

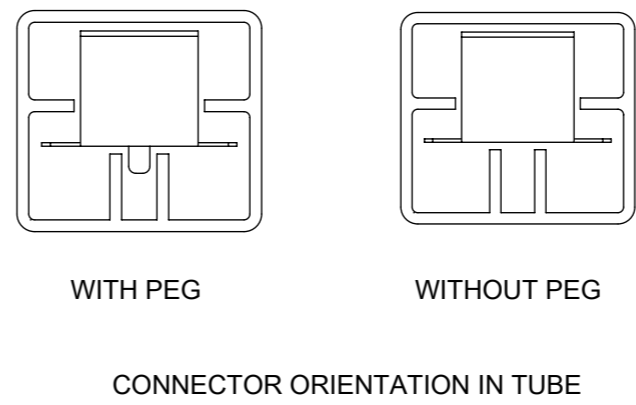
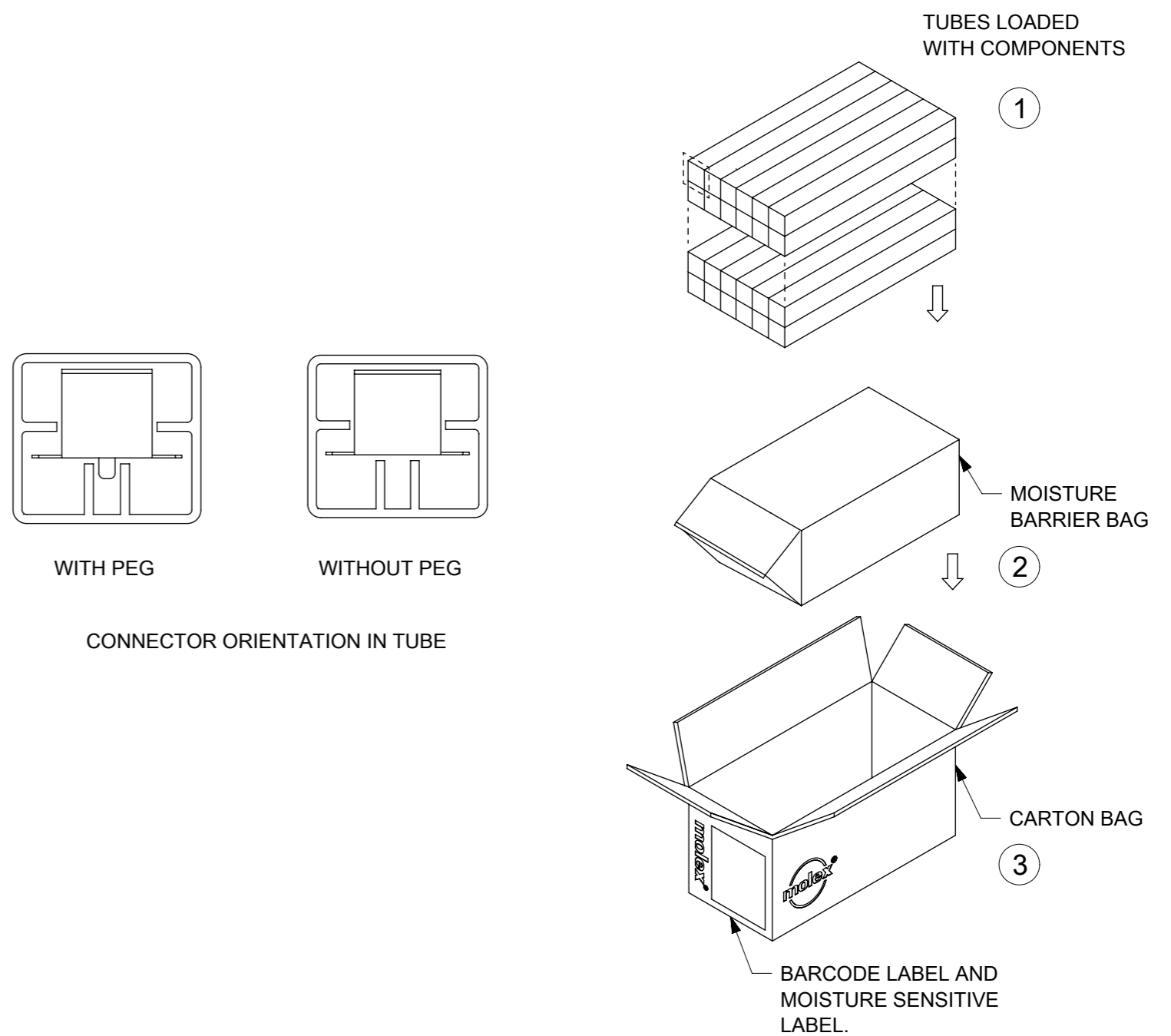
Molex 87368-2024 PDF

molex[®]

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

CKTS	TUBE : 89990-0002			MOISTURE BARRIER BAG	CARTON
	PARTS PER TUBE	TUBES PER INNER BOX	PARTS PER INNER BOX (SPQ)		
6	90	80	7200	89990-0201	96707-0004
8	65		5200		
10	52		4160		
12	44		3520		
14	38		3040		
16	33		2640		
18	29		2320		
20	26		2080		
22	24		1920		
24	22		1760		
26	20		1600		
28	19		1520		
30	17		1360		
32	16		1280		
34	15		1200		
36	14		1120		
38	13		1040		
40	13		1040		
42	12		960		
44	12		960		
46	11		880		
48	11		880		
50	10		800		

PACKAGING PROCEDURE



- NOTES :
1. ARRANGE AND STACK NUMBER OF TUBES NEATLY INTO THE MOISTURE BARRIER BAG AS SHOWN.
 2. VACUUM PACKED THE BAG WITH DESSICANTS.
 3. PLACED THE SEALED BAG WITH TUBES INTO A CARTON AS SHOWN.
 4. PARTIAL PACKAGING SHOULD BE AVOIDED.

SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		CURRENT REV DESC: REMASTERED IN NX		molex
	DIMENSION UNITS	SCALE			
▽ = 0	mm	NTS			PACKAGING SPECIFICATION MILLIGRID RECEPTACLE 87368
▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)				
▽ = 0		MM	INCH		
▽ = 0	4 PLACES	±	±	EC NO: 603631	PACKAGING DESIGN DRAWING
▽ = 0	3 PLACES	±	±	DRWN: NVELUSAMY 2018/02/13	
▽ = 0	2 PLACES	± 0.13	±	CHK'D: GJEEVANSURES 2018/08/29	DOCUMENT NUMBER
▽ = 0	1 PLACE	± 0.2	±	APPR: ISHWARG 2018/09/04	
▽ = 0	0 PLACES	±	±	INITIAL REVISION:	DOC TYPE
▽ = 0	ANGULAR TOL	± °		DRWN: GMENARLY 2017/08/22	DOC PART
▽ = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING	REVISION
▽ = 0				A3-SIZE	001
			SERIES	MATERIAL NUMBER	CUSTOMER
			87368	SEE TABLE	GENERAL MARKET
					SHEET NUMBER
					1 OF 1



PRODUCT SPECIFICATION

MILLI-GRID 2MM DUAL ROW SIDE-ENTRY RECEPTACLES

1.0 SCOPE

This Product Specification describes the performance requirements for a 4 pin, 2mm Pitch Compression Connector which will be used on Mobile Phone.

2.0 PRODUCT DESCRIPTION

2.1 PRODUCT NAME

Milli-grid 2mm Dual Row Side-Entry Receptacles

Include the P.C. board Through Hole version 87264, and the P.C. board Surface Mount Version 87368. There are board-in connectors that are intended to mate with Milli-grid Headers for inter-connections.

2.2 DIMENSIONS, MATERIAL, PLASTICS AND MARKINGS

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

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 the 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.

