

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

**Part Number:** [0009521046](#)  
**Status:** **Active**  
**Description:** 3.96mm (.156") Pitch KK® PC Board Connector, Right Angle, Nylon Connector, 5.0µm (200µ") Tin (Sn), 4 Circuits

**Documents:**

[3D Model](#) [Product Specification PS-08-50 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

UL E29179

**General**

Product Family PCB Receptacles  
 Series [2145](#)  
 Application Board-to-Board  
 Product Name KK®

**Physical**

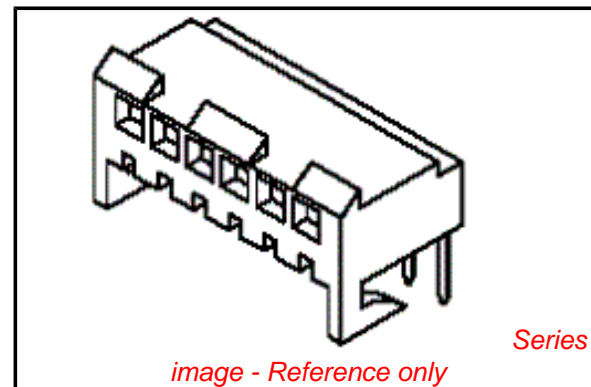
Circuits (Loaded) 4  
 Color - Resin Natural  
 Flammability 94V-2  
 Glow-Wire Compliant No  
 Lock to Mating Part Yes  
 Material - Metal Phosphor Bronze  
 Material - Plating Mating Tin  
 Material - Plating Termination Tin  
 Material - Resin Nylon  
 Number of Rows 1  
 Orientation Right Angle  
 PC Tail Length (in) 0.145 In  
 PC Tail Length (mm) 3.68 mm  
 PCB Locator No  
 PCB Retention Yes  
 PCB Thickness Recommended (in) 0.062 In  
 PCB Thickness Recommended (mm) 1.60 mm  
 Packaging Type Bag, Tray  
 Pitch - Mating Interface (in) 0.156 In  
 Pitch - Mating Interface (mm) 3.96 mm  
 Plating min: Mating (µin) 200  
 Plating min: Mating (µm) 5.00  
 Plating min: Termination (µin) 200  
 Plating min: Termination (µm) 5.00  
 Polarized to PCB Yes  
 Temperature Range - Operating 0°C to +75°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 235



**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](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**  
[2145Series](#)

**Material Info**

Old Part Number

A-2145-AA04B-102

**Reference - Drawing Numbers**

Product Specification

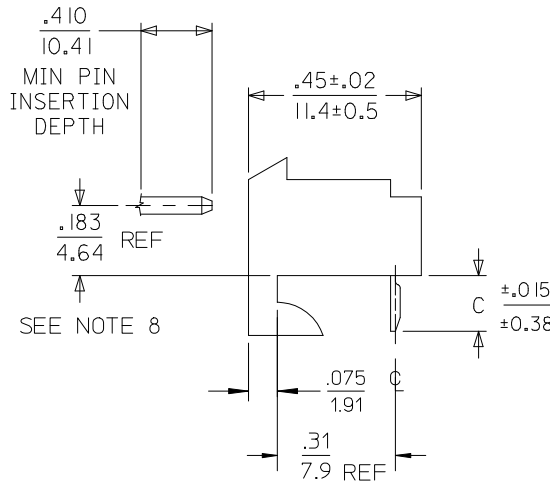
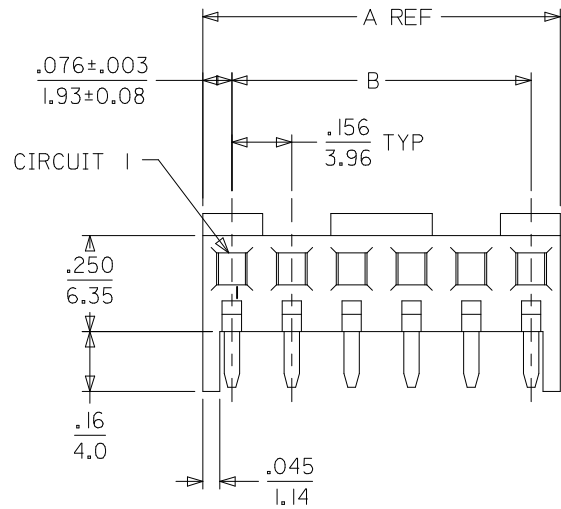
PS-08-50

