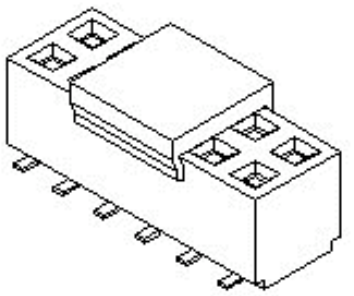
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Part Number: 0873812464
Status: Active
Description: 2.00mm (.079") Pitch Milli-Grid™ Receptacle, Surface Mount, Top Entry, 0.38µm (15µ") Gold (Au) Plating, with Cap, without Locating Pegs, 24 Circuits, Lead-free



Series image - Reference only

Documents:

3D Model
Drawing (PDF)
Product Specification PS-87380-002 (PDF)
RoHS Certificate of Compliance (PDF)

Agency Certification

CSA	LR19980
UL	E29179

General

Product Family	PCB Receptacles
Series	87381
Application	Board-to-Board
Comments	With Cap
Product Literature Order No	987650-1991
Product Name	Milli-Grid™

Physical

Circuits (Loaded)	24
Circuits (maximum)	24
Color - Resin	Black
Durability (mating cycles max)	25
Flammability	94V-0
Glow-Wire Compliant	No
Lock to Mating Part	None
Material - Metal	Phosphor Bronze
Material - Plating Mating	Gold
Material - Plating Termination	Tin-Lead
Material - Resin	High Temperature Thermoplastic
Number of Rows	2
Orientation	Vertical
PCB Locator	No
PCB Retention	None
Packaging Type	Tube
Pitch - Mating Interface (in)	0.079 In
Pitch - Mating Interface (mm)	2.00 mm
Pitch - Term. Interface (in)	0.079 In
Pitch - Term. Interface (mm)	2.00 mm
Plating min: Mating (µin)	15
Plating min: Mating (µm)	0.38
Plating min: Termination (µin)	50
Plating min: Termination (µm)	1.27
Polarized to PCB	No
Surface Mount Compatible (SMC)	N/A
Temperature Range - Operating	-55°C to +105°C
Termination Interface: Style	Surface Mount

Electrical

Current - Maximum per Contact	1.9A
Voltage - Maximum	125V

Solder Process Data

Duration at Max. Process Temperature (seconds)	12

EU RoHS
ELV and RoHS Compliant
REACH SVHC
Contains SVHC: No
Halogen-Free Status
Not Reviewed

China RoHS

Need more information on product environmental compliance?

Email productcompliance@molex.com
For a multiple part number RoHS Certificate of Compliance, click here

Please visit the Contact Us section for any non-product compliance questions.

Search Parts in this Series
87381Series

Mates With
87758 Vertical, Through Hole, Stackable PCB Header, 87759 Vertical, Surface Mount, Stackable PCB Header, 87760 Right Angle, Through Hole, Stackable PCB Header, 87831 Vertical, Through Hole PCB Header, 87832 Vertical, Surface Mount PCB

Lead-free Process Capability	Reflow Capable (SMT only)
Max. Cycles at Max. Process Temperature	1
Process Temperature max. C	260

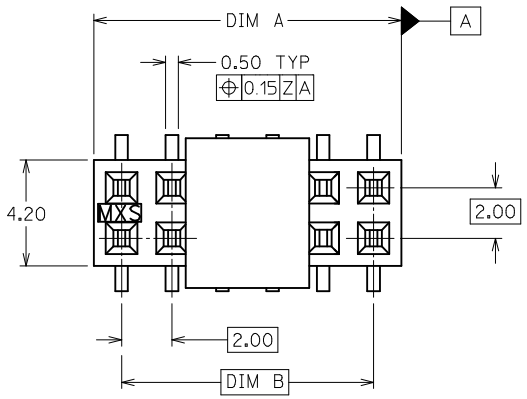
Material Info

Reference - Drawing Numbers

Product Specification	PS-87380-002
Sales Drawing	SD-87381-**6*

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PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION



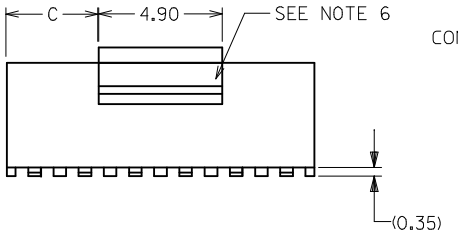
PART NO. LEGEND
FOR TUBE PACKAGING ONLY

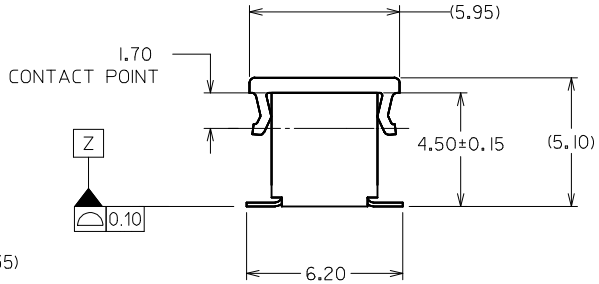
87381 - * * * *

CIRCUIT SIZE

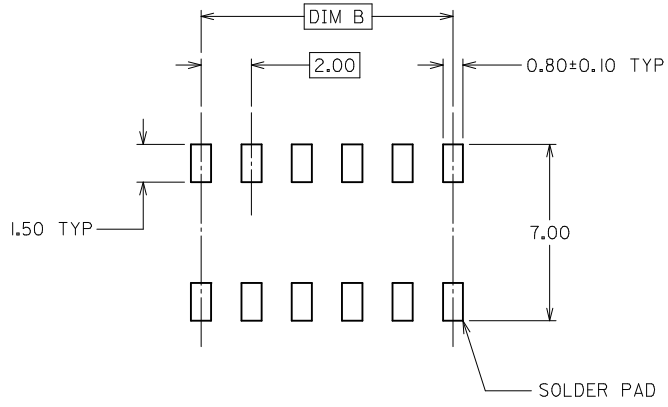
PLATING (SEE NOTE 1)
3
4

6 COVER
7 NO COVER





PART NUMBER (SEE NOTE 5)	CKT. SIZE	DIM A	DIM B	DIM C
87381-06**	6	6.00	4.00	0.55
87381-08**	8	8.00	6.00	1.55
87381-10**	10	10.00	8.00	2.55
87381-12**	12	12.00	10.00	3.55
87381-14**	14	14.00	12.00	4.55
87381-16**	16	16.00	14.00	5.55
87381-18**	18	18.00	16.00	6.55
87381-20**	20	20.00	18.00	7.55
87381-22**	22	22.00	20.00	8.55
87381-24**	24	24.00	22.00	9.55
87381-26**	26	26.00	24.00	10.55
87381-28**	28	28.00	26.00	11.55
87381-30**	30	30.00	28.00	12.55
87381-32**	32	32.00	30.00	13.55
87381-34**	34	34.00	32.00	14.55
87381-36**	36	36.00	34.00	15.55
87381-38**	38	38.00	36.00	16.55
87381-40**	40	40.00	38.00	17.55
87381-42**	42	42.00	40.00	18.55
87381-44**	44	44.00	42.00	19.55
87381-46**	46	46.00	44.00	20.55
87381-48**	48	48.00	46.00	21.55
87381-50**	50	50.00	48.00	22.55



RECOMMENDED PCB LAYOUT

NOTES:
1. PLATING FINISH:
   3 - 0.76um MIN. GOLD IN CONTACT AREA 1.27um MIN. TIN IN SOLDER TAIL AREA BOTH OVER 1.27um MIN. NICKEL OVERALL
   4 - 0.38um MIN. GOLD IN CONTACT AREA 1.27um MIN. TIN IN SOLDER TAIL AREA BOTH OVER 1.27um MIN. NICKEL OVERALL
2. 12 CKT SIZE SHOWN FOR ASSY ILLUSTRATION ONLY. (SEE CHART FOR ALL PART SIZES), 6 CKT & 30 CKT ILLUSTRATED FOR TAPE/REEL VERSION ON SHT 2.
3. PRODUCT SPECIFICATION PS-87380 APPLIES.
4. COPLANARITY OF SOLDER TAILS ARE TO BE MEASURED BY RESTING THE PART ON A FLAT GAUGE SURFACE.
5. TUBE PACKAGING STANDARD.
6. COVER IS OPTIONAL, SEE LEGEND.
7. PARTS SHALL BE PACKED IN MOISTURE BARRIER BAG.
8. REFER SHT 3 FOR P/N: 87381-6000 T&R ILLUSTRATION.

