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Part Number: [0873814600](#)
Status: **Active**
Description: 2.00mm (.079") Pitch Milli-Grid™ Receptacle, Surface Mount, Top Entry, 0.38µm (15µ") Gold (Au) Plating, with Cap version, Tape on Reel, 46 Circuits, Lead free

Documents:

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

Agency Certification

CSA	LR19980
UL	E29179

General

Product Family	PCB Receptacles
Series	87381
Application	Board-to-Board
Product Name	Milli-Grid™

Physical

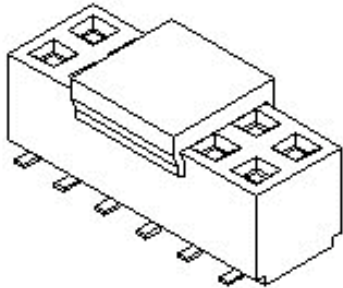
Circuits (Loaded)	46
Circuits (maximum)	46
Color - Resin	Black
Durability (mating cycles max)	25
Flammability	94V-0
Glow-Wire Compliant	No
Lock to Mating Part	None
Material - Metal	Phosphor Bronze
Material - Plating Mating	Gold
Material - Plating Termination	Tin-Lead
Material - Resin	High Temperature Thermoplastic
Number of Rows	2
Orientation	Vertical
PCB Locator	No
PCB Retention	None
Packaging Type	Embossed Tape on Reel
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 Mating Part	No
Polarized to PCB	No
Stackable	Yes
Surface Mount Compatible (SMC)	Yes
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)	14
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Series