Sales Drawing

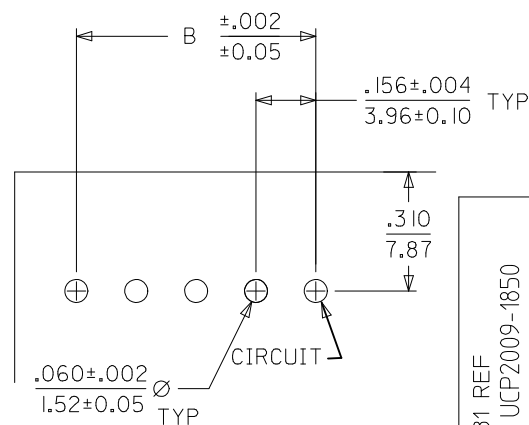
SDA-2145-001, SDA-2145-004

This document was generated on 04/14/2010

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- NOTES:
- HOUSING MATERIAL: NYLON, UL 94V-2
  - FINISH:
    - (909) OVERALL HOT TIN DIP: .000100/0.00254 MIN.
    - (122) OVERALL TIN: .000150/0.00281 MIN.
    - OVERALL NICKEL UNDERPLATE: .000030/0.00076 MIN.
    - (558) SELECT GOLD: .000030/0.00076 MIN.
    - WITH OVERALL GOLD FLASH .000002/0.00005 MIN.
    - OVERALL NICKEL UNDERPLATE: .000050/0.00127 MIN.
    - (102) OVERALL TIN: .000200/0.00508 MIN.
    - OVERALL COPPER UNDERPLATE .000100/0.00254 MIN.
    - (208) SELECT GOLD: .000015/0.00038 MIN.
    - SELECT TIN: .000100/0.00254 MIN.
    - OVERALL NICKEL UNDERPLATE: .000050/0.00127 MIN.
  - PRODUCT SPECIFICATION: PS-08-50
  - PACKAGING INFO: SEE CHARTS.
  - SOLDERABILITY SPECIFICATION: SMES-152.
  - TOP ENTRY OPTIONS: SEE DRAWING SDA-2145-002.
  - BOTTOM ENTRY OPTIONS: SEE DRAWING SDA-2145-003
  - .183/4.64 DIMENSION IS BOTTOM OF HOUSING TO CENTER OF MATING PIN AND DOES NOT REFLECT CENTER OF THE CONNECTOR HOUSING WINDOW DIMENSION.
  - THIS PART CONFORMS TO CLASS B REQUIREMENTS OF COSMETIC SPECIFICATION.



PCB LAYOUT: COMPONENT SIDE  
RECOMMENDED PCB THICKNESS: .062/1.57

CKT	A	B
02	.308 7.82	.156±.005 3.96±0.13
03	.464 11.79	.312±.005 7.92±0.13
04	.620 15.75	.468±.005 11.89±0.13
05	.776 19.71	.624±.005 15.85±0.13
06	.932 23.67	.780±.005 19.81±0.13
07	1.088 27.64	.936±.010 23.77±0.25
08	1.244 31.60	1.092±.010 27.74±0.25
09	1.400 35.56	1.248±.010 31.70±0.25
10	1.556 39.52	1.404±.010 35.66±0.25
11	1.712 43.48	1.560±.010 39.62±0.25
12	1.868 47.45	1.716±.010 43.59±0.25
13	2.024 51.41	1.872±.010 47.55±0.25
14	2.180 55.37	2.028±.014 51.51±0.36
15	2.336 59.33	2.184±.014 55.47±0.36

2*	Y2
1	Y5
SHT	REV.