2.3 SAFTY AGENCY APPROVALS

UL File no. : E29179

CSA File no. : LR19980



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 87264, rated 1.0A, 125V

REVISION:	ECR/ECN INFORMATION:	TITLE:	SHEET No.
A2	EC No: 121915 DATE: 2017/10/10	MILLI-GRID 2MM DUAL ROW SIDE-ENTRY RECEPTACLES	1 of 7
DOCUMENT NUMBER:	CREATED / REVISED BY:	CHECKED BY:	APPROVED BY:
PS-87264	SCHEONG	GMENARLY	KHLIM
<small>TEMPLATE FILENAME: PRODUCT_SPEC(SIZE_A4)(V.1).DOC</small>			



PRODUCT SPECIFICATION

3.0 RATINGS

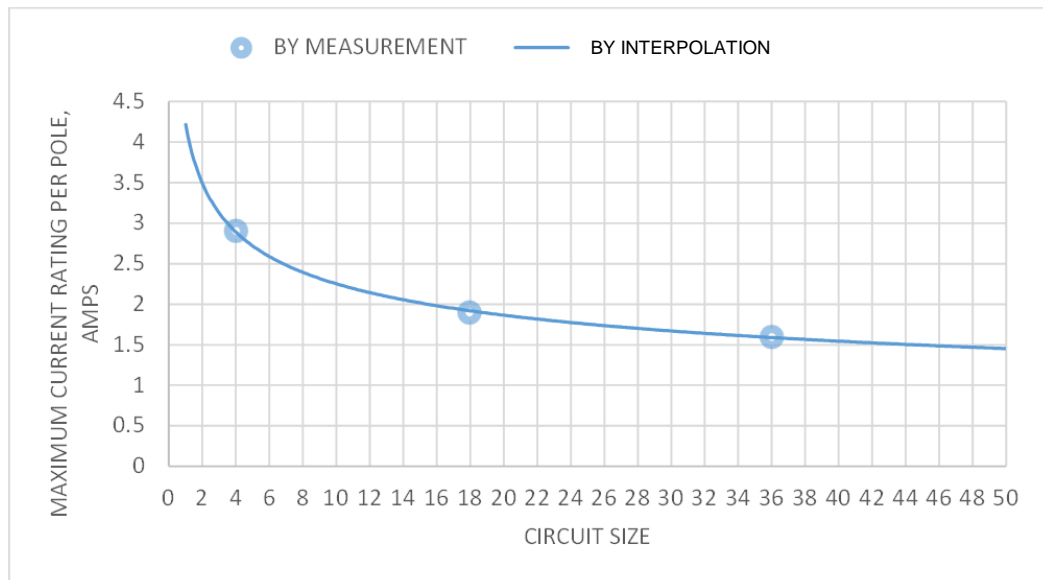
3.1 CURRENT

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): 1.45A

Board to Board (87264 & 87758 Series)



3.2 TEMPERATURE

Temperature Range -55°C ~ +105°C

REVISION: A2	ECR/ECN INFORMATION: EC No: 121915 DATE: 2017/10/10	TITLE: MILLI-GRID 2MM DUAL ROW SIDE-ENTRY RECEPTACLES	SHEET No. 2 of 7
DOCUMENT NUMBER: PS-87264	CREATED / REVISED BY: SCHEONG	CHECKED BY: GMENARLY	APPROVED BY: KHLIM



PRODUCT SPECIFICATION

4.0 PERFORMANCE

4.1 ELECTRICAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
4.1.1	Contact Resistance	Per MIL-STD-1344A method 3004.1	15 milliohms MAXIMUM
4.1.2	Insulation Resistance	500 VDC applied for 1 minute per MIL-STD-1344A method 3003.1	1000 Megaohms MINIMUM
4.1.3	Dielectric Strength	500 Vrms for 1 minute between adjacent terminals	No breakdown
4.1.4	Contact Capacitance	Measure between adjacent terminals at 1MHz.	2.0 picofarads MAXIMUM

4.2 MECHANICAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
4.2.1	Contact Normal Force	Apply a load normal to the point of contact of the terminal.	50grams MINIMUM At deflection of 0.06mm
4.2.2	Durability	Mate connectors 25 times at a maximum rate of 10 cycles/min.	Contact Resistance 10 milliohms MAXIMUM (Change from initial)
4.2.3	Vibration	Simple Harmonic Motion 0.06 inch total excursion, 10-55-10 Hz traverse in 1 minute for 2 hours in each axis per MIL-STD-202F method 201A .	Contact Resistance 10 milliohms MAXIMUM (Change from initial) & Discontinuity < 1 microsecond
4.2.4	Individual Contact Insertion Forces	Insert a maximum gage pin at a rate of 12 +/- 5cm/min	180 grams MAXIMUM.
4.2.5	Individual Contact Withdrawal Forces	Withdraw a minimum gage pin at a rate of 12 +/- 5cm/min	20 grams MINIMUM

REVISION:	ECR/ECN INFORMATION:	TITLE:	SHEET No.
A2	EC No: 121915 DATE: 2017/10/10	MILLI-GRID 2MM DUAL ROW SIDE-ENTRY RECEPTACLES	3 of 7
DOCUMENT NUMBER:	CREATED / REVISED BY:	CHECKED BY:	APPROVED BY:
PS-87264	SCHEONG	GMENARLY	KHLIM



PRODUCT SPECIFICATION

4.2.6	Shock (Mechanical)	½ Sine Wave, 50g (11 milliseconds) Pulse, 3 shocks per axis per MIL-STD- 202F method 231B condition A	Contact Resistance 10 milliohms MAXIMUM (Change from initial) & Discontinuity < 1 microsecond
-------	-------------------------------	---	---

REVISION: A2	ECR/ECN INFORMATION: EC No: 121915 DATE: 2017/10/10	TITLE: MILLI-GRID 2MM DUAL ROW SIDE-ENTRY RECEPTACLES	SHEET No. 4 of 7	
DOCUMENT NUMBER: PS-87264		CREATED / REVISED BY: SCHEONG	CHECKED BY: GMENARLY	APPROVED BY: KHLIM



PRODUCT SPECIFICATION

4.3 ENVIRONMENTAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT						
4.3.1	Temperature Rise	Apply 1.0 amps DC to mated connectors and measure contact temperature rise for 48 hours	+30°C MAXIMUM Temperature Rise over Ambient						
4.3.2	Thermal Shock	Mated connectors expose for 5 cycles: <table border="1"><thead><tr><th>Temperature °C</th><th>Duration</th></tr></thead><tbody><tr><td>-55 +0/-5</td><td>30 minutes</td></tr><tr><td>+105 +3/-0</td><td>30 minutes</td></tr></tbody></table>	Temperature °C	Duration	-55 +0/-5	30 minutes	+105 +3/-0	30 minutes	Contact Resistance 10 milliohms MAXIMUM (Change from initial) & Visual: No Damage
Temperature °C	Duration								
-55 +0/-5	30 minutes								
+105 +3/-0	30 minutes								
4.3.3	Thermal Aging	Mated connectors expose at 105 +/-2°C for 96 hours	Contact Resistance 10 milliohms MAXIMUM (Change from initial) & Visual: No Damage						
4.3.4	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	Contact Resistance 10 milliohms MAXIMUM (Change from initial) & Visual: No Damage						
4.3.5	Flowers of Sulfur	Mated connectors exposed to sulfur vapors for 17 hours at +65 +/-2°C	Contact Resistance 10 milliohms MAXIMUM (Change from initial)						
4.3.6	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 10 milliohms MAXIMUM (Change from initial)						
4.3.7	Current Cycling	Apply 1 amp DC to mated connectors over a cycle of 45 minutes ON and 15 minutes OFF for 48 hours	Contact Resistance 10 milliohms MAXIMUM (Change from initial)						
4.3.8	Solderability	Solder tail to be dipped in flux and examined as per MIL-STD-202F Method 208F	Dipped plated portion should have 95% continuous new solder coating coverage						

REVISION:	ECR/ECN INFORMATION:	TITLE:	SHEET No.
A2	EC No: 121915 DATE: 2017/10/10	MILLI-GRID 2MM DUAL ROW SIDE-ENTRY RECEPTACLES	5 of 7
DOCUMENT NUMBER:	CREATED / REVISED BY:	CHECKED BY:	APPROVED BY:
PS-87264	SCHEONG	GMENARLY	KHLIM



