

**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** **0448120012**  
**Status:** **Active**  
**Description:** 2.54mm (.100") Pitch KK® PC Board Receptacle, Top and Bottom Entry, Low Profile, 5.0µm (200µ") Tin (Sn), 12 Circuits

**Documents:**

[3D Model](#) [Product Specification PS-44812-001 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

CSA LR19980  
 UL E29179

**General**

Product Family PCB Receptacles  
 Series [44812](#)  
 Application Board-to-Board  
 Product Name KK®

**Physical**

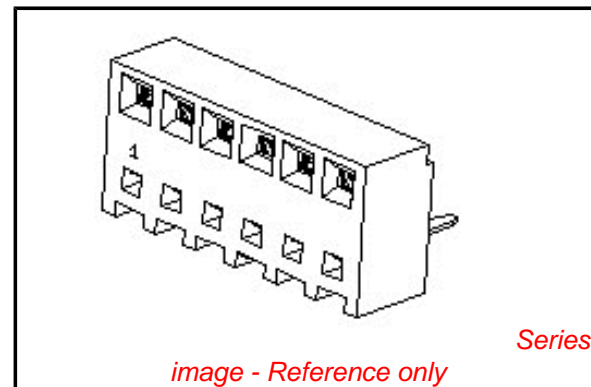
Circuits (Loaded) 12  
 Color - Resin Black  
 Durability (mating cycles max) 25  
 Flammability 94V-0  
 Glow-Wire Compliant No  
 Material - Metal High Performance Alloy (HPA)  
 Material - Plating Mating Tin  
 Material - Plating Termination Tin  
 Material - Resin High Temperature Thermoplastic  
 Number of Rows 1  
 Orientation Vertical  
 PCB Locator No  
 PCB Retention None  
 PCB Thickness Recommended (in) 0.062 In, 0.093 In  
 PCB Thickness Recommended (mm) 1.60 mm, 2.40 mm  
 Packaging Type Tube  
 Pitch - Mating Interface (in) 0.100 In  
 Pitch - Mating Interface (mm) 2.54 mm  
 Plating min: Mating (µin) 200  
 Plating min: Mating (µm) 5  
 Plating min: Termination (µin) 200  
 Plating min: Termination (µm) 5  
 Polarized to PCB No  
 Surface Mount Compatible (SMC) Yes  
 Temperature Range - Operating -40°C to +105°C  
 Termination Interface: Style Through Hole

**Electrical**

Current - Maximum per Contact 5A  
 Voltage - Maximum 250V

**Solder Process Data**

Duration at Max. Process Temperature (seconds) 5  
 Lead-free Process Capability Wave Capable (TH only)  
 Max. Cycles at Max. Process Temperature 1  
 Process Temperature max. C 250



**EU RoHS**

**ELV and RoHS Compliant**  
**REACH SVHC Contains SVHC: No**  
**Halogen-Free Status**

**China RoHS**



**Not Halogen-Free**

**Need more information on product environmental compliance?**

Email [productcompliance@molex.com](mailto: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**

[44812Series](#)

**Mates With**

[42153](#) , [4094](#) , [42376](#) , [42375](#) , [42377](#) , [42152](#) , [4030](#)

**Material Info**

**Reference - Drawing Numbers**

Product Specification

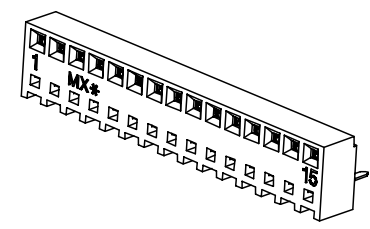
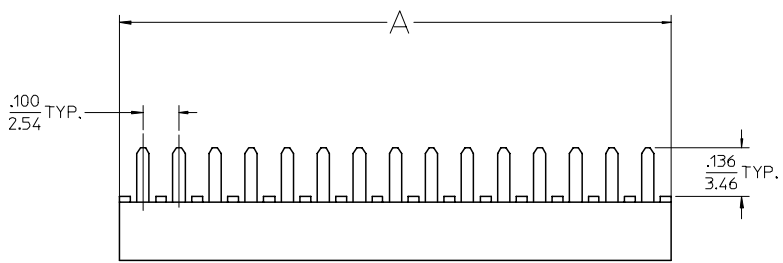
PS-44812-001

Sales Drawing

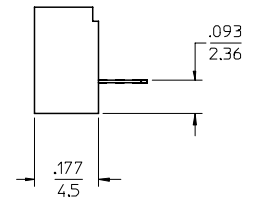
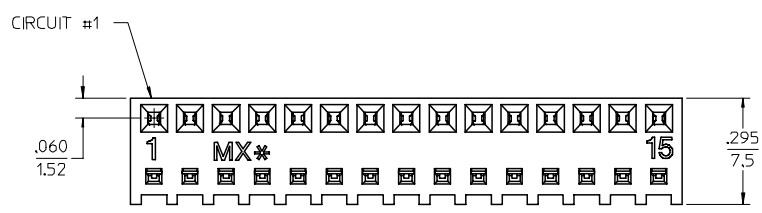
SD-44812-001

