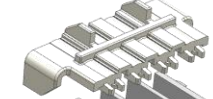
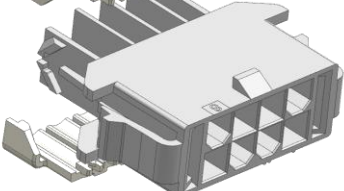
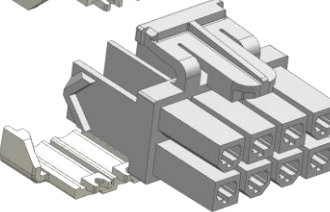




APPLICATION SPECIFICATION

Mini-fit TPA2

INTERCONNECT SYSTEMS

Plug w/ TPA	Receptacle w/ TPA
See section 2.1 for series numbers	
<p data-bbox="613 716 776 779" style="text-align: center;">Male Crimp Terminal</p> 	<p data-bbox="894 779 1089 842" style="text-align: center;">Female Crimp Terminal</p> 
<p data-bbox="472 947 662 974">TPA Retainer</p>  <p data-bbox="695 1024 813 1087" style="text-align: center;">Plug Housing</p> 	<p data-bbox="841 1136 1031 1163">TPA Retainer</p> 
<p data-bbox="472 1394 662 1421">TPA Retainer</p>  <p data-bbox="695 1381 813 1514" style="text-align: center;">Plug Housing, Panel Mount</p> 	<p data-bbox="992 1493 1154 1556" style="text-align: center;">Receptacle Housing</p> 

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APPLICATION SPECIFICATION

1.0 SCOPE

This Application Specification covers the performance requirements for the MINI-FIT TPA2 Wire-To-Board and Wire-To-Wire, 4.20mm pitch dual row and single row connector series using brass and phos bronze terminals with Tin plating terminated with 16 to 24 AWG wire using Molex crimp technology. The TPA Retainer (terminal position assurance) is intended to ensure the crimp terminals are fully seated and to prevent incidence of terminal back-out due to partially seated terminals. This document is NOT intended to be the final process definition nor is it intended to constrain design.

2.0 PRODUCT DESCRIPTION

2.1 NAMES AND SERIES NUMBER(S)

WIRE-TO-BOARD				
Description	Series Number	UL (600 V)	CSA (250 V)	IEC (250 V)
Mini-Fit TPA2, Receptacle Hsg, Dual Row	172708	Yes	Yes	Yes
Mini-Fit TPA2, Receptacle Hsg, Single Row	200453	Yes	Yes	Yes
Mini-Fit TPA2, Female Crimp Terminal	172718	Yes	Yes	Yes
Mini-Fit TPA2, TPA Retainer	172709	Yes	Yes	Yes

WIRE-TO-WIRE				
Description	Series Number	UL (600 V)	CSA (250 V)	IEC (250 V)
Mini-Fit TPA2, Female Crimp Terminal	172718	Yes	Yes	Yes
Mini-Fit TPA2, Receptacle Hsg, Dual Row	172708	Yes	Yes	Yes
Mini-Fit TPA2, Receptacle Hsg, Single Row	200453	Yes	Yes	Yes
Mini-Fit TPA2, TPA Retainer	172709	Yes	Yes	Yes
Mini-Fit TPA2, Male Crimp Terminal	172765	Yes	Yes	Yes
Mini-Fit TPA2, Plug Hsg, Dual Row	172762	Yes	Yes	Yes
Mini-Fit TPA2, Plug Hsg, Panel Mount, Dual Row	172767	Yes	Yes	Yes
Mini-Fit TPA2, Plug Hsg, Single Row	200471	Yes	Yes	Yes
Mini-Fit TPA2, Plug Hsg, Panel Mount, Single Row	200488	Yes	Yes	Yes

2.2 DIMENSIONS, MATERIALS, PLATINGS AND MARKINGS

See the appropriate sales drawings for the information on dimensions, materials, platings and markings.

3.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS

Product Specification.....	PS-172718-0000
Receptacle Crimp Terminal Sales Drawing.....	SD-172718-0000
Receptacle Front Housing Sales Drawing.....	SD-172708-0000
TPA Sales Drawing.....	SD-172709-0000
Plug Crimp Terminal Sales Drawing.....	SD-172765-0000
Plug Front Housing Sales Drawing.....	SD-172762-0000
Plug Front Housing, Panel Mount Sales Drawing.....	SD-172767-0000
Technical Advisory Moisturizing Nylon Connector Parts.....	AS-45499-001

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APPLICATION SPECIFICATION

4.0 TERMINAL INSERTION INTO HOUSING

Terminals are to be inserted in the housing as shown below in Figure 1. Notice the orientation of the stop tabs. Do not force terminals into the housing cavity. The terminal and housing are designed with features that provide some light resistance during insertion as well as retention after insertion but if excessive resistance is felt during insertion pull terminal back out and double check that the terminal orientation is per Figure 1. Terminals are to be inserted until they are fully seated as shown in Figure 2. The terminal stop tabs provide a stopping surface and the locking tangs provide a light audible click to indicate a fully inserted terminal.