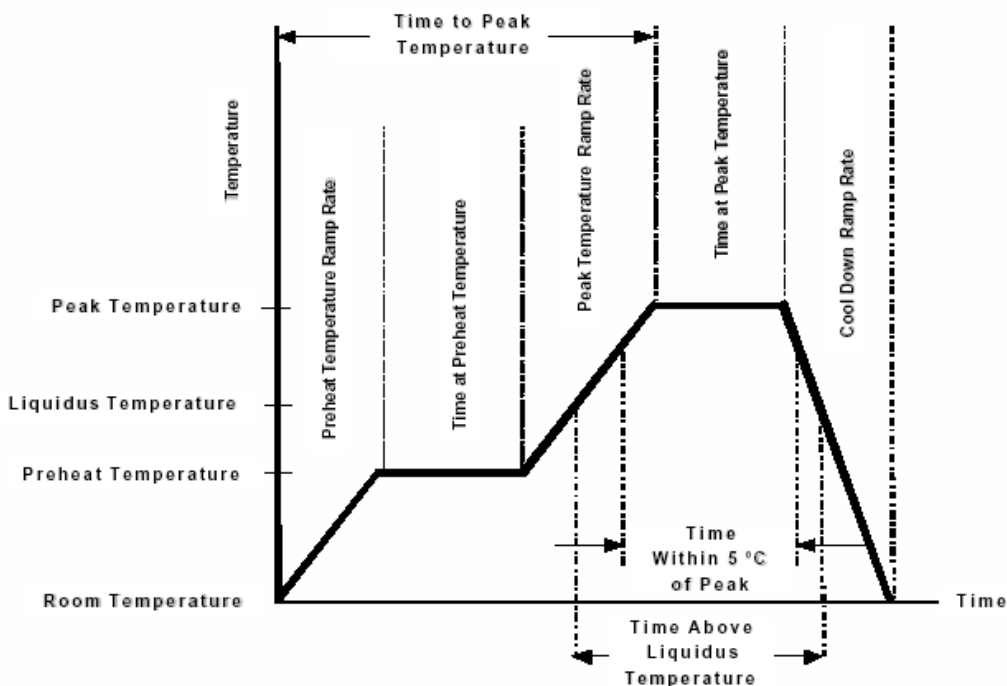
PRODUCT SPECIFICATION

4.3 ENVIRONMENTAL REQUIREMENTS (continued)

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
4.3.9	Resistance to Soldering Heat	Solder tail to be dipped in flux as per MIL-STD-202F Method 210A Condition B	Visual: No Damage
	Resistance to Infra-Red Heat	Subject connector to the IR Reflow temperature of 260 +/-5°C for 12+/-2 seconds	Visual: No Damage

4.3.10

Reflow Temperature Profile



LEAD FREE ALLOY

DESCRIPTION	REQUIREMENT
Average Preheat Ramp Rate	3 °C/ second maximum
Preheat Temperature	150 °C minimum ; 200 °C maximum
Preheat Time	60 to 180 seconds
Ramp to Peak	3 °C/ second maximum
Time over Liquidus (217 °C)	60 to 150 seconds
Peak Temperature	260 °C to +0/ -5 °C
Time within 5 °C of peak	20 to 40 seconds
Ramp - Cool Down	6 °C/ second maximum
Time 25°C to Peak	8 minutes maximum

REVISION:	ECR/ECN INFORMATION:	TITLE:	SHEET No.
A2	EC No: 121915 DATE: 2017/10/10	MILLI-GRID 2MM DUAL ROW SIDE-ENTRY RECEPTACLES	6 of 7
DOCUMENT NUMBER:	CREATED / REVISED BY:	CHECKED BY:	APPROVED BY:
PS-87264	SCHEONG	GMENARLY	KHLIM



PRODUCT SPECIFICATION

5.0 PACKAGING

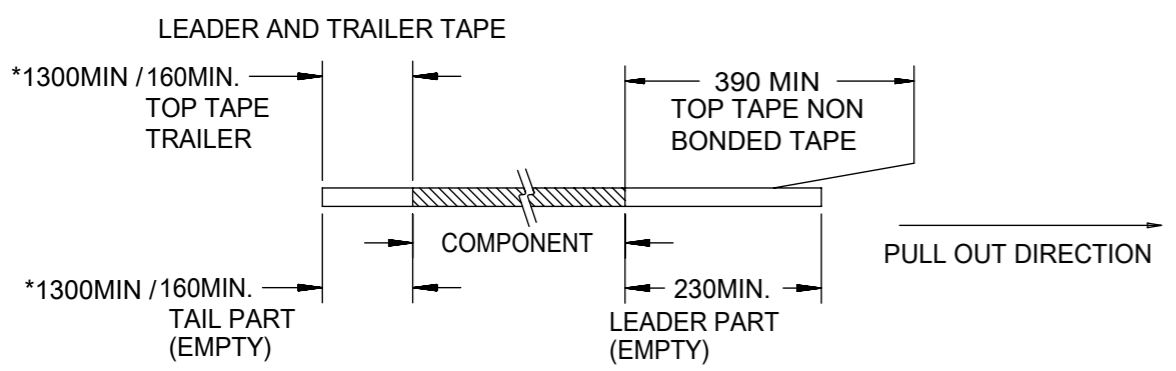
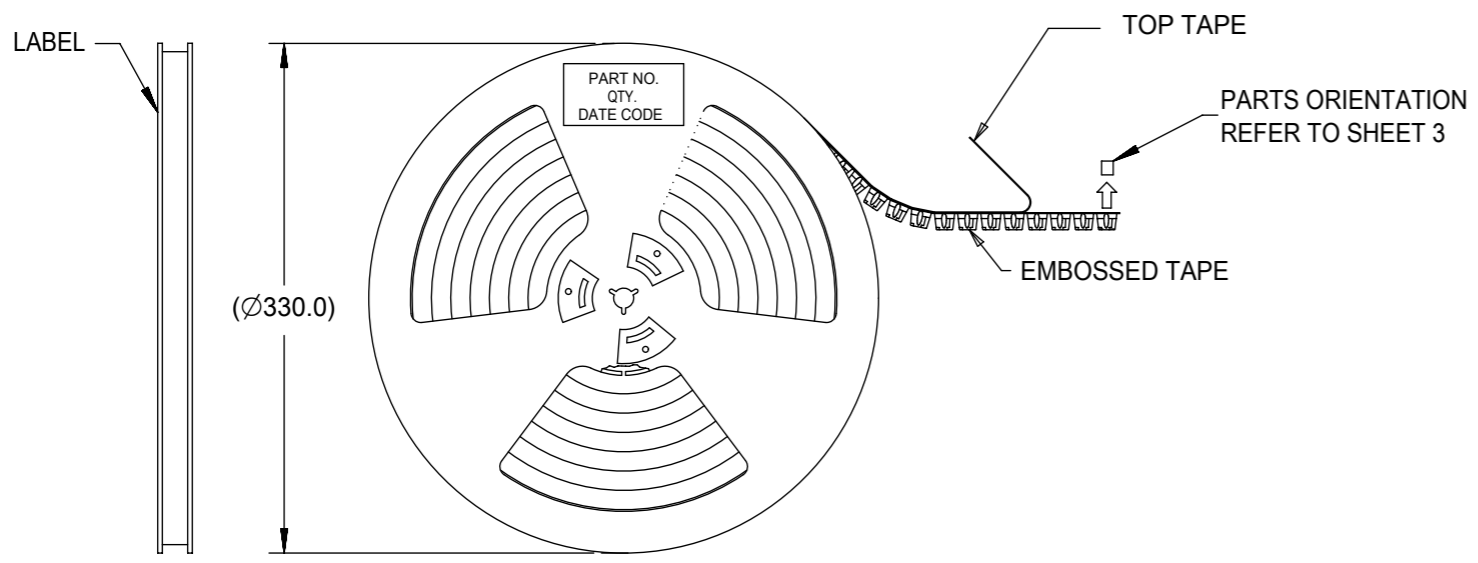
Parts shall be packaged to protect against damage during handling, transit and storage.

