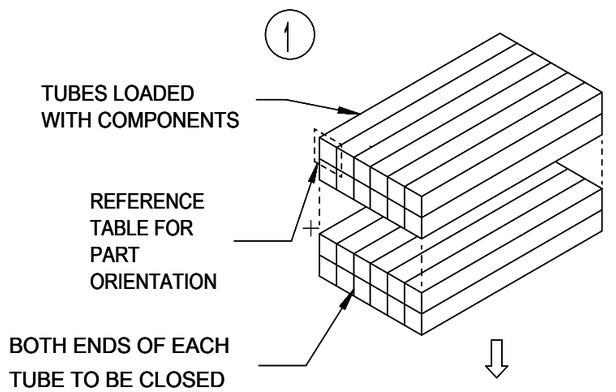
Molex 87263-1223 PDF

深圳创唯电子有限公司 http://www.molex-connect.com

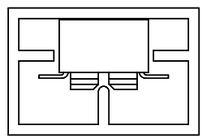
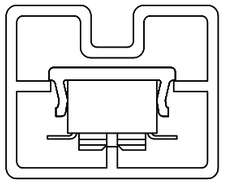
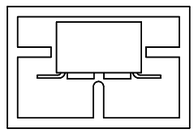
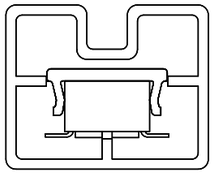
PART WITHOUT CAP TUBE:89990-0016					
CKT SIZE	QTY/ TUBE	TUBE/ CARTON	QTY/ CARTON	MBB	CARTON
4	130	70	9100	89990-0214	96707-0006
6	88		6160		
8	66		4620		
10	53		3710		
12	44		3080		
14	38	140	5320	89990-0201	96707-0004
16	33		4620		
18	29		4060		
20	26		3640		
22	24		3360		
24	22		3080		
26	20		2800		
28	19		2660		
30	17		2380		
32	16		2240		
34	15		2100		
36	14		1960		
38	14		1960		

PART WITH CAP TUBE:87264-9000					
CKT SIZE	QTY/ TUBE	TUBE/ CARTON	QTY/ CARTON	MBB	CARTON
4	105	40	5250	89990-0214	96707-0006
6	88		3520		
8	66		2640		
10	53		2120		
12	44		1760		
14	38	100	3800	89990-0201	96707-0004
16	33		3300		
18	29		2900		
20	26		2600		
22	24		2400		
24	22		2200		
26	20		2000		
28	19		1900		
30	17		1700		
32	16		1600		

PACKAGING PROCEDURE



REFERENCE TABLE FOR PART ORIENTATION

	WITHOUT CAP TUBE: 89990-0016	WITH CAP TUBE: 87264-9000
WITH PEGS		
WITHOUT PEG		

NOTES :

1. ARRANGE AND STACK NUMBER OF TUBES NEATLY INTO THE HDPE BAG AS SHOWN.
2. VACUUM PACKED THE BAG WITH DESSICANTS.
3. PLACE PARTS INTO A MOISTURE BARRIER BAG.
4. PLACED THE SEALED BAG WITH TUBES INTO A CARTON AS SHOWN.
5. PARTIAL PACKAGING SHOULD BE AVOIDED. REFER TO PART TABLE FOR STANDARD PACK QUANTITY.

QUALITY SYMBOLS: FA = 0; FC = 0; FD = 0; ▼ = 0; C = 0; ☒ = 0; ■ = 0; V = 0

EC NO: 627455
DRWN: SCS02 2018/04/27
CHK'D: MRAMAKRISHNA 2019/11/14
APPR: MRAMAKRISHNA 2019/11/14

GENERAL TOLERANCES (UNLESS SPECIFIED)

ANGULAR TOL ±	°
4 PLACES	±
3 PLACES	±
2 PLACES	±
1 PLACE	±
0 PLACES	±

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION UNITS	MM
SCALE	NTS
DRWN BY	GMENARLY
DATE	2017/09/04
CHK'D BY	SCHEONG
DATE	2017/09/28
APPR BY	KHLIM
DATE	2017/09/29
DRAWING SIZE	A3
	THIRD ANGLE PROJECTION

A1 REV

molex®

PACKAGING SPECIFICATION
MGRID 2MM PITCH RECEPT, 87263 IN TUBE

PACKAGING DESIGN DRAWING

SERIES	MATERIAL NUMBER	CUSTOMER
87263	SEE TABLE	GENERAL MARKET

DOCUMENT NUMBER	DOC TYPE	DOC PART	SHEET NUMBER
PK-87263-0001	PDD	001	1 OF 1

RELEASE STATUS	P1	RELEASE DATE	2019/11/14 14:05:07

FORMAT: master-tb-prod-A3
REVISION: G
DATE: 2017/02/06

1.0 SCOPE

This Product Specification covers the performance requirements for Milli-Grid 2mm Dual Row Bottom Entry Receptacles.

