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<u>DOCUMENT NUMBER:</u> <b>PS-34840-0001</b>	<u>CREATED / REVISED BY:</u> <b>D. HALL</b>	<u>CHECKED BY:</u> <b>M. VANSLAMBROUCK</b>	<u>APPROVED BY:</u> <b>V. KOSHY</b>

**1.0 SCOPE**

This specification covers the 3.50mm (0.138 inch) centerline (pitch) dual row bulkhead twist-lock connector terminated to using crimp technology wire. Designed to mate with MX150 dual row receptacle assembly per product specification [PS-33472-000](#). Terminated with series 33012 receptacle terminals and 33000 blade terminals.

For information not covered in the product specification, please refer to appropriate sales drawing (SD) or application specification [AS-34840-001](#)

**2.0 PRODUCT DESCRIPTION**

MX150 DUAL ROW RECEPTACLE ASSEMBLY, SEE [PS-33472-000](#) FOR DETAILS



MX150 DUAL ROW BULKHEAD TWIST-LOCK SEALED CONNECTOR ASSEMBLY



BULKHEAD CONNECTOR INTERFACE, SEE [SD-34840-001](#) FOR DETAILS



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# PRODUCT SPECIFICATION

## 2.1 PRODUCT NAME AND PART NUMBER

			Mates/ Assembles To:			
Description	Document #	Series #	Description		Document #	Series #
6 ckt	<a href="#">SD-34840-001</a>	34840	MX150 Dual Row Receptacle Assembly	6 ckt	<a href="#">SD-33472-061</a>	33472
8 ckt	<a href="#">SD-34840-001</a>	34840	MX150 Dual Row Receptacle Assembly	8 ckt	<a href="#">SD-33472-081</a>	33472
12 ckt	<a href="#">SD-34840-001</a>	34840	MX150 Dual Row Receptacle Assembly	12 ckt	<a href="#">SD-33472-121</a>	33472
16 ckt	<a href="#">SD-34840-001</a>	34840	MX150 Dual Row Receptacle Assembly	16 ckt	<a href="#">SD-33472-161</a>	33472

Refer document # for applicable part numbers.

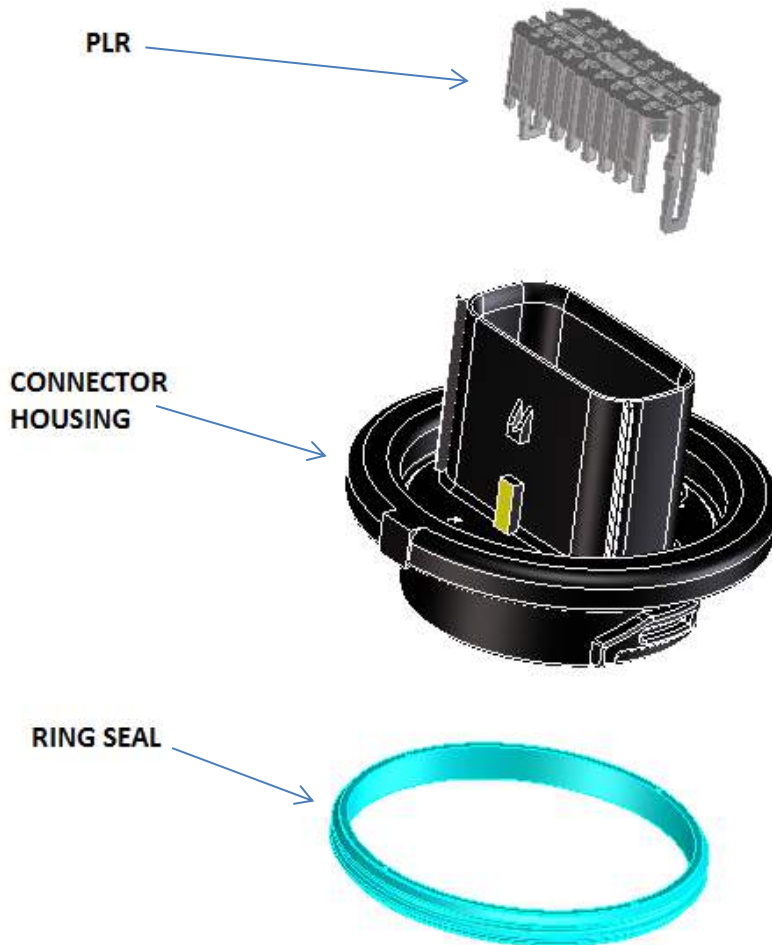
See [PK-31301-615](#) for packaging related information.

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**2.2 DIMENSIONS, MATERIALS AND MARKINGS**

All dimensions, materials and ID locations can be found on the applicable document # in the above table.