6.0 GAGES

Individual Contact Insertion and Withdrawal Test to be performed using steel gage pins to simulate the minimum and maximum mating pin dimensions. The size of these gage pins are as follows:

Minimum Pin Size = 0.48 +/- 0.005mm
Maximum Pin Size = 0.52 +/- 0.005mm

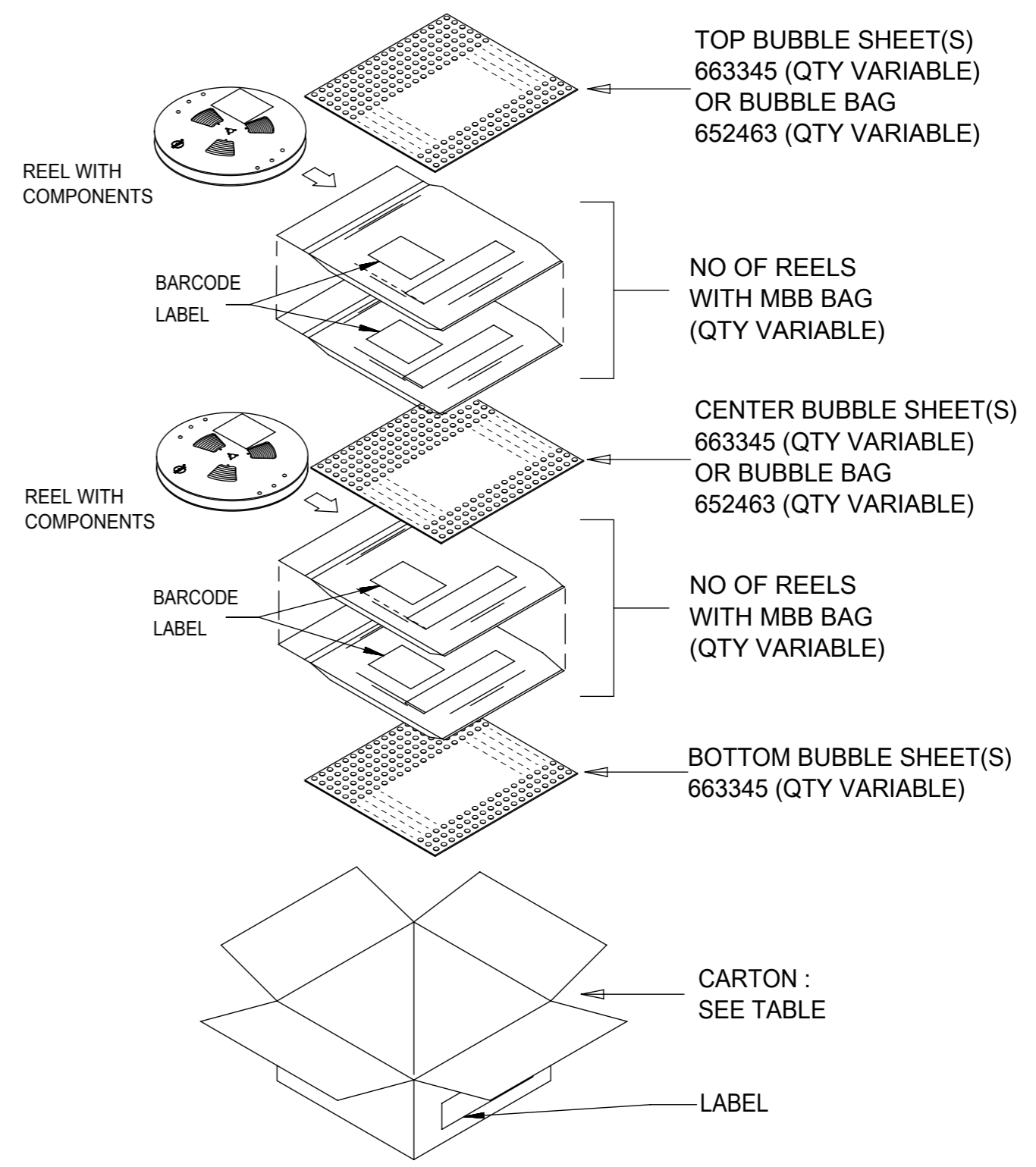
REVISION: A2	ECR/ECN INFORMATION: EC No: 121915 DATE: 2017/10/10	TITLE: MILLI-GRID 2MM DUAL ROW SIDE-ENTRY RECEPTACLES	SHEET No. 7 of 7
DOCUMENT NUMBER: PS-87264	CREATED / REVISED BY: SCHEONG	CHECKED BY: GMENARLY	APPROVED BY: KHLIM



*NOTE: 1300MM IN THE TRAILER SIDE IS FOR ONLY 87381-9007 AND REST ALL FOLLOWS 160MM.

NOTES:

1. PACKAGING COMPONENTS, QUANTITIES & CARBON BOX SHALL BE ESTABLISHED AS PER DROP TEST REPORT. PLEASE REFERENCE TABLE FOR DETAILS.
2. ALL REQUIREMENTS FOR TAPING SURFACE MOUNT COMPONENTS IS AS PER EIA-481 STANDARD.
3. THE TOP COVER TAPE SHALL BE CLEAR ONLY, AND SHALL NOT EXTEND OVER THE EDGES OF THE CARRIER TAPE OR COVER ANY PART OF THE SPROCKET HOLES
4. THE TOP COVER TAPE MUST BE SECURELY ATTACHED TO THE EMBOSSSED CARRIER TAPE BY USE OF HEAT
5. EACH REEL SHALL HAVE A LABEL AFFIXED TO IT WITH THE FOLLOWING INFORMATION:
PART NO., QUANTITY, DATE CODE
6. REEL OF COMPONENTS IN A MBB BAG CONTAINS SILICA GEL.
7. TAPE SPLICES ARE NOT PERMITTED
8. PEELING OFF FORCE OF THE TOP TAPE : 20 ~ 80gf

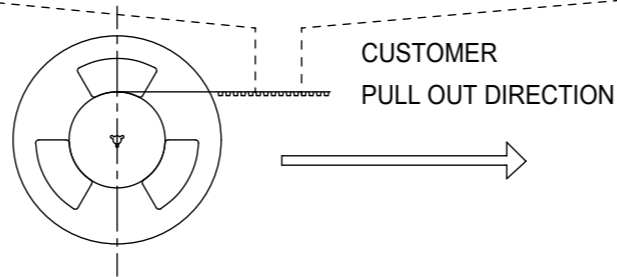
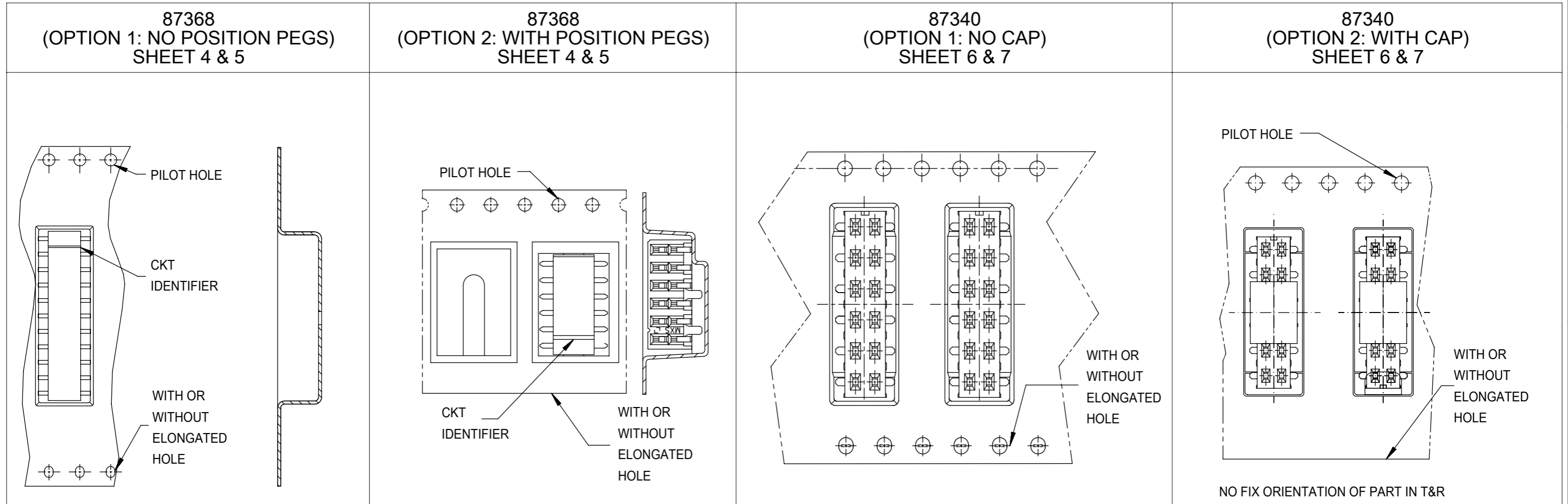