2.0 PRODUCT DESCRIPTION

The Milli-Grid 2mm Dual Row Bottom Entry Receptacles are board-in connectors that are intended to mate with Milli-Grid Headers for inter-connections.

2.1 PRODUCT NAME AND SERIES NUMBER(S)

Product Name	**Series**
Milli-grid Bottom Entry Receptacle SMT	87263

2.2 DIMENSIONS, MATERIALS, PLATINGS AND MARKINGS

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

2.3 SAFETY AGENCY APPROVALS

UL FILE : E29179 Volume 1, Section 76
CSA : LR 19980A-212

C US

CSA approval meets following standards/test procedures:

a) CSA std. C22.2 No. 182.3-M1987
b) UL-1977

* “C” and “US” mark adjacent to CSA signifies that the product has been evaluated to the applicable CSA and ANSI/UL standards, for use in Canada and US respectively.

Series 87263, rated 1.0A, 125V

3.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS

The following documents form a part of this specification to the extent specified herewith. In the event of conflict between the requirements of this specification and the product drawing, the product drawing shall take precedence. In addition, in event of conflict between the requirements of this specification and the reference documents, this specification shall take precedence.

MIL-STD-202	Test Methods for Electronic and Electrical component parts
MIL-STD-1344	Test Methods for Electrical Connectors
EIA 638	Surface Mount Solderability Test

4.0 RATINGS

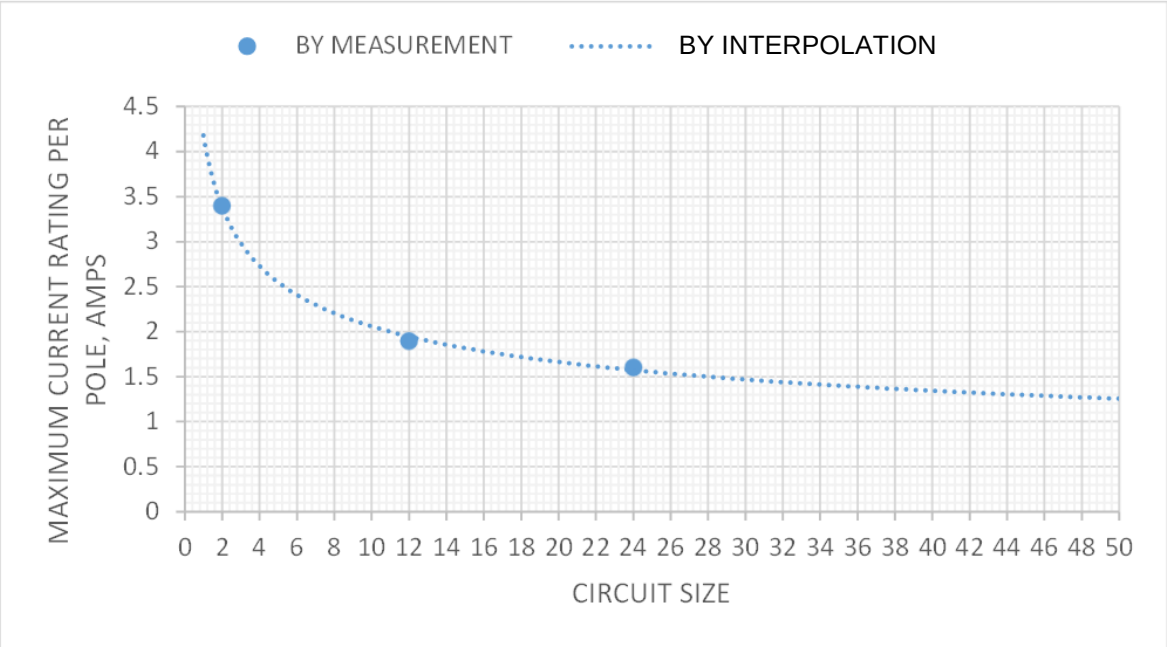
4.1 CURRENT

Current rating is application dependent and each application should be evaluated by the end user for compliance to specific safety agency requirements. The ratings listed in the chart below are per Molex test method based on a 30° C maximum temperature rise over ambient temperature and are provided as a guideline. Appropriate de-rating is required based on circuit size, ambient temperature, copper trace size on the PCB, AWG WIRE, gross heating from adjacent modules/components and other factors that influence connector performance. Wire size, insulation thickness, stranding, tin coated or bare copper, wire length & crimp quality are other factors that influence current rating.