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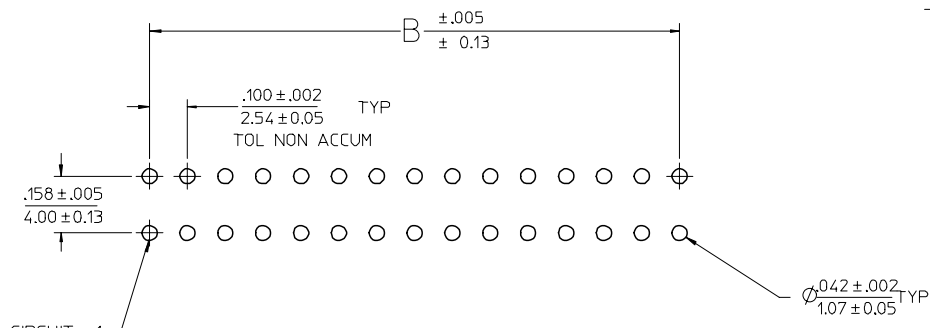
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CKTS	DIM A	DIM B
2	.230 5.84	.100 2.54
3	.330 8.38	.200 5.08
4	.430 10.92	.300 7.62
5	.530 13.46	.400 10.16
6	.630 16.00	.500 12.70
7	.730 18.54	.600 15.24
8	.830 21.08	.700 17.78
9	.930 23.62	.800 20.32
10	1.030 26.16	.900 22.86
11	1.130 28.70	1.000 25.40
12	1.230 31.24	1.100 27.94
13	1.330 33.78	1.200 30.48
14	1.430 36.32	1.300 33.02
15	1.530 38.86	1.400 35.56
16	1.630 41.40	1.500 38.10



- NOTES :
- MATERIAL - HOUSING : HIGH TEMP NYLON, GLASS-FILLED, UL94V-0, COLOR - BLACK  
TERMINAL : MODIFIED TIN/BRASS ALLOY
  - FINISH - (SEE CHART)  
A-TIN: .000200/(0.00508) MINIMUM  
B-SELECT GOLD: .000015/(0.00038) MIN., SELECT TIN: .000100/(0.00254) MIN., OVER NICKEL  
C-SELECT GOLD: .000030/(0.00076) MIN., SELECT TIN: .000100/(0.00254) MIN., OVER NICKEL
  - PRODUCT SPECIFICATION : PS-44812-001
  - PACKAGING SPECIFICATION : TRAY PACK PER PK-44812-001
  - 15 CIRCUIT PART SHOWN SEE SHEET 2 FOR OTHER CIRCUIT SIZES.



PCB LAYOUT : COMPONENT SIDE SHOWN  
RECOMMENDED PCB THK: .062/1.57

\* THE PRIMARY SHIPPING CARTON WILL BE LABELED 'COMPLIANT TO RoHS DIRECTIVE 2002/95/EC AND ELV ANNEX II OF DIRECTIVE 2000/53/EC'. CARTONS WITHOUT THIS LABEL MAY CONTAIN TIN/LEAD.

UPDATE FINISH EC NO: UCP2006-2478 DRAWN/PR/DDR 2006/03/17 CHKD:ADERR 2006/03/21 APPR:FSM TH 2006/03/22	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE IN/MM		SCALE 4:1	DESIGN UNITS INCH	THIRD ANGLE PROJECTION		
		4 PLACES ± --- ± ---	3 PLACES ± --- ± .010	2 PLACES ± 0.25 ± .015	1 PLACE ± 0.38 ± ---	DRAWN BY MUELLER	DATE 2001/09/22		TITLE KK 100 PCB CONN ASSY LOW PROFILE	
		ANGULAR ±1/2°				CHECKED BY MUELLER	DATE 2001/09/23		MOLEX INCORPORATED	
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				APPROVED BY MARGULIS	DATE 2001/09/24		MATERIAL NO. SEE CHART	DOCUMENT NO. SD-44812-001

FINISH: A (TIN)	
CKTS	MATERIAL NO.
2	44812-0002
3	44812-0003
4	44812-0004
5	44812-0005
6	44812-0006
7	44812-0007
8	44812-0008
9	44812-0009
10	44812-0010
11	44812-0011
12	44812-0012
13	44812-0013
14	44812-0014
15	44812-0015
16	44812-0016

FINISH: B (15 GOLD)	
CKTS	MATERIAL NO.
2	44812-0020
3	44812-0021
4	44812-0022
5	44812-0023
6	44812-0024
7	44812-0025
8	44812-0026
9	44812-0027
10	44812-0028
11	44812-0029
12	44812-0030
13	44812-0031
14	44812-0032
15	44812-0033
16	44812-0034

FINISH: C (30 GOLD)	
CKTS	MATERIAL NO.
2	44812-0040
3	44812-0041
4	44812-0042
5	44812-0043
6	44812-0044
7	44812-0045
8	44812-0046
9	44812-0047
10	44812-0048
11	44812-0049
12	44812-0050
13	44812-0051
14	44812-0052
15	44812-0053
16	44812-0054

UPDATE FINISH FCC NO: UCP2006-2178 DRAWN BY: DDER 2006/03/17 CHKD: ADERR 2006/03/21 APPR: FSM TH 2006/03/22 REV: D1	QUALITY SYMBOLS 	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE IN/MM		SCALE 1:1	DESIGN UNITS INCH	THIRD ANGLE PROJECTION	
		4 PLACES ± --- ± ---	3 PLACES ± --- ± .010	DRAWN BY MUELLER	DATE 2001/09/22	TITLE KK 100 PCB CONN ASSY LOW PROFILE			
		2 PLACES ± 0.25 ± .015	1 PLACE ± 0.38 ± ---	CHECKED BY MUELLER	DATE 2001/09/23	APPROVED BY MARGULIS			
		ANGULAR ±1/2°		DATE 2001/09/24		MATERIAL NO. SD-44812-001			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				SEE CHART		MOLEX INCORPORATED		SHEET NO. 2 OF 2	