ADD P/N: 87381-3200
EC NO: S2009-0725 2009/04/01
DRWN:SKANG 2009/04/06
CH'KD:ATSEE 2009/04/07
APPR:MLONG
DESCRIPTION
REV
E8

QUALITY SYMBOLS
▼=0
Ⓒ=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± ---
2 PLACES	± 0.20	± ---
1 PLACE	± ---	± ---
ANGULAR ± 3 °		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: MM ONLY
SCALE: NTS
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY: JAMES DATE: 1998/01/08
CHECKED BY: LCHANG DATE: 1999/04/23
APPROVED BY: SQUEK DATE: 1999/04/26

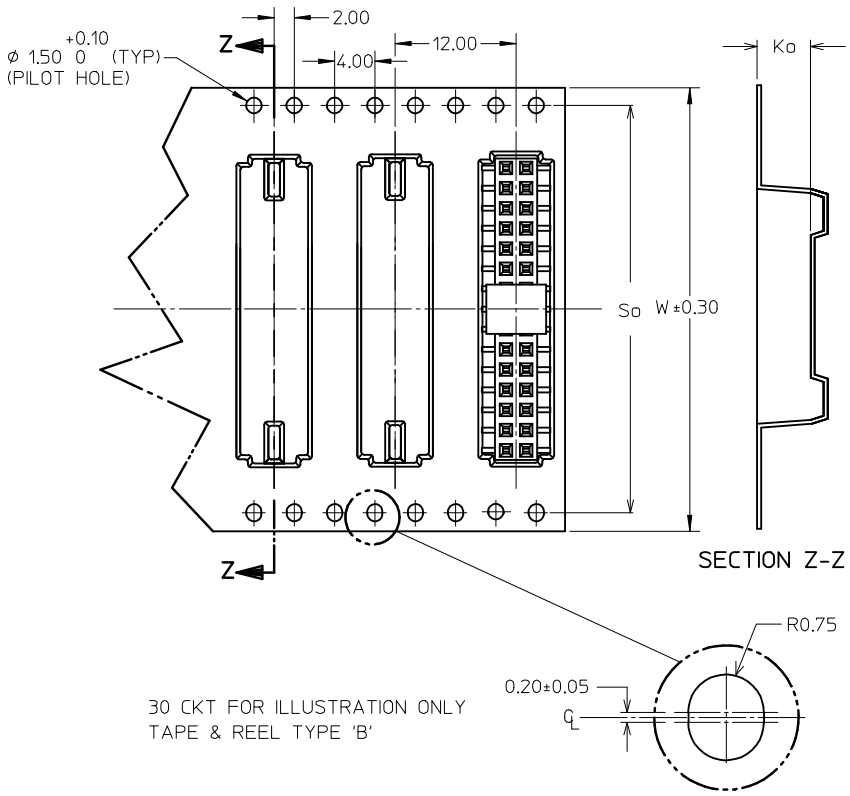
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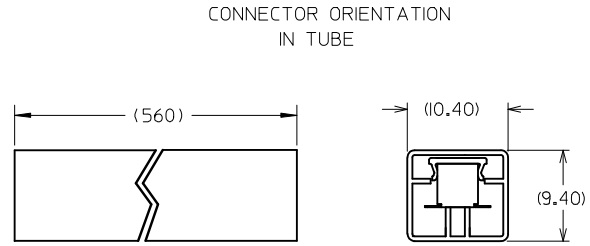
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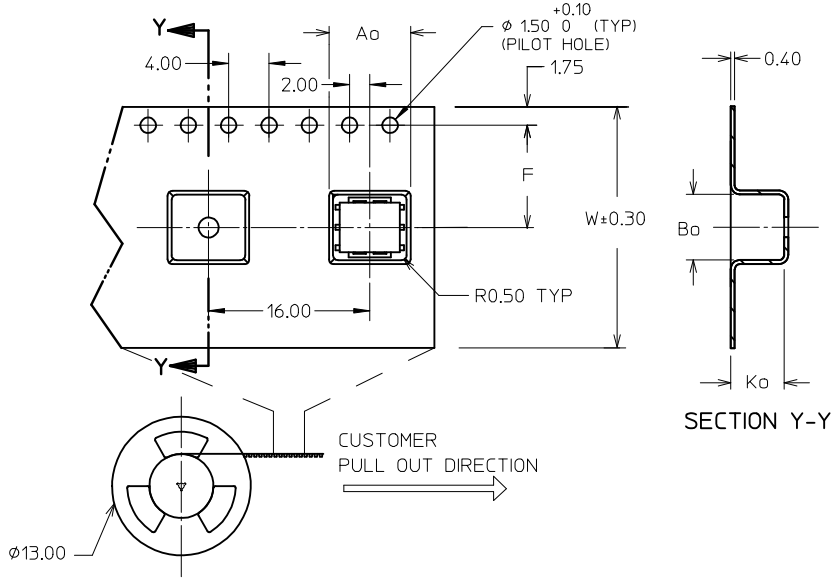
MATERIAL NO.: SEE TABLE
DOCUMENT NO.: SD-87381-**6*
SHEET NO.: 1 OF 4