SYMBOLS ▽ = 0 ▽ = 0 ▽ = 2 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0	DIMENSION UNITS mm	SCALE NTS	CURRENT REV DESC: EC NO: 625481 DRWN: NMANE02 2019/05/30 CHK'D: MRAMAKRISHNA 2019/10/15 APPR: MRAMAKRISHNA 2019/10/15			
	GENERAL TOLERANCES (UNLESS SPECIFIED)		INITIAL REVISION: DRWN: SCHEONG 2016/01/18 APPR: KHLIM 2016/11/24			PACKAGING SPECIFICATION MGRID RECEPTACLE SERIES 2.00MM PITCH IN T&R
	4 PLACES ± 3 PLACES ± 2 PLACES ± 1 PLACE ± 0 PLACES ±	MM INCH	INCH MM	PACKAGING DESIGN DRAWING		
	ANGULAR TOL ± ° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	THIRD ANGLE PROJECTION 	DRAWING A3-SIZE	SERIES 87368		MATERIAL NUMBER SEE TABLE

DOCUMENT STATUS	P1	RELEASE DATE	2019/10/15	13:45:17
-----------------	----	--------------	------------	----------

FOR REFERENCE ONLY.

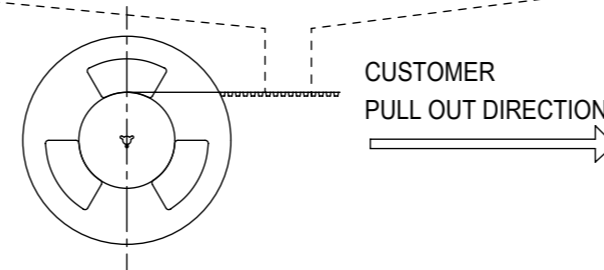
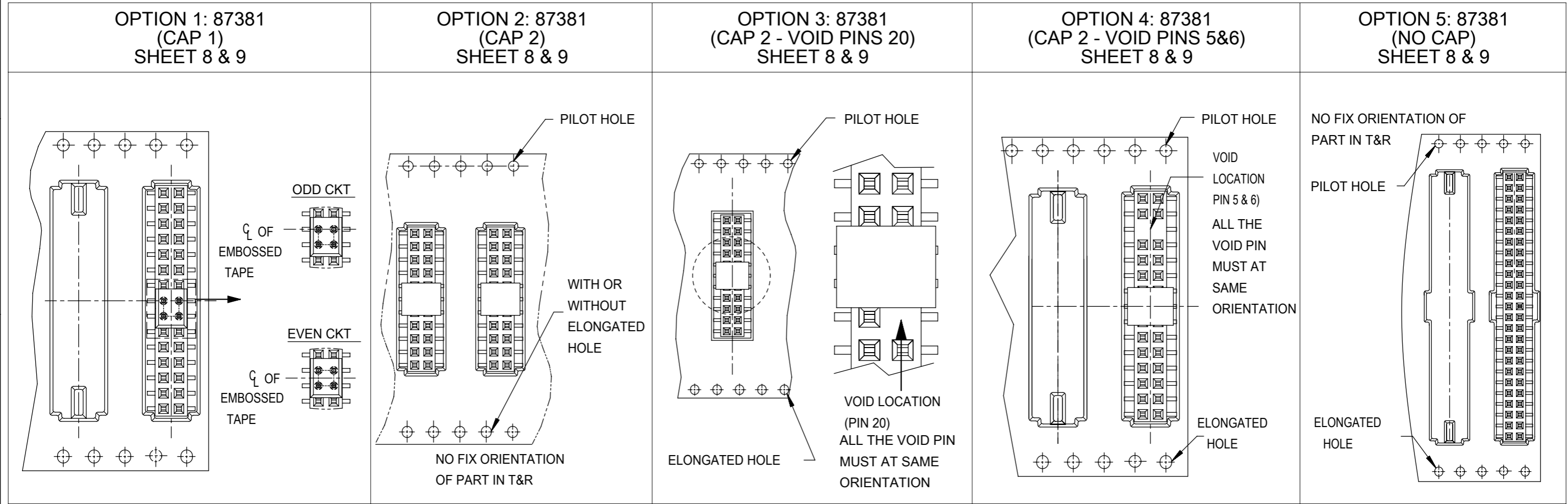
OVERVIEW OF PARTS ORIENTATION IN TAPE & REEL FOR 2.00MM PITCH.



SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		CURRENT REV DESC:		molex
	DIMENSION UNITS	SCALE			
▽ = 0	mm	NTS			MGRID RECEPTACLE SERIES 2.00MM PITCH IN T&R
▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)				PACKAGING DESIGN DRAWING
▽ = 0		MM	INCH		
▽ = 0	4 PLACES	±	±	EC NO: 625481	DOCUMENT NUMBER
▽ = 0	3 PLACES	±	±	DRWN: NMANE02 2019/05/30	
▽ = 0	2 PLACES	±	±	CHK'D: MRAMAKRISHNA 2019/10/15	DOC TYPE
▽ = 0	1 PLACE	±	±	APPR: MRAMAKRISHNA 2019/10/15	DOC PART
▽ = 0	0 PLACES	±	±	INITIAL REVISION:	REVISION
▽ = 0	ANGULAR TOL	±	°	DRWN: SCHEONG 2016/01/18	PK-87368-0001
▽ = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	APPR: KHLIM 2016/11/24	PDD
▽ = 0			DRAWING	SERIES	001
			A3-SIZE	87368	A5
DOCUMENT STATUS			MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
P1	RELEASE DATE	2019/10/15 13:45:17	SEE TABLE	GENERAL MARKET	2 OF 9

FOR REFERENCE ONLY.

OVERVIEW OF PARTS ORIENTATION IN TAPE & REEL FOR 2.00MM PITCH.



SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		CURRENT REV DESC:		molex
	▽ = 0	mm	NTS	EC NO: 625481	
▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DRWN: NMANE02	2019/05/30	PACKAGING SPECIFICATION MGRID RECEPTACLE SERIES 2.00MM PITCH IN T&R
▽ = 0			CHK'D: MRAMAKRISHNA	2019/10/15	
▽ = 0	4 PLACES	±	±	APPR: MRAMAKRISHNA	2019/10/15
▽ = 0	3 PLACES	±	±	INITIAL REVISION:	
▽ = 0	2 PLACES	±	±	DRWN: SCHEONG	2016/01/18
▽ = 0	1 PLACE	±	±	APPR: KHLIM	2016/11/24
▽ = 0	0 PLACES	±	±	THIRD ANGLE PROJECTION	
▽ = 0	ANGULAR TOL ± °		DRAWING		SERIES
▽ = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		A3-SIZE		87368
▽ = 0	MATERIAL NUMBER		CUSTOMER		SHEET NUMBER
DOCUMENT NUMBER		DOC TYPE		DOC PART	REVISION
PK-87368-0001		PDD		001	A5
SEE TABLE		GENERAL MARKET		3 OF 9	