Single Ckt (powered-up): 4.2A

Maximum 50 Ckt (powered-up): 1.25A

Board to Board (87263 & 87759 Series)



4.2 TEMPERATURE

Operating: -55°C to +105°C

5.0 PERFORMANCE

The standard range of atmospheric conditions for making measurements and tests is as follows:

Ambient Temperature : 20 ± 2°C

Relative Humidity : 60% to 85%

Air Pressure : 86KPa to 106KPa

5.1 ELECTRICAL PERFORMANCE

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
5.1.1	**Contact Resistance**	Per MIL-STD-1344A method 3004.1	15 milliohms Maximum
5.1.2	**Insulation Resistance**	250 VDC applied for 1 minute between adjacent terminals and between terminal and ground	1000 Megaohms Minimum
5.1.3	**Dielectric Strength**	1000 VAC rms for 1 minute between adjacent terminal and between terminal and ground.	No breakdown
5.1.4	**Capacitance**	Measure between adjacent terminals at 1MHz	1.0 pf Maximum

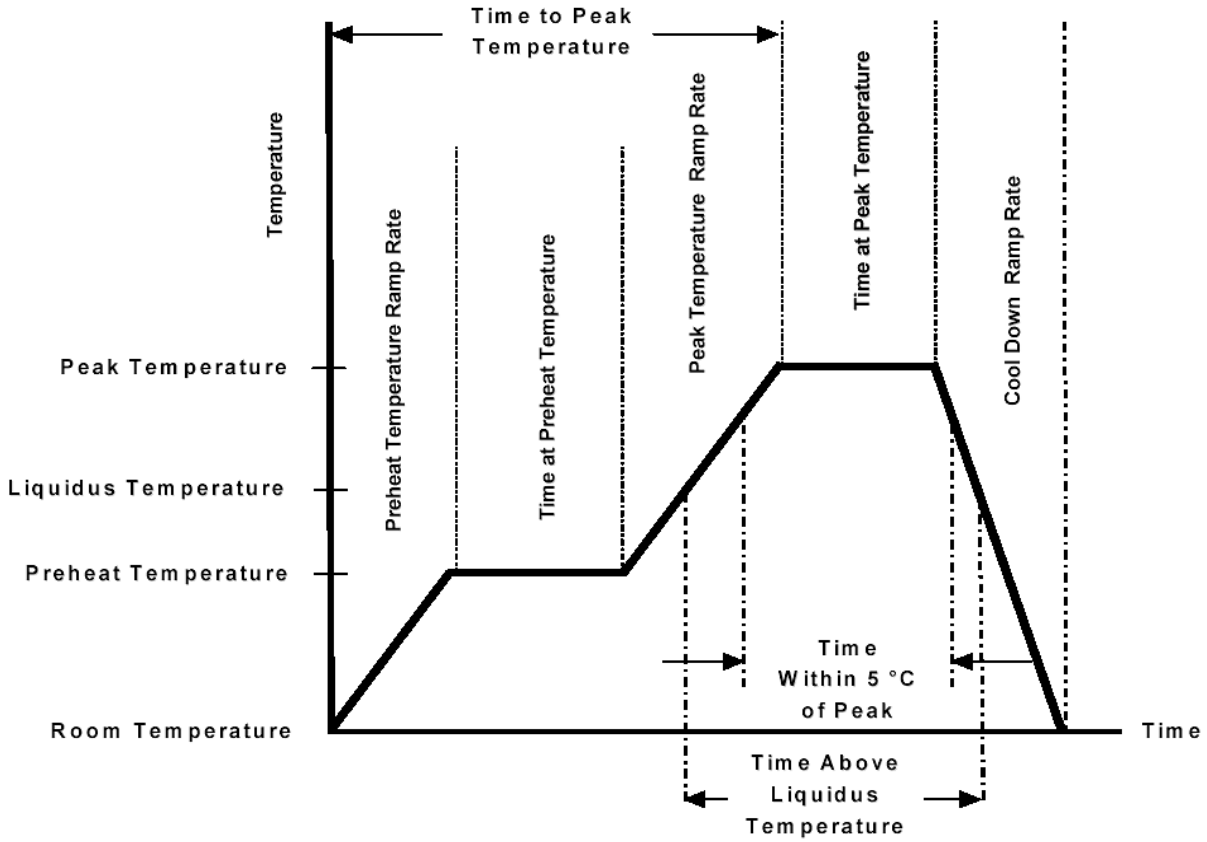
5.2 MECHANICAL PERFORMANCE

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
5.2.1	**Individual Contact Insertion Force**	Insert a 0.50mm square pin at a rate of 12.7mm per minute	180 grams Maximum
5.2.2	**Individual Contact Withdrawal Force**	Withdraw a 0.50mm square pin at a rate of 12.7mm per minute	20 grams Maximum
5.2.3	**Contact Normal Force**	Apply a load normal to the point of contact of the terminal	50 grams Minimum at deflection of 0.06mm
5.2.4	**Durability**	Mate connectors 25 times at a maximum rate of 10 cycles per minute	Contact resistance change from initial 10 milliohms Maximum
5.2.5	**Mechanical Shock**	½ Sine Wave, 50G, 11ms, Pulse, 3 shocks per axis per MIL-STD-202F method 231B condition A	Contact resistance change from initial 10 milliohms Maximum Discontinuity of 1 micro-second Maximum
5.2.6	**Vibration**	Simple Harmonic Motion 1.52mm total excursion, 10-55-10Hz traverse in 1 minute for 2 hours in each axis per MIL-STD-202F method 201A	Contact resistance change from initial 10 milliohms Maximum Discontinuity of 1 micro-second Maximum

