

## Datasheet for 76650-0158

### General Information

<b>Part Number:</b>	76650-0158
<b>Manufacturer:</b>	Molex / Waldom
<b>Title:</b>	Mini-Fit BMI Connector Kit
<b>Description:</b>	Blind Mate Vertical and Right Angle Header, Vertical Receptacle Header, Plug and Receptacle
<b>Product Family:</b>	Mini-Fit BMI™
<b>Certificates:</b>	(Molex Parts within this kit) - EU RoHS Compliant, UL and CSA
<b>Country of Origin:</b>	Kit assembled in U.S.A.

### Specifications

#### Design

<b>Configuration:</b>	(Wire-to-Board), (Wire-to-Wire) and (Board-to-Board)
<b>Pitch:</b>	4.20mm (.165")
<b>Connector Type:</b>	Receptacles, Plugs and Headers
<b>Circuit Sizes:</b>	4, 6, 8, 10, 14 and 18
<b>Current Rating:</b>	6 Amps
<b>Voltage:</b>	600 Volts
<b>Wire size:</b>	24-18 AWG

### Product Highlights

The Mini-Fit BMI™ is designed for high current/high density applications requiring the blind mating of modules, subassemblies or printed circuit boards. The Mini-Fit BMI™ allows a misalignment of up to .100". It is appropriate for both power and signal applications as it can carry currents of up to 9.0A per circuit and has a 10mW contact resistance. Mini-Fit BMI™ accepts the same terminals and application tooling as for the Mini-Fit product family, further reducing your design and qualification effort.

### Features and Benefits

### Applications

**[For additional Molex / Waldom Design and Solution Kits please go to www.molexkits.com](http://www.molexkits.com)**

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- Blindmating Capabilities
- Fully isolated terminals to protect contacts from damage
- Positive housing locks to mate with Mini-Fit Jr.
- Standard with drain holes to allow PCB washing after wave soldering
- Low engagement force terminals

- Security and Alarms
- Vending and Gaming
- White Goods
- High End Computer
- Business Machines
- Storage
- Energy and Power
- Environmental Equipment and Controls
- Production Equipment
- Broadcast Equipment
- Telecom Infrastructure

**Bill of Materials for Part No. 76650-0158**

Molex Part No.	Country of Origin	Description	Quantity in Kit
39-00-0039-C	USA	Female Crimp Terminals 18-24 AWG	100
39-00-0041-C	USA	Male Crimp Terminals 18-24 AWG	100
15-06-0040	USA	4.20mm (.165") Pitch Mini-Fit BMI™ Receptacle Panel Mount, 4 Circuits	3
15-06-0060	USA	4.20mm (.165") Pitch Mini-Fit BMI™ Receptacle Panel Mount, 6 Circuits	3
15-06-0080	USA	4.20mm (.165") Pitch Mini-Fit BMI™ Receptacle Panel Mount, 8 Circuits	2
15-06-0100	USA	4.20mm (.165") Pitch Mini-Fit BMI™ Receptacle Panel Mount, 10 Circuits	2
15-06-0140	USA	4.20mm (.165") Pitch Mini-Fit BMI™ Receptacle Panel Mount, 14 Circuits	2
15-06-0180	USA	4.20mm (.165") Pitch Mini-Fit BMI™ Receptacle Panel Mount, 18 Circuits	2
15-06-0045	USA	4.20mm (.165") Pitch Mini-Fit BMI™ Plug Panel Mount 4 Circuits	3
15-06-0065	USA	4.20mm (.165") Pitch Mini-Fit BMI™ Plug Panel Mount 6 Circuits	3
15-06-0085	USA	4.20mm (.165") Pitch Mini-Fit BMI™ Plug Panel Mount 8 Circuits	2
15-06-0105	USA	4.20mm (.165") Pitch Mini-Fit BMI™ Plug Panel Mount 10 Circuits	2
15-06-0145	USA	4.20mm (.165") Pitch Mini-Fit BMI™ Plug Panel Mount 14 Circuits	2
15-06-0185	USA	4.20mm (.165") Pitch Mini-Fit BMI™ Plug Panel Mount 18 Circuits	2
15-24-6040	USA	4.20mm (.165") Pitch Mini-Fit BMI™ Header, Right Angle, 4 Circuits Tin Plating	2

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15-24-6060	Mexico	4.20mm (.165") Pitch Mini-Fit BMI™ Header, Right Angle, 6 Circuits Tin Plating	2
15-24-6100	Mexico	4.20mm (.165") Pitch Mini-Fit BMI™ Header, Right Angle, 10 Circuits Tin Plating	2
15-24-6140	Mexico	4.20mm (.165") Pitch Mini-Fit BMI™ Header, Right Angle, 14 Circuits Tin Plating	2
15-24-6180	Mexico	4.20mm (.165") Pitch Mini-Fit BMI™ Header, Right Angle, 18 Circuits Tin Plating	2
15-24-6046	Mexico	4.20mm (.165") Pitch Mini-Fit BMI™ Header, Vertical, 4 Circuits Tin Plating	2
15-24-6066	Mexico	4.20mm (.165") Pitch Mini-Fit BMI™ Header, Vertical, 6 Circuits Tin Plating	2
15-24-6106	Mexico	4.20mm (.165") Pitch Mini-Fit BMI™ Header, Vertical, 10 Circuits Tin Plating	2
15-24-6146	Mexico	4.20mm (.165") Pitch Mini-Fit BMI™ Header, Vertical, 14 Circuits Tin Plating	2
15-24-6186	Mexico	4.20mm (.165") Pitch Mini-Fit BMI™ Header, Vertical, 18 Circuits Tin Plating	2
15-24-7040^	Mexico	4.20mm (.165") Pitch Mini-Fit BMI™ Receptacle Header, Vertical, 4 Circuits	1
15-24-7060^	Mexico	4.20mm (.165") Pitch Mini-Fit BMI™ Receptacle Header, Vertical, 6 Circuits	1
15-24-7100^	Mexico	4.20mm (.165") Pitch Mini-Fit BMI™ Receptacle Header, Vertical, 10 Circuits	1
15-24-7140^	Mexico	4.20mm (.165") Pitch Mini-Fit BMI™ Receptacle Header, Vertical, 14 Circuits	1
15-24-7180^	Mexico	4.20mm (.165") Pitch Mini-Fit BMI™ Receptacle Header, Vertical, 18 Circuits	1

^ Note: 42385 (series) Receptacle Headers do not mate with Mini-Fit Jr.™ products, and are not inherently blindmating. Guidance to align the connectors during mating and float to provide stress-free positioning after mating must be provided

**Recommended Molex Tool(s) for Part No. 76650-0158\***

Molex Part No.	Country of Origin	Description
63819-0900 *	Sweden	Hand Crimp Tool
11-03-0044 *	USA	Extraction Tool
57031-6000 *	USA	Japan - Hand Extraction Tool

\*Tool(s) not included in kit. Tool(s) ordered separately.