image - Reference only

EU RoHS

**ELV and RoHS
Compliant**

REACH SVHC

Not Reviewed

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	265

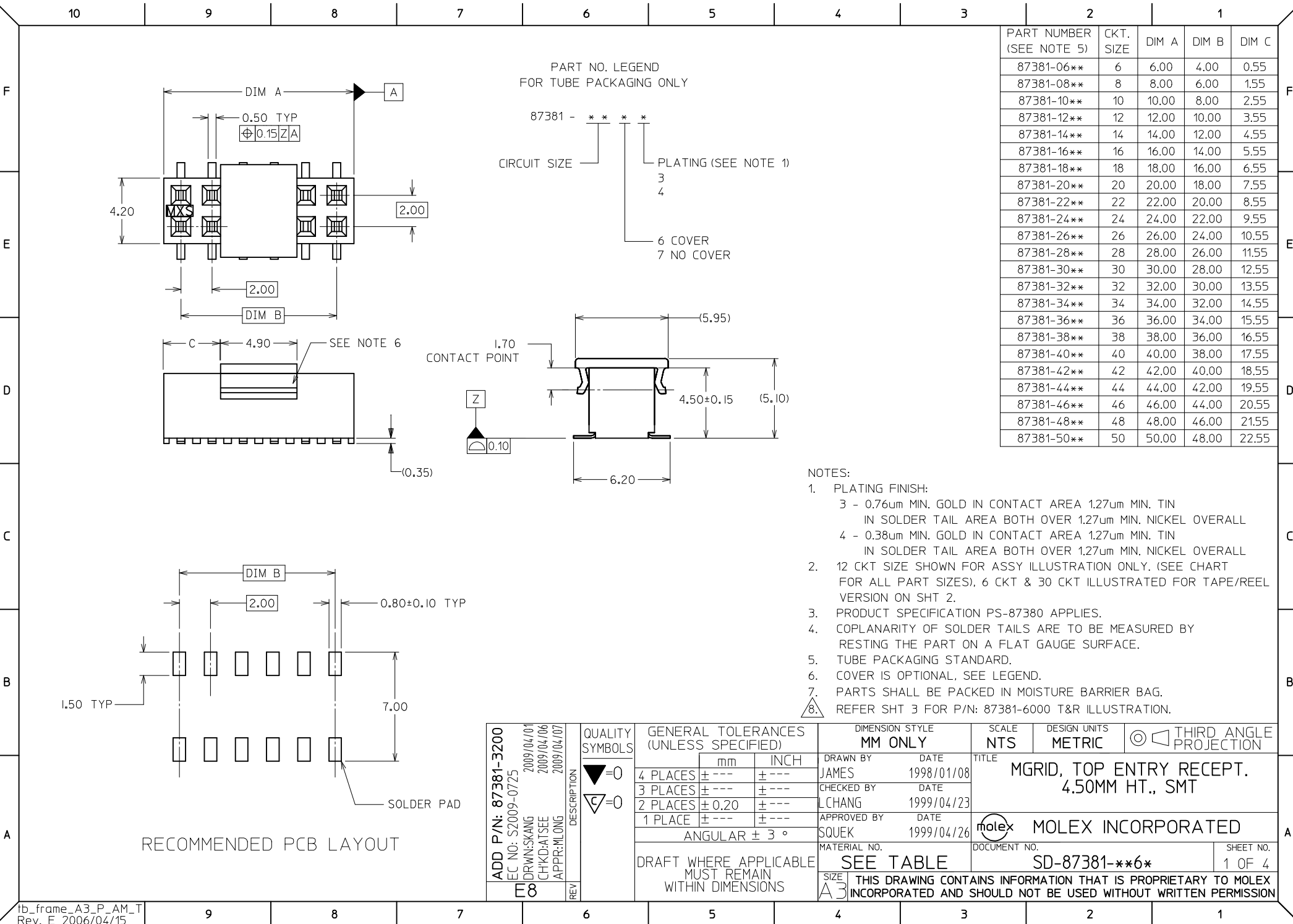
Material Info

Reference - Drawing Numbers

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

This document was generated on 04/09/2010

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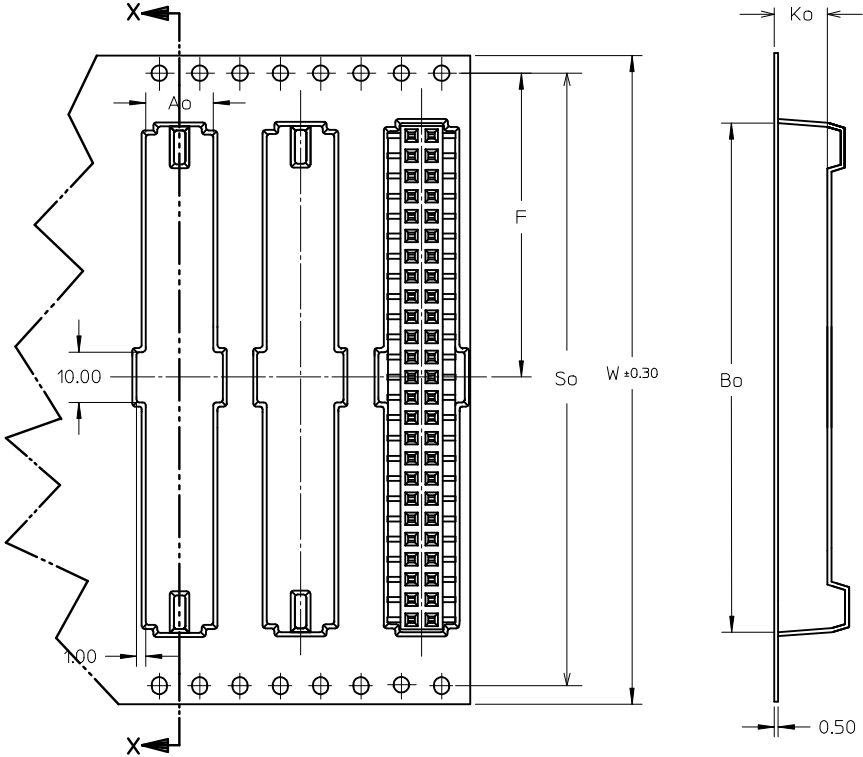
PART NUMBER (SEE NOTE 5)	CKT. SIZE	DIM A	DIM B	DIM C
87381-06**	6	6.00	4.00	0.55
87381-08**	8	8.00	6.00	1.55
87381-10**	10	10.00	8.00	2.55
87381-12**	12	12.00	10.00	3.55
87381-14**	14	14.00	12.00	4.55
87381-16**	16	16.00	14.00	5.55
87381-18**	18	18.00	16.00	6.55
87381-20**	20	20.00	18.00	7.55
87381-22**	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

ADD P/N: 87381-3200 EC NO: S2009-0725 DRWN:SKANG CHKD:ATSEE APPR:MLONG REV E8	QUALITY SYMBOLS ▽=0 ▽=0	DESCRIPTION	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
				mm	INCH	DRAWN BY JAMES	DATE 1998/01/08	TITLE MGRID, TOP ENTRY RECEPT. 4.50MM HT., SMT	MOLEX INCORPORATED	DOCUMENT NO. SD-87381-***6*	SHEET NO. 1 OF 4
			4 PLACES	±---	±---	CHECKED BY	DATE				
			3 PLACES	±---	±---	LCHANG	1999/04/23				
			2 PLACES	±0.20	±---	APPROVED BY	DATE				
	1 PLACE	±---	±---	SQUEK	1999/04/26						
			ANGULAR ± 3 °		MATERIAL NO.						
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE						
					SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				

F	E	D	C	B	A	10	9	8	7	6	5	4		3		2		1			
						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					
												QUALITY SYMBOLS		GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
ADD P/N: 87381-3200 EC NO: S2009-0725 DRWN:SKANG CHKD:ATSEE APPR:MLONG		DESCRIPTION REV	=0 =0	4 PLACES	± ---	± ---	DRAWN BY	DATE	TITLE MGRID, TOP ENTRY RECEPT. 4.50MM HT., SMT												
				3 PLACES	± ---	± ---	CHECKED BY	DATE													
				2 PLACES	± 0.20	± ---	LCHANG	1999/04/23													
				1 PLACE	± ---	± ---	APPROVED BY	DATE													
E8				ANGULAR ± 3 °		SQUEK		1999/04/26	MOLEX INCORPORATED												
				DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO.		DOCUMENT NO.													
						SEE TABLE															
							SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						SHEET NO. 3 OF 4							
fb_frame_A3_P_AM_T Rev. E 2006/04/15						9	8	7	6	5	4	3		2		1					

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 	72	68.40	6.80	34.20	50.50	8.00	B	500

 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

DRWN:SKANG

CHKD:ATSEE

APPR:MLONG

2009/04/07

2009/04/06

2009/04/07

DESCRIPTION

REV

8

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

DRAWN BY

JAMES

DATE

1998/01/08

CHECKED BY

L CHANG

DATE

1999/04/23

APPROVED BY

SQUEK

DATE

1999/04/26

MATERIAL NO.

SEE TABLE

SIZE

A3

SCALE

NTS

DESIGN UNITS

METRIC

 THIRD ANGLE PROJECTION

TITLE

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

 MOLEX INCORPORATED

DOCUMENT NO.

SD-87381-***6*

SHEET NO.

4 OF 4

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