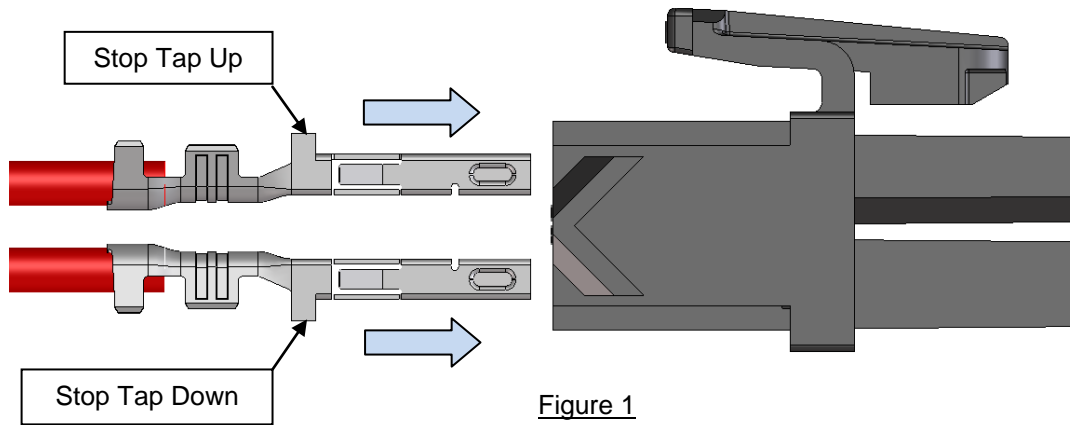


Figure 1

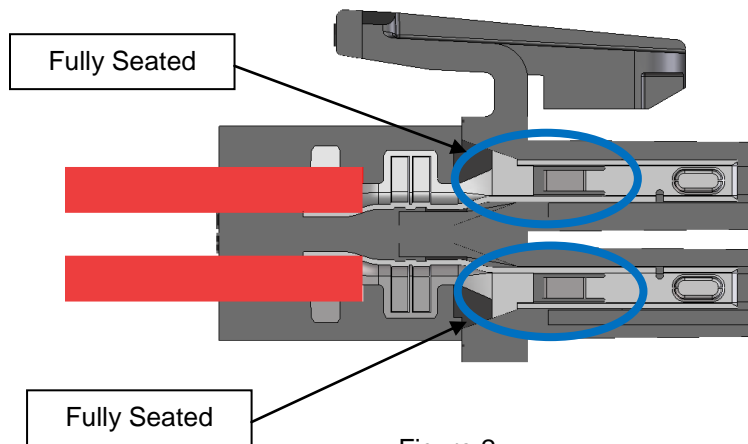


Figure 2

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APPLICATION SPECIFICATION

5.0 TPA ASSEMBLY

TPA's are to be inserted in the housing as shown below in Figure 3. The TPA's are placed into the housing at an angle and then pushed down to lock all in one motion. The TPA and housing are designed with latches and locking features that hold the TPA in place after assembly. These features, when used properly, provide an audible click to indicate proper installation. See Figures 4 and 5 for proper TPA orientation after assembly. Be sure to check that both side latches have engaged. Figure 6 shows a failure mode where only one side of the TPA was engaged. In this case just push the TPA a bit further to allow the other latch to engage.

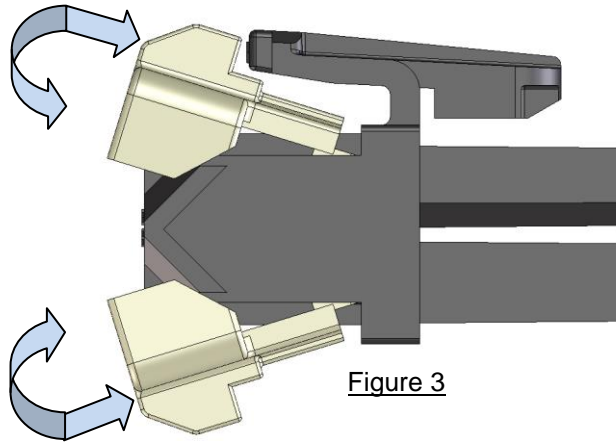


Figure 3

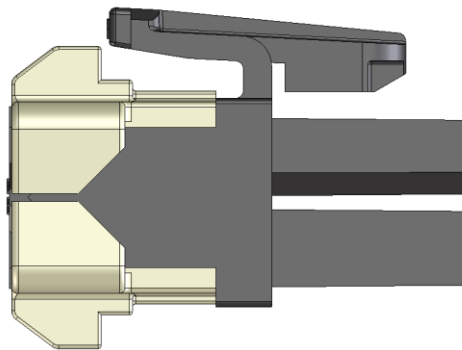


Figure 4

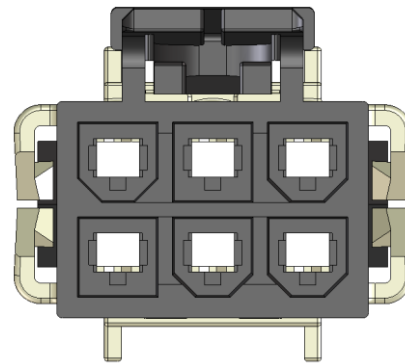


Figure 5

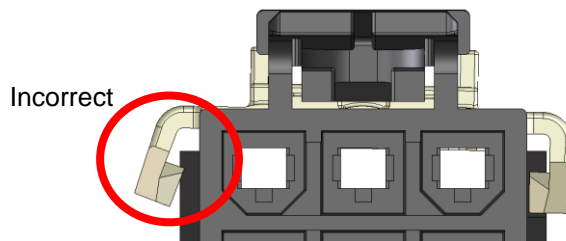


Figure 6

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APPLICATION SPECIFICATION

6.0 PACKAGING

Parts shall be packaged to protect against damage during handling, transit and storage. Nylon parts should remain in their original packaging until ready for use. Refer to Molex specification AS-45499-001 for moisturizing nylon connector parts.

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