SIZE A3

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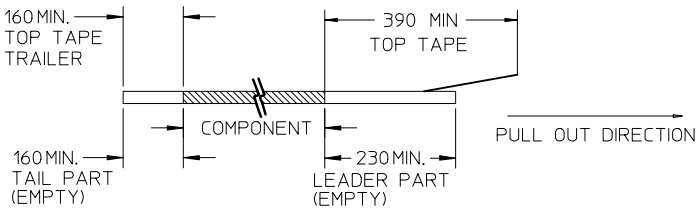




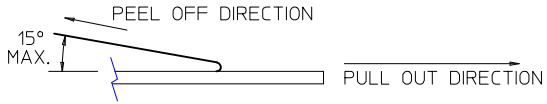


NOTES:

1. LEADER AND TRAILER TAPE



2. PEELING OFF FORCE OF THE TOP TAPE: 20-80gf.
   (PEELING DIRECTION AS SHOWN IN FOLLOWING FIGURE)



3. PACKAGING STANDARD IS AS PER EIA-481.
4. TAPE & REEL QUANTITY = SEE TABLE

ADD P/N: 87381-3200
EC NO: S2009-0725 2009/04/01
DRWN:SKANG 2009/04/06
CH'KD:ATSEE 2009/04/07
APPR:MLONG DESCRIPTION
E8 REV

QUALITY SYMBOLS
▼=0
Ⓒ=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± ---
2 PLACES	± 0.20	± ---
1 PLACE	± ---	± ---
ANGULAR ± 3 °		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: MM ONLY
SCALE: NTS
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY: JAMES DATE: 1998/01/08
CHECKED BY: LCHANG DATE: 1999/04/23
APPROVED BY: SQUEK DATE: 1999/04/26
MATERIAL NO.: SEE TABLE

TITLE: MGRID, TOP ENTRY RECEPT. 4.50MM HT., SMT
MOLEX INCORPORATED
DOCUMENT NO.: SD-87381-**6*
SHEET NO.: 2 OF 4
SIZE: A3

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

CKT SIZE	PART NO. WITH CAP IN TUBE	PART NO. WITH CAP IN TAPE / REEL	W	So	Ao	F	Bo	Ko	T&R TYPE (SHT 2)	T&R QTY PER REEL
6	87381-0664	87381-9002	24	-	7.00	11.50	6.50	5.30	A	500
8	87381-0864	87381-9003	24	-	7.00	11.50	8.50	5.30	A	600
10	87381-1064	87381-9005	24	-	7.00	11.50	10.50	5.30	A	680
14	87381-1464	87381-9006	32	28.40	7.20	14.20	14.50	5.30	B	750
16	87381-1664	87381-9004	32	28.40	7.20	14.20	16.50	5.30	B	800
18	87381-1864	87381-1800	32	28.40	7.20	14.20	18.50	5.30	B	750
20	87381-2063	87381-2000	32	28.40	7.20	14.20	20.50	5.30	B	800
22	87381-2264	87381-2200	44	40.40	7.20	20.20	22.50	5.30	B	500
30	87381-3064	87381-3000	44	40.40	7.20	20.20	30.50	5.30	B	500
32	87381-3264	87381-3200	44	40.40	7.20	20.20	32.50	5.30	B	500
44	87381-4464	87381-4400	56	52.40	7.20	26.20	44.50	5.30	B	500
46	87381-4664	87381-4600	72	68.40	7.20	34.20	46.50	5.30	B	750
50	87381-5063	87381-5030	72	68.40	7.20	34.20	50.50	5.30	B	500
50	87381-5064	87381-5000	72	68.40	7.20	34.20	50.50	5.30	B	500