CKTS	ASSEMBLY P/N	OPTION	CARTON BOX	EMBOSSSED TAPE	REEL	TOP TAPE	MOISTURE BARRIER BAG (MBB)	METHOD SEAL OR NOT)	BUBBLE SHEETS QTY			BUBBLE BAGS (EVERY REEL)	EMBOSS WIDTH	QTY/ REEL	REELS/ CARTON
									TOP	CENTER	BOTTOM				
08	87368-6123	01	89990-1018	78888-2038	89990-5710	89990-5603	89990-0200	SEAL					24.00	750	04
10	87368-6122	02	89990-1018	89990-2015	89990-5710	89990-5603	89990-0200	SEAL	-	-	-	-	24.00	750	04
	87368-1110	01	89990-1018	89990-5005	89990-5710	89990-5603	89990-0200	SEAL	-	-	-	-	24.00	750	03
12	87368-1112	01	89990-1018	89990-5011	89990-5710	89990-5603	89990-0200	SEAL	-	-	-	-	24.00	750	04
	87368-6100	02	89990-1018	89990-2011	89990-5710	89990-5603	89990-0200	SEAL	-	-	-	-	24.00	750	04
16	87368-6123	02	89990-1018	78888-2038	89990-5710	89990-5603	89990-0200	SEAL	2	-	2	-	24.00	750	04
	87368-6124	02	89990-1018	78888-2112	89990-5710	89990-5603	89990-0200	SEAL	2	-	2	-	24.00	750	04
18	87368-6102	02	89990-1018	89990-2018	89990-5711	89990-5604	89990-0200	SEAL	-	-	-	-	32.00	750	04
	87368-6103	02	89990-1018	89990-2018	89990-5711	89990-5604	89990-0200	SEAL	-	-	-	-	32.00	750	04
20	87368-8010	01	89990-1018	89990-5004	89990-5711	89990-5604	89990-0200	SEAL	-	-	-	-	32.00	750	02
	87368-1120	01	89990-1018	89990-5004	89990-5711	89990-5604	89990-0200	SEAL	-	-	-	-	32.00	750	02

SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	
	DIMENSION UNITS	SCALE
▽ = 0	mm	NTS
▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)	
▽ = 0		
▽ = 0	4 PLACES ±	±
▽ = 0	3 PLACES ±	±
▽ = 0	2 PLACES ±	±
▽ = 0	1 PLACE ±	±
▽ = 0	0 PLACES ±	±
▽ = 0	ANGULAR TOL ± °	
■ = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	
▽ = 0	THIRD ANGLE PROJECTION	DRAWING
		A3-SIZE

CURRENT REV DESC:		
EC NO: 625481	2019/05/30	
DRWN: NMANE02	2019/10/15	
CHK'D: MRAMAKRISHNA	2019/10/15	
APPR: MRAMAKRISHNA	2019/10/15	
INITIAL REVISION:		
DRWN: SCHEONG	2016/01/18	
APPR: KHLIM	2016/11/24	

molex		
PACKAGING SPECIFICATION		
MGRID RECEPTACLE SERIES 2.00MM PITCH IN T&R		
PACKAGING DESIGN DRAWING		
DOCUMENT NUMBER	DOC TYPE	DOC PART
PK-87368-0001	PDD	001
REVISION		
A5		
MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
SEE TABLE	GENERAL MARKET	4 OF 9

9 8 7 6 5 4 3 2 1

CKTS	ASSEMBLY P/N	OPTION	CARTON BOX	EMBOSSSED TAPE	REEL	TOP TAPE	MOISTURE BARRIER BAG (MBB)	METHOD SEAL OR NOT)	BUBBLE SHEETS QTY			BUBBLE BAGS (EVERY REEL)	EMBOSS WIDTH	QTY/ REEL	REELS/ CARTON
									TOP	CENTER	BOTTOM				
22	87368-6111	02	89990-1018	89990-2016	89990-5711	89990-5604	89990-0200	SEAL	-	-	-	-	32.00	750	03
	87368-6112	02	89990-1018	89990-2016	89990-5711	89990-5604	89990-0200	SEAL	-	-	-	-	32.00	750	03
24	87368-6104	01	89990-1018	89990-2020	89990-5712	89990-5605	89990-0200	SEAL	-	-	-	-	44.00	750	04
	87368-6105	01	89990-1018	89990-2020	89990-5712	89990-5605	89990-0200	SEAL	-	-	-	-	44.00	750	04
40	87368-1140	01	89990-1018	89990-5001	89990-5713	89990-5606	89990-0200	SEAL	-	-	-	-	56.00	750	02
44	87368-6134	02	89990-1018	89990-2014	89990-5713	89990-5606	89990-0200	SEAL	-	-	-	-	56.00	650	02
	87368-6135	02	89990-1018	89990-2014	89990-5713	89990-5606	89990-0200	SEAL	-	-	-	-	56.00	650	02
50	87368-6140	02	89990-1018	89990-2010	89990-5772	89990-5607	89990-0200	SEAL	-	-	-	-	72.00	650	02
	87368-6141	02	89990-1018	89990-2010	89990-5772	89990-5607	89990-0200	SEAL	-	-	-	-	72.00	650	02
	87368-1150	01	89990-1018	89990-5000	89990-5772	89990-5607	89990-0200	SEAL	-	-	-	-	72.00	750	02

SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		
	DIMENSION UNITS	SCALE	CURRENT REV DESC:
▽ = 0	mm	NTS	EC NO: 625481 DRWN: NMANE02 2019/05/30 CHK'D: MRAMAKRISHNA 2019/10/15 APPR: MRAMAKRISHNA 2019/10/15
▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)		
▽ = 0			INITIAL REVISION: DRWN: SCHEONG 2016/01/18 APPR: KHLIM 2016/11/24
▽ = 0	4 PLACES ±	±	
▽ = 0	3 PLACES ±	±	DOCUMENT NUMBER: PK-87368-0001 DOC TYPE: PDD DOC PART: 001 REVISION: A5
▽ = 0	2 PLACES ±	±	
▽ = 0	1 PLACE ±	±	MATERIAL NUMBER: SEE TABLE CUSTOMER: GENERAL MARKET SHEET NUMBER: 5 OF 9
▽ = 0	0 PLACES ±	±	
▽ = 0	ANGULAR TOL ± °		
▽ = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	THIRD ANGLE PROJECTION	DRAWING: A3-SIZE SERIES: 87368


DOCUMENT STATUS | P1 | RELEASE DATE | 2019/10/15 13:45:17

9 8 7 6 5 4 3 2 1

FORMAT: Mol-lega-master-ib-prod-A3
REVISION: 0
DATE: 2017/10/08

9 8 7 6 5 4 3 2 1

CKTS	ASSEMBLY P/N	OPTION	CARTON BOX	EMBOSSSED TAPE	REEL	TOP TAPE	MOISTURE BARRIER BAG (MBB)	METHOD SEAL OR NOT)	BUBBLE SHEETS QTY			BUBBLE BAGS (EVERY REEL)	EMBOSS WIDTH	QTY/ REEL	REELS/ CARTON
									TOP	CENTER	BOTTOM				
04	87340-0476	02	89990-1018	89990-7051	89990-5710	89990-5603	-	SEAL	-	-	-	01	24.00	1000	03
	87340-0496	02	89990-1018	89990-7051	89990-5710	89990-5603	-	SEAL	-	-	-	01	24.00	1000	04
	87340-0429	01	89990-1018	151000-4278	89990-5709	89990-5602	-	SEAL	2	-	2	-	24.00	1500	06
06	87340-0676	02	89990-1018	89990-7052	89990-5710	89990-5603	-	SEAL	-	-	-	01	24.00	1000	03
	87340-0686	02	89990-1018	89990-7052	89990-5710	89990-5603	-	SEAL	-	-	-	01	24.00	1000	04
	87340-0696	02	89990-1018	89990-7084	89990-5709	89990-5602	-	SEAL	-	-	-	01	16.00	1000	04
	87340-0698	02	89990-1018	89990-7084	89990-5709	89990-5602	-	SEAL	-	-	-	01	16.00	1000	04
	87340-0629	01	89990-1018	151000-4304	89990-5710	89990-5603	-	SEAL	1	-	1	-	24.00	1500	05
08	87340-0876	02	89990-1018	89990-7053	89990-5710	89990-5603	-	SEAL	-	-	-	01	24.00	1000	03
	87340-0896	02	89990-1018	89990-7053	89990-5710	89990-5603	-	SEAL	-	-	-	01	24.00	1000	04
10	87340-1019	01	89990-1018	89990-7095	89990-5710	89990-5603	-	SEAL	-	-	-	01	24.00	1000	03
	87340-1096	02	89990-1018	89990-7095	89990-5710	89990-5603	-	SEAL	-	-	-	01	24.00	1000	03
	87340-1076	02	89990-1018	89990-7095	89990-5710	89990-5603	-	SEAL	-	-	-	01	24.00	1000	03

SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION													
	DIMENSION UNITS		SCALE		CURRENT REV DESC:									
▽ = 0	mm	NTS		EC NO: 625481 DRWN: NMANE02 2019/05/30 CHK'D: MRAMAKRISHNA 2019/10/15 APPR: MRAMAKRISHNA 2019/10/15						PACKAGING SPECIFICATION MGRID RECEPTACLE SERIES 2.00MM PITCH IN T&R				
▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)											MM		INCH
▽ = 0	4 PLACES	±	±	INITIAL REVISION: DRWN: SCHEONG 2016/01/18 APPR: KHLIM 2016/11/24						DOCUMENT NUMBER		DOC TYPE	DOC PART	REVISION
▽ = 0	3 PLACES	±	±							PK-87368-0001		PDD	001	A5
▽ = 0	2 PLACES	±	±	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION		DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER		SHEET NUMBER	
▽ = 0	1 PLACE	±	±	A3-SIZE		87368		SEE TABLE		GENERAL MARKET		6 OF 9		
▽ = 0	0 PLACES	±	±	ANGULAR TOL ± °		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION		CUSTOMER		SHEET NUMBER		
▽ = 0	□ = 0													

DOCUMENT STATUS | P1 | RELEASE DATE | 2019/10/15 13:45:17

9 8 7 6 5 4 3 2 1

CKTS	ASSEMBLY P/N	OPTION	CARTON BOX	EMBOSSSED TAPE	REEL	TOP TAPE	MOISTURE BARRIER BAG (MBB)	METHOD SEAL OR NOT)	BUBBLE SHEETS QTY			BUBBLE BAGS (EVERY REEL)	EMBOSS WIDTH	QTY/ REEL	REELS/ CARTON
									TOP	CENTER	BOTTOM				
12	87340-1276	02	89990-1018	89990-5504	89990-5710	89990-5603	-	SEAL	-	-	-	01	24.00	1000	03
	87340-1296	02	89990-1018	89990-5504	89990-5710	89990-5603	-	SEAL	-	-	-	01	24.00	1000	03
	87340-1298	02	89990-1018	89990-5504	89990-5710	89990-5603	-	SEAL	-	-	-	01	24.00	1000	03
	87340-1233	01	89990-1018	89990-5504	89990-5710	89990-5603	-	SEAL	-	-	-	01	24.00	1500	03
14	87340-1496	02	89990-1018	89990-7087	89990-5710	89990-5603	-	SEAL	-	-	-	01	24.00	1000	04
	87340-1429	01	89990-1018	89990-7087	89990-5710	89990-5603	-	SEAL	-	-	-	01	24.00	1000	04
16	87340-1686	02	89990-1018	89990-7088	89990-5710	89990-5603	-	SEAL	-	-	-	01	24.00	1000	04
	87340-1676 (A5)	02	89990-1018	89990-7088	89990-5710	89990-5603	-	SEAL	-	-	-	01	24.00	1000	04
	87340-1696	02	89990-1018	89990-7088	89990-5710	89990-5603	-	SEAL	-	-	-	01	24.00	1000	04
	87340-1698	02	89990-1018	89990-7088	89990-5710	89990-5603	-	SEAL	-	-	-	01	24.00	1000	04
18	87340-1829	01					-	SEAL							
20	87340-2029	01	89990-1018	89990-7090	89990-5712	89990-5605	-	SEAL	-	EVERY LAYER	-	-	44.00	1000	03
	87340-2096	02	89990-1018	89990-7090	89990-5712	89990-5605	-	SEAL	-	-	-	01	44.00	1000	02

DOCUMENT STATUS	P1	RELEASE DATE	2019/10/15	13:45:17																																																																	
<table border="1"> <tr> <td>SYMBOLS</td> <td colspan="2">THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION</td> <td colspan="2">CURRENT REV DESC:</td> </tr> <tr> <td>▽ = 0</td> <td>DIMENSION UNITS</td> <td>SCALE</td> <td colspan="2"></td> </tr> <tr> <td>▽ = 0</td> <td>mm</td> <td>NTS</td> <td colspan="2"></td> </tr> <tr> <td>▽ = 0</td> <td colspan="4">GENERAL TOLERANCES (UNLESS SPECIFIED)</td> </tr> <tr> <td>▽ = 0</td> <td></td> <td>MM</td> <td>INCH</td> <td></td> </tr> <tr> <td>▽ = 0</td> <td>4 PLACES</td> <td>±</td> <td>±</td> <td></td> </tr> <tr> <td>▽ = 0</td> <td>3 PLACES</td> <td>±</td> <td>±</td> <td></td> </tr> <tr> <td>▽ = 0</td> <td>2 PLACES</td> <td>±</td> <td>±</td> <td></td> </tr> <tr> <td>▽ = 0</td> <td>1 PLACE</td> <td>±</td> <td>±</td> <td></td> </tr> <tr> <td>▽ = 0</td> <td>0 PLACES</td> <td>±</td> <td>±</td> <td></td> </tr> <tr> <td>▽ = 0</td> <td>ANGULAR TOL</td> <td>±</td> <td>°</td> <td></td> </tr> <tr> <td>▽ = 0</td> <td colspan="2">DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS</td> <td>THIRD ANGLE PROJECTION</td> <td>DRAWING</td> </tr> <tr> <td>▽ = 0</td> <td colspan="2"></td> <td></td> <td>A3-SIZE</td> </tr> </table>					SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		CURRENT REV DESC:		▽ = 0	DIMENSION UNITS	SCALE			▽ = 0	mm	NTS			▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)				▽ = 0		MM	INCH		▽ = 0	4 PLACES	±	±		▽ = 0	3 PLACES	±	±		▽ = 0	2 PLACES	±	±		▽ = 0	1 PLACE	±	±		▽ = 0	0 PLACES	±	±		▽ = 0	ANGULAR TOL	±	°		▽ = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING	▽ = 0				A3-SIZE
SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		CURRENT REV DESC:																																																																		
▽ = 0	DIMENSION UNITS	SCALE																																																																			
▽ = 0	mm	NTS																																																																			
▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)																																																																				
▽ = 0		MM	INCH																																																																		
▽ = 0	4 PLACES	±	±																																																																		
▽ = 0	3 PLACES	±	±																																																																		
▽ = 0	2 PLACES	±	±																																																																		
▽ = 0	1 PLACE	±	±																																																																		
▽ = 0	0 PLACES	±	±																																																																		
▽ = 0	ANGULAR TOL	±	°																																																																		
▽ = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING																																																																	
▽ = 0				A3-SIZE																																																																	
EC NO: 625481 DRWN: NMANE02 2019/05/30 CHK'D: MRAMAKRISHNA 2019/10/15 APPR: MRAMAKRISHNA 2019/10/15			molex PACKAGING SPECIFICATION MGRID RECEPTACLE SERIES 2.00MM PITCH IN T&R																																																																		
INITIAL REVISION: DRWN: SCHEONG 2016/01/18 APPR: KHLIM 2016/11/24			PACKAGING DESIGN DRAWING DOCUMENT NUMBER: PK-87368-0001 DOC TYPE: PDD DOC PART: 001 REVISION: A5																																																																		
MATERIAL NUMBER: 87368 CUSTOMER: GENERAL MARKET		SHEET NUMBER: 7 OF 9																																																																			