**ASSEMBLY COMPONENTS:**



COMPONENT	MATERIAL
PLR	20% glass filled SPS/nylon blend
CONNECTOR HOUSING	20% glass filled SPS/nylon blend
RING SEAL	Inherently lubricated silicone

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# PRODUCT SPECIFICATION

## 2.3 APPLICABLE/ INTEGRAL COMPONENTS:

Part Number		Sales Drawing	Plating	Wire Size Application		Packaging Drawing #
Right Payoff	Left Payoff			SAE (AWG)	Metric (mm <sup>2</sup> )	
33000-0001	33000-1001	<a href="#">SD-33000-001</a>	Sn	14	1.5	SEE TERMINAL PRODUCT SPECIFICATION <a href="#">PS-33012-002</a>
33000-0002	33000-1002	<a href="#">SD-33000-001</a>	Sn	16/18/20	1.0 , 0.75	
33000-0003	33000-1003	<a href="#">SD-33000-001</a>	Sn	22	0.35 , 0.50	
33000-0004	33000-1004	<a href="#">SD-33000-001</a>	Sn	N/A	0.35 , 0.50	

## 2.4 ACCESSORIES / AUXILIARY COMPONENTS:

Description	Part Number	Material	Document #	Packaging Drawing #
Extractor Tool 1.5mm MX150 and MX150L Terminals	63813-1500	N/A	<a href="#">638131500-ASSY</a>	N/A
MX150 Cavity Plug Sealed	34345-0002	N/A	SD-34345-001	N/A

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## 2.5 FEATURES AND BENEFITS:

- Twistlock housings are available in 4 unique mechanical polarization options, color coding offers the ability to use multiple connectors on one module without the risk of cross-mating incorrect harness connectors.
- 3.50mm pitch supporting dual-row configurations for 6,8,12, & 16 circuits.
- Pre-assembled connector housing, seal, PLR components shipped in single assembly.
- Twistlock latching design with audible, tactile and visual feedback.

## 2.6 KNOWN APPLICATIONS:

- LED Grid Arrays
- Sensors
- Cameras
- Navigation Systems
- Power Consumption
- Leveling
- Swiveling
- Turn Signals
- Tail lights
- Break lights
- Adaptive Front Lighting System
- DRL
- Ballast
- ECU's



## 3.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS

Description	Document Number
Sales Drawing	See section 2.1
Application Specification	<a href="#">AS-34840-001</a>
Packaging Specification	See section 2.1

## 4.0 SAFETY APPROVALS

Agency	Approval Status
CSA File Number	Not Applicable
TUV License number	Not Applicable
UL File Number	Not Applicable
IMDS	Available upon request
Environmental Compliance	Available on molex.com

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## 5.0 RATINGS/ PERFORMANCE/ VALIDATION

Item		Description	Rating			
5.1	Electrical	5.1.1	Operating Voltage	14 Volts DC Maximum.		
		5.1.2	Total Connection Resistance (contact resistance) per the following: Dry circuit (low level) Resistance is determined by limiting the open circuit voltage of 20mV and 100mA maximum At rated current (Voltage drop) apply a 5 Ampere/ 1.0mm <sup>2</sup> current	1.5mm Terminal System	8milliΩ Maximum	
		5.1.3	Terminal Current Rating / Derating <i>Current rating is dependent on many factors, including but not limited to application, connector size, ambient temperature, blade size, etc. Hence evaluate current rating for each application</i>	1.5mm Terminal System	See <a href="#">PS-33012-002</a>	
		5.1.4	Discontinuities	No discontinuities > 7Ω for more than 1μS		
		5.1.5	Isolation Resistance	100MegΩ minimum when 500 VDC between adjacent terminals and terminals to ground		
5.2	Temperature	5.2.1	Operating Temperature	-40° C to 105° C		
		5.2.2	Non- operating Temperature	-40° C to 105° C		
5.3	Flammability	The burn rate of the plastic material when tested to GMW 3191 December 2007 does not exceed 100 mm/min.				
5.4	Durability	Connectors are cycled 10 times prior to environmental tests.				
5.5	Seal-ability	IP67K, GMW 3191 December 2007, Sealing Class 3				

Product conforms to the following specifications:

Conforms To	For Validation Results See
GMW 3191 DECEMBER 2007 T2, V1, S3	<a href="#">TS-34840-8002</a>

Or contact your molex sales engineer

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**6.0 PACKAGING**

Parts are packaged to protect against damage during handling, transit and storage. Product must remain in the supplied packaging prior to assembly in production.

**7.0 GAGES AND FIXTURES**

Gages and fixtures are referenced in the appropriate Control Plans.

**8.0 OTHER INFORMATION/ MISCELLANEOUS**

A. MOLEX REPRESENTS AND WARRANTS TO BUYER FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF DELIVERY OF THE PRODUCTS THAT:

- 1) THE PRODUCTS SHALL CONFORM TO THE MOLEX SPECIFICATIONS FOR THE PRODUCTS IN FORCE AT THE DATE OF DELIVERY OF THE PRODUCTS TO BUYER, AND
- 2) THE PRODUCTS SHALL BE FREE FROM DEFECTS IN MATERIALS AND MANUFACTURING.

EXCEPT AS EXPRESSLY PROVIDED ABOVE, MOLEX MAKES NO WARRANTY, EXPRESS OR IMPLIED, REGARDING THE PRODUCTS. ALL IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY DISCLAIMED. IN ADDITION, MOLEX EXPRESSLY DISCLAIMS ANY WARRANTY OBLIGATIONS IN THOSE INSTANCES WHERE THE FAILURES RESULTED FROM THE MODIFICATION OF THE PRODUCTS BY BUYER OR ITS CUSTOMERS, IMPROPER HANDLING, USE OR INSTALLATION OF THE PRODUCTS BY BUYER OR ITS CUSTOMERS, OR ANY OTHER CAUSE BEYOND THE CONTROL OF MOLEX.

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