ADD P/N: 87381-3200
EC NO: S2009-0725 2009/04/01
DRWN:SKANG 2009/04/06
CH'KD:ATSEE 2009/04/07
APPR:MLONG
DESCRIPTION
REV
E8

QUALITY SYMBOLS
▼=0
Ⓒ=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± ---
2 PLACES	± 0.20	± ---
1 PLACE	± ---	± ---

ANGULAR ± 3 °

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: MM ONLY
SCALE: NTS
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY: JAMES DATE: 1998/01/08
CHECKED BY: LCHANG DATE: 1999/04/23
APPROVED BY: SQUEK DATE: 1999/04/26

TITLE: MGRID, TOP ENTRY RECEPT. 4.50MM HT., SMT

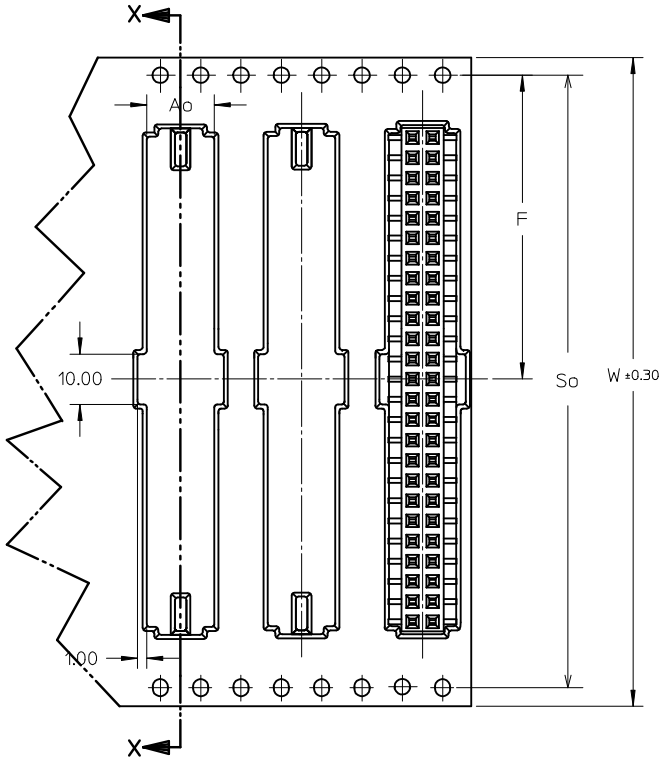
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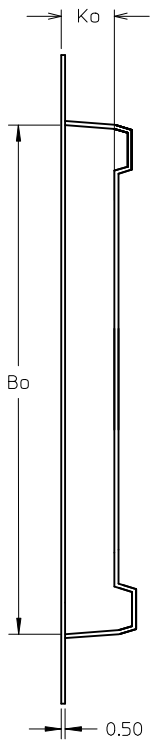
MATERIAL NO.: SEE TABLE
DOCUMENT NO.: SD-87381-**6*
SHEET NO.: 3 OF 4
SIZE: A3

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CKT SIZE	PART NO. WITHOUT CAP IN TUBE	PART NO. WITHOUT CAP IN TAPE / REEL	W	So	Ao	F	Bo	Ko	T&R TYPE (SHT 2)	T&R QTY PER REEL
50	87381-5074	87381-6000 △8	72	68.40	6.80	34.20	50.50	8.00	B	500

△8 ILLUSTRATION FOR P/N: 87381-6000
50 CKT IN T&R W/O CAP





SECTION X-X

ADD P/N: 87381-3200
EC NO: S2009-0725 2009/04/01
DRWN:SKANG 2009/04/06
CH'KD:ATSEE 2009/04/07
APPR:MLONG
DESCRIPTION
E8
REV

QUALITY SYMBOLS
▼=0
Ⓒ=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± ---
2 PLACES	± 0.20	± ---
1 PLACE	± ---	± ---
ANGULAR ± 3 °		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: MM ONLY
SCALE: NTS
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY: JAMES DATE: 1998/01/08
CHECKED BY: LCHANG DATE: 1999/04/23
APPROVED BY: SQUEK DATE: 1999/04/26

TITLE: MGRID, TOP ENTRY RECEPT. 4.50MM HT., SMT

MOLEX INCORPORATED

MATERIAL NO.: SEE TABLE
DOCUMENT NO.: SD-87381-**6*
SHEET NO.: 4 OF 4
SIZE: A3

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