5.3 ENVIRONMENTAL PERFORMANCE

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
5.3.1	**Thermal Shock**	Mated connectors expose for 5 cycles : Temperature — Duration -55 +0/-5°C — 30 minutes +105 +3/-0°C — 30 minutes	No damage in appearance Contact resistance change from initial 10 milliohms Maximum
5.3.2	**Thermal Aging**	Mated connectors expose at 105 +/-2°C for 96 hours	No damage in appearance Contact resistance change from initial 10 milliohms Maximum
5.3.3	**Cyclic Humidity**	Mated connectors expose to temperature cycle between +25 +/-2°C to +65 +/-2°C at 90% to 98% R.H. for 240 hours per MIL-STD-1344A method 1002.2 type II, except step 7.	No damage in appearance Contact resistance change from initial 10 milliohms Maximum
5.3.4	**Salt Spray**	Mated connectors exposed to 5% concentration sodium chloride solution at +35 +/-2°C for 96 hours per MIL-STD-202F method 101D condition A	Contact resistance change from initial 10 milliohms Maximum
5.3.5	**Temperature Rise**	Apply maximum rated DC to mated connectors and measure contact temperature rise for 96 hours.	+30°C Maximum temperature rise over ambient
5.3.6	**Solderability**	Soldertail to be placed on solderpaste and subjected to IR per “EIA 638 Surface Mount Solderability Test”	Soldertail in contact with solderpaste should have 95% new solder coating coverage
5.3.7	**Resistance to Soldering Heat**	Refer to Sheet 5 for Soldering Profile	No damage in appearance of the connector

SOLDERING PROFILE



Description	Requirement
Average Ramp Rate	3°C/sec Max
Preheat Temperature	150°C Min to 200°C Max
Preheat Time	60 to 180 sec
Ramp to Peak	3°C/sec Max
Time over Liquidus (217°C)	60 to 150 sec
Peak Temperature	260 +0/-5°C
Time within 5°C of Peak	20 to 40 sec
Ramp - Cool Down	6°C/sec Max
Time 25°C to Peak	8 min Max

6.0 PACKAGING

Parts shall be packaged to protect against damage during handling, transit and storage.

7.0 SPECIAL INSTRUCTIONS FOR HIGH-TEMPERATURE REFLOW PROCESSING ONLY

Background

The products covered in this specification are molded with a high-temperature thermoplastic resin that can withstand the effects of elevated temperatures as seen in today's reflow soldering processes. This high temperature resin, like many used in the electronics industry, is hygroscopic in nature, meaning it can absorb/desorb moisture readily.

Depending on the degree of elevated ambient temperature and relative humidity, the connectors may absorb an increased percentage of moisture. This increase in percentage of absorption is also dependent on the exposure time once connectors are removed from the sealed moisture barrier bags. Higher levels of moisture absorption are typically non-detrimental in most situations but when combined with the elevated peak temperatures and dwell times seen in reflow solder processes trapped gasses and moisture can sometimes result in blistering of the plastic housing.

Floor Life

In view of the hygroscopic nature of the resin, proper handling and storage are required if connectors will be processed or exposed to the higher temperatures of reflow soldering. Storage exposure time begins once connectors have been removed from sealed moisture barrier bags. Greater exposure time, storage and processing temperatures, ambient humidity and part geometry are influencing factors. As such, if connectors are used in a reflow soldering environment, it is recommended that upon removal from the moisture barrier bag, they should be consumed within 48 hours with a temperature and humidity level of not more than 30°C and 60% RH respectively. For unused quantity, it is recommended to repack within 24 hours into the moisture barrier bag and vacuum sealed prior to storage for future use.

Precautions and Remedy

To minimize moisture absorption, connectors are supplied in sealed moisture barrier bags with desiccant pouches. It is recommended that the connectors remain sealed in moisture barrier bags until they are ready to be consumed, following the above storage guideline. However, in the event the connectors are removed from the moisture barrier bag and have been exposed to conditions beyond the storage guideline, it is recommended that the connectors to be baked to remove moisture. Exposed connectors may be baked at 125°C for 3 to 5 hours and thereafter, they should be good for reflow soldering.