9 8 7 6 5 4 3 2 1

CKTS	ASSEMBLY P/N	OPTION	CARTON BOX	EMBOSSSED TAPE	REEL	TOP TAPE	MOISTURE BARRIER BAG (MBB)	METHOD SEAL OR NOT)	CORNER GAURD	BUBBLE SHEETS QTY			BUBBLE BAGS (EVERY REEL)	EMBOSS WIDTH	QTY/ REEL	REELS/ CARTON
										TOP	CENTER	BOTTOM				
06	87381-9002	02	89990-1018	89990-2022	89990-5710	89990-5603	89990-0200	SEAL	-	1	-	1	-	24.00	500	05
	87381-9013	02	89990-1018	89990-6806	89990-5710	89990-5603	89990-0200	SEAL	-	-	-	-	-	24.00	800	05
	87381-9011									-	-	-	-	-	-	
	87381-9012									-	-	-	-	-	-	
08	87381-9003	02	89990-1018	89990-2114	89990-5710	89990-5603	89990-0200	SEAL	-	1	-	1	-	24.00	600	05
	87381-9016	02	89990-1018	89990-6808	89990-5710	89990-5603	89990-0200	SEAL	-	1	-	1	-	24.00	800	05
10	87381-9030	02	89990-1018	89990-6810	89990-5710	89990-5603	89990-0200	SEAL	-	-	-	-	-	24.00	800	05
	87381-9005	02	89990-1018	89990-6910	89990-5710	89990-5603	89990-0200	SEAL	-	-	-	-	-	24.00	680	05
12	87381-9007	02	89990-1018	151000-4374	89990-5710	89990-5603	89990-0200	SEAL	YES	1	-	1	-	24.00	600	05
14	87381-9006	02	89990-1018	89990-6914	89990-5711	89990-5604	89990-0200	SEAL	-	-	-	-	-	32.00	750	04
	87381-9004	02	89990-1018	89990-6916	89990-5711	89990-5604	89990-0200	SEAL	-	-	-	-	-	32.00	800	04
	87381-1800	02	89990-1018	89990-6918	89990-5711	89990-5604	89990-0200	SEAL	-	-	-	-	-	32.00	750	04
	87381-2000	02	89990-1018	89990-6920	89990-5711	89990-5604	89990-0200	SEAL	-	1	-	1	-	32.00	800	04
22	87381-2200	02	89990-1018	89990-6902	89990-5712	89990-5605	89990-0200	SEAL	-	1	-	1	-	44.00	500	03
	87381-8212	02	89990-1018	89990-6902	89990-5712	89990-5605	89990-0200	SEAL	-	-	-	-	-	44.00	500	02
26	87381-8887	02	89990-1018	89990-6903	89990-5712	89990-5605	89990-0200	SEAL	-	1	-	1	-	44.00	650	03
	87381-2620	02	89990-1018	151000-4447	89990-5712	89990-5605	89990-0200	SEAL	-	1	-	1	-	44.00	375	03

9	8	7	6	5	4	3	2	1									
<table border="1"> <tr> <td>DOCUMENT STATUS</td> <td>P1</td> <td>RELEASE DATE</td> <td>2019/10/15</td> <td>13:45:17</td> <td colspan="4"></td> </tr> </table>									DOCUMENT STATUS	P1	RELEASE DATE	2019/10/15	13:45:17				
DOCUMENT STATUS	P1	RELEASE DATE	2019/10/15	13:45:17													

SYMBOLS = 0 = 0 = 0 = 0 = 0 = 0 = 0 = 0 = 0	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION DIMENSION UNITS: mm SCALE: NTS GENERAL TOLERANCES (UNLESS SPECIFIED) <table border="1"> <tr> <th></th> <th>MM</th> <th>INCH</th> </tr> <tr> <td>4 PLACES</td> <td>±</td> <td>±</td> </tr> <tr> <td>3 PLACES</td> <td>±</td> <td>±</td> </tr> <tr> <td>2 PLACES</td> <td>±</td> <td>±</td> </tr> <tr> <td>1 PLACE</td> <td>±</td> <td>±</td> </tr> <tr> <td>0 PLACES</td> <td>±</td> <td>±</td> </tr> </table> ANGULAR TOL ± ° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MM	INCH	4 PLACES	±	±	3 PLACES	±	±	2 PLACES	±	±	1 PLACE	±	±	0 PLACES	±	±	CURRENT REV DESC: EC NO: 625481 DRWN: NMANE02 2019/05/30 CHK'D: MRAMAKRISHNA 2019/10/15 APPR: MRAMAKRISHNA 2019/10/15 INITIAL REVISION: DRWN: SCHEONG 2016/01/18 APPR: KHLIM 2016/11/24 THIRD ANGLE PROJECTION 	 PACKAGING SPECIFICATION MGRID RECEPTACLE SERIES 2.00MM PITCH IN T&R PACKAGING DESIGN DRAWING DOCUMENT NUMBER: PK-87368-0001 DOC TYPE: PDD DOC PART: 001 REVISION: A5 MATERIAL NUMBER: SEE TABLE CUSTOMER: GENERAL MARKET SHEET NUMBER: 8 OF 9
		MM	INCH																		
	4 PLACES	±	±																		
	3 PLACES	±	±																		
2 PLACES	±	±																			
1 PLACE	±	±																			
0 PLACES	±	±																			

CKTS	ASSEMBLY P/N	OPTION	CARTON BOX	EMBOSSSED TAPE	REEL	TOP TAPE	MOISTURE BARRIER BAG (MBB)	METHOD SEAL OR NOT)	BUBBLE SHEETS QTY			BUBBLE BAGS (EVERY REEL)	EMBOSS WIDTH	QTY/ REEL	REELS/ CARTON
									TOP	CENTER	BOTTOM				
30	87381-3000	02	89990-1018	89990-6915	89990-5712	89990-5605	89990-0200	SEAL	1	-	1	-	44.00	500	03
	87381-9015	02	89990-1018	89990-6829	89990-5713	89990-5606	89990-0200	SEAL	-	-	-	-	56.00	800	02
	87381-8231	02	89990-1018	89990-6915	89990-5712	89990-5605	89990-0200	SEAL	-	-	-	-	44.00	700	02
	87381-8025	02	89990-1018	89990-2004	89990-5712	89990-5605	89990-0200	SEAL	-	-	-	-	44.00	1000	03
32	87381-3200	02	89990-1018	89990-6932	89990-5712	89990-5605	89990-0200	SEAL	-	-	-	-	44.00	500	03
40	87381-4000	02	89990-1018	151000-4265	89990-5713	89990-5606	89990-0200	SEAL	2	2	2	-	56.00	400	02
44	87381-4489	03	89990-1018	89990-6922	89990-5713	89990-5606	89990-0200	SEAL	-	-	-	-	56.00	800	02
	87381-4400	02	89990-1018	89990-6922	89990-5713	89990-5606	89990-0200	SEAL	-	-	-	-	56.00	500	02
46	87381-4600	02	89990-1018	89990-6946	89990-5772	89990-5607	89990-0200	SEAL	-	-	-	-	72.00	750	02
50	87381-6000	05	89990-1018	89990-7050	89990-5772	89990-5607	89990-0200	SEAL	-	-	-	-	72.00	500	02
	87381-7017	04	89990-1018	89990-6950	89990-5772	89990-5607	89990-0200	SEAL	-	-	-	-	72.00	800	02
	87381-5000	02	89990-1018	89990-6950	89990-5772	89990-5607	89990-0200	SEAL	-	-	-	-	72.00	500	02
	87381-5030	02	89990-1018	89990-6950	89990-5772	89990-5607	89990-0200	SEAL	-	-	-	-	72.00	500	02
	87381-6851	01	89990-1018	89990-6950	89990-5772	89990-5607	89990-0200	SEAL	-	-	-	-	72.00	650	02
12	87381-9021	02	89990-1018	151000-4374	89990-5710	89990-5603	89990-0200	SEAL	1	-	1	-	24.00	600	05
40	87381-9022	02	89990-1018	151000-4265	89990-5713	89990-5606	89990-0200	SEAL	2	2	2	-	56.00	400	02

DOCUMENT STATUS | P1 | RELEASE DATE | 2019/10/15 13:45:17

SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	
	DIMENSION UNITS	SCALE
▽ = 0	mm	NTS
▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)	
▽ = 0	MM	INCH
▽ = 0	4 PLACES ±	±
▽ = 0	3 PLACES ±	±
▽ = 0	2 PLACES ±	±
▽ = 0	1 PLACE ±	±
▽ = 0	0 PLACES ±	±
▽ = 0	ANGULAR TOL ± °	
■ = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	
▽ = 0	THIRD ANGLE PROJECTION	DRAWING
		A3-SIZE
	SERIES	87368
	MATERIAL NUMBER	SEE TABLE
	CUSTOMER	GENERAL MARKET
	SHEET NUMBER	9 OF 9

EC NO: 625481
 DRWN: NMANE02 2019/05/30
 CHK'D: MRAMAKRISHNA 2019/10/15
 APPR: MRAMAKRISHNA 2019/10/15

molex

PACKAGING SPECIFICATION
 MGRID RECEPTACLE SERIES 2.00MM PITCH IN T&R

PACKAGING DESIGN DRAWING

INITIAL REVISION:
 DRWN: SCHEONG 2016/01/18
 APPR: KHLIM 2016/11/24

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
PK-87368-0001	PDD	001	A5