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REVISION DESCRIPTION	ADDED REFERENCE TRS TO DERATING CURVES IN SECTIONS 5.1.3.1 & 5.1.3.2			MX64 MAT SEAL RCPT. TERMINAL					
CHANGE NO.	647017								
REVISED BY	JPRUNEAU	DATE	2020/10/13	DOC TYPE	DOC TYPE DESCRIPTION		DOC PART	SERIES	
REV APPR BY	JCUATACERVAN	DATE	2020/10/26	PS	PRODUCT SPECIFICATION		001	33468	
INITIAL RELEASE				CUSTOMER		DOCUMENT NUMBER		REVISION	SHEET
INITIAL DRWN	AKARANA	DATE	2013/01/28	GENERAL MARKET		PS-33468-001		A1	1 OF 5
INITIAL APPR	JALEXANDER	DATE	2013/02/04						

**1.0 SCOPE**

This product specification covers the MX64 Mat Seal Receptacle terminal crimped to an array of wires utilizing crimp technology.

**2.0 PRODUCT DESCRIPTION****2.1 PRODUCT NAME AND ATTRIBUTES**

Terminal Family	Gender	Sealing	Plating	Grip Size	Special Characteristics	Current Rating
MX64	Receptacle	Mat Seal	Sn	S	ISO Grip	9A
MX64	Receptacle	Mat Seal	Au	S	ISO Grip	9A
MX64	Receptacle	Mat Seal	Ag	S	ISO Grip	9A
MX64	Receptacle	Mat Seal	Sn	L	ISO Grip	11.3A
MX64	Receptacle	Mat Seal	Au	L	ISO Grip	11.3A
MX64	Receptacle	Mat Seal	Ag	L	ISO Grip	11.3A
MX64	Receptacle	Mat Seal	Sn	S	SAE Grip	8.6A
MX64	Receptacle	Mat Seal	Au	S	SAE Grip	8.6A
MX64	Receptacle	Mat Seal	Ag	S	SAE Grip	8.6A
MX64	Receptacle	Mat Seal	Sn	L	SAE Grip	11.3A
MX64	Receptacle	Mat Seal	Au	L	SAE Grip	11.3A
MX64	Receptacle	Mat Seal	Ag	L	SAE Grip	11.3A

**2.2 DIMENSIONS, MATERIALS, PLATINGS AND MARKINGS**

All dimensions, terminal materials, plating descriptions and ID locations can be found on the applicable sales drawing.

**2.3 FEATURES AND BENEFITS**

- High performance copper alloy
- One piece terminal design
- Accepts 0.64mm square blade
- Accepts 0.64mm thick X 1.0mm wide blade
- Molex cavity compatible
- High current carrying capability
- All terminals validated to USCAR-21 crimp performance requirements across a wide array of wires
- All terminals validated to USCAR-2 terminal performance requirements

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**3.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS**

Description	Document Number
Sales Drawing	SD-33468-001 (SAE grip) SD-33468-002 (ISO grip)
Application Specification (Crimp)	AS-33468-001 (SAE grip) AS-33468-002 (ISO grip)
Packaging Specification	PK-31300-516 PK-30907-759 PK-31302-480 313025040
Terminal & Cavity Test Summary	334670001-TS 334670002-TS 347360001-TS 334680003-TS

**4.0 SAFETY AGENCY 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

**5.0 RATINGS / PERFORMANCE / VALIDATION****5.1 ELECTRICAL**

Item	Description	Condition	Rating
5.1.1	Operating Voltage	Applied voltage during operation	Please refer to the product specification of the Molex connector to be used to obtain the connection system maximum operating voltage.
5.1.2	Crimp Resistance	Post environment crimp resistance	Change in crimp resistance $\leq 0.33\text{m}\Omega$ or $\leq 0.55\text{m}\Omega$ crimp resistance.

**5.1.3 TERMINAL CURRENT DERATING CURVES**

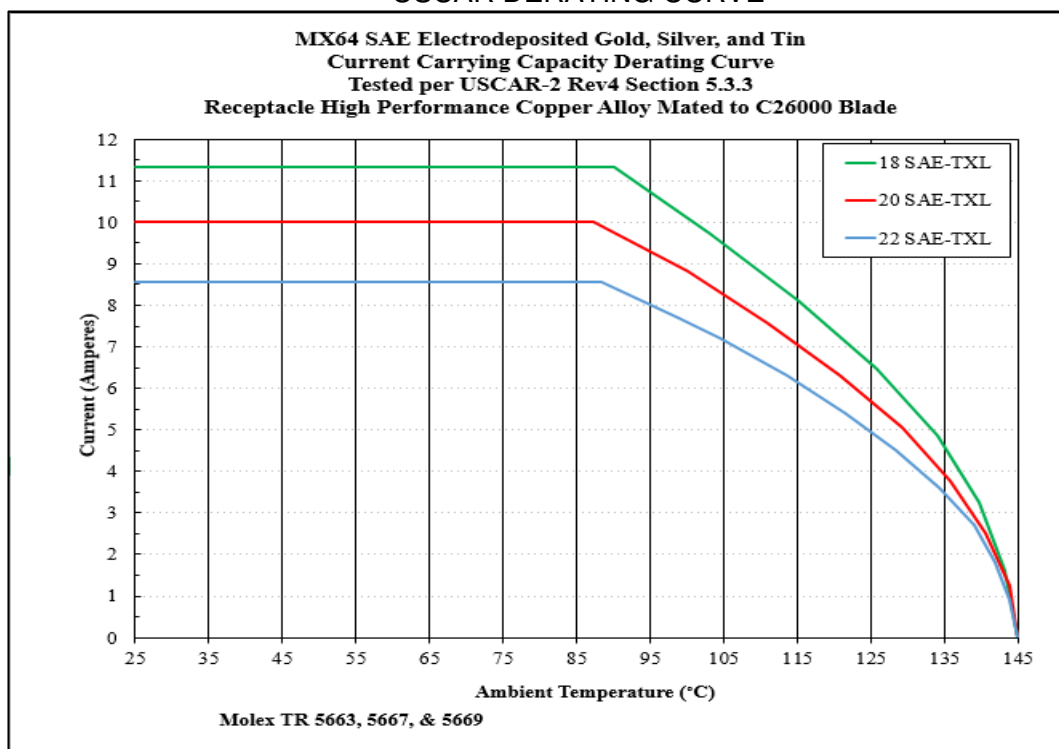
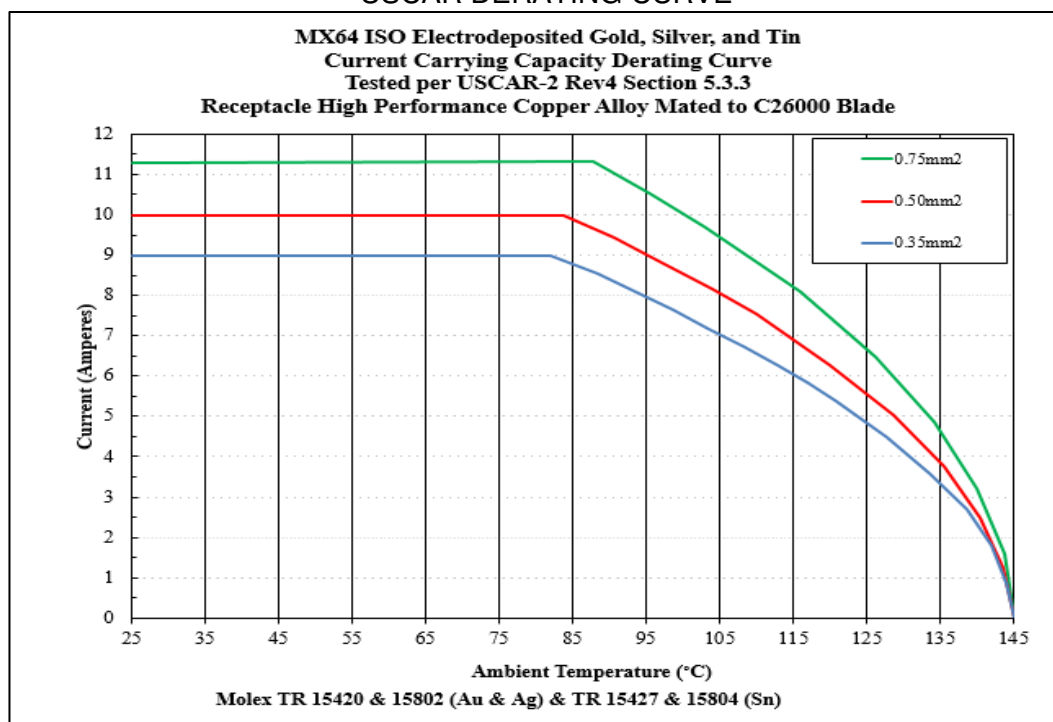
This test is used to determine the maximum test current at which a terminal system can operate in a room temperature environment before excessive thermal degradation and/or resistance begins to occur. Temperature Rise (Y axis) vs. Current (X axis) shall be plotted for each applicable conductor size.

CAUTION: These graphs are NOT to be used for actual terminal application in a vehicle. This test is conducted on terminals alone, thus eliminating the variation that may be introduced by variations in the heat dissipating characteristics of differing connector housing designs and sizes. This test cannot establish the Maximum Current Capability of a specific terminal application. For specific applications, several factors other than current load must be considered (see SAE/USCAR-2 appendix F for more information).

USCAR derating curve is developed using 90% of the current required to raise the temperature of the terminal to 55°C rise over ambient and the terminal maximum operating temperature limit.

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**5.1.3.1 SAE (SD-33468-001) GRIP RECEPTACLE TERMINAL  
USCAR DERATING CURVE**

**5.1.3.2 ISO (SD-33468-002) GRIP RECEPTACLE TERMINAL  
USCAR DERATING CURVE**


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**5.2 TEMPERATURE**

Non-operating temperature: - 40°C to +125°C

Operating temperature: - 40°C to +125°C

**\*\*For terminal validation information contact your Molex Sales Engineer**

**\*\*For connector system level performance see related product specification**

**6.0 PACKAGING**

Parts are packaged to protect against damage during handling, transit and storage. Please refer to PK-31300-516 for reel wind direction. Terminals on reels should be stored in original packaging until ready for use. Storage temperature is recommended between 65 and 95°F (18 and 35°C) and storage humidity at less than 85% relative humidity. Under these conditions Molex recommended shelf life is 12 months from manufacturing date on terminal reel.

**7.0 GAGES AND FIXTURES**

Gages and Fixtures are referenced in the appropriate control plans of the receptacle terminals. For terminal electrical checking, please refer to the related connector application specification.

**8.0 OTHER INFORMATION / MISCELLANEOUS**

MOLEX REPRESENTS AND WARRANTS TO BUYER FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF DELIVERY OF THE PRODUCT 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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