ADD .31 REF EC NO: UCP2009-1850 DRWN:KSAMIEC 2009/01/27 CHKD: 2009/01/27 APPR:JCOMERCI 2009/01/27 DESCRIPTION	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
			IN/MM			INCH		
			mm	INCH	DRAWN BY	DATE	TITLE	KK 156 PCB ASSY RIGHT ANGLE ENTRY
			4 PLACES ± ---	± ---	SAMIEC			
		3 PLACES ± ---	± .010	CHECKED BY	DATE		MOLEX INCORPORATED DOCUMENT NO. SDA-2145-001 SHEET NO. 1 OF *	
		2 PLACES ± 0.25	± .015	SAMIEC				
		1 PLACE ± 0.38	± ---	APPROVED BY	DATE			
		ANGULAR ± 1/2°		MARGULIS				
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE CHART				
		SIZE A	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					



# KK 156 PCB ASSY

## 2145 RIGHT ANGLE SERIES

OPTIONS

RAMPS	YES
HOOKS:	YES
COLOR:	WHITE
MOLD VOID:	NONE
TERM MATL:	PHOS BRONZE
CONTACT:	STANDARD
PC TAIL (C):	.145 / 3.68
PLATING:	102 - TIN
TERM VOID:	NONE
PACKAGING:	TRAY PK-2145-001

RAMPS	YES
HOOKS:	YES
COLOR:	WHITE
MOLD VOID:	NONE
TERM MATL:	PHOS BRONZE
CONTACT:	STANDARD
PC TAIL (C):	.145 / 3.68
PLATING:	208 - GOLD
TERM VOID:	NONE
PACKAGING:	TRAY PK-2145-001

Ckts	Material No
2	09-52-1026
3	09-52-1036
4	09-52-1046
5	09-52-1056
6	09-52-1066
7	09-52-1076
8	09-52-1086
9	09-52-1096
10	09-52-1106
11	09-52-1116
12	09-52-1126
13	09-52-1136
14	09-52-1146
15	09-52-1156

Ckts	Material No
2	09-62-4027
3	09-62-4037
4	09-62-4047
5	09-62-4057
6	09-62-4067
7	09-62-4077
8	09-62-4087
9	09-62-4097
10	09-62-4107
11	09-62-4117
12	09-62-4127
13	09-62-4137
14	09-62-4147
15	09-62-4157

REV:	3/9/2005 SAMIEC	TITLE:		SHEET No.
<b>Y<sub>2</sub></b>		<b>KK 156 PCB ASSY</b>		<b>- 2 -</b>
DOCUMENT NUMBER:		CREATED / REVISED BY:	CHECKED BY:	APPROVED BY:
<b>SDA-2145-001</b>		<b>SAMIEC</b>	<b>SAMIEC</b>	<b>MARGULIS</b>



# KK 156 PCB ASSY

## 2145 RIGHT ANGLE SERIES

OPTIONS	RAMPS	YES	RAMPS	YES	RAMPS	YES	RAMPS	YES
	HOOKS:	YES	HOOKS:	YES	HOOKS:	YES	HOOKS:	YES
	COLOR:	WHITE	COLOR:	WHITE	COLOR:	WHITE	COLOR:	WHITE
	MOLD VOID:	NONE	MOLD VOID:	NONE	MOLD VOID:	NONE	MOLD VOID:	NONE
	TERM MATL:	BRASS	TERM MATL:	BRASS	TERM MATL:	PHOS BRONZE	TERM MATL:	BRASS
	CONTACT:	STANDARD	CONTACT:	STANDARD	CONTACT:	STANDARD	CONTACT:	STANDARD
	PC TAIL (C):	.145 / 3.68	PC TAIL (C):	.145 / 3.68	PC TAIL (C):	.145 / 3.68	PC TAIL (C):	.145 / 3.68
	PLT CODE:	102 - TIN	PLT CODE:	122 - TIN	PLT CODE:	558 - 30 GOLD	PLT CODE:	P909 - TIN
	TERM VOID:	NONE	TERM VOID:	NONE	TERM VOID:	NONE	TERM VOID:	NONE
	PACKAGING:	TRAY PK-2145-001	PACKAGING:	TRAY PK-2145-001	PACKAGING:	TRAY PK-2145-001	PACKAGING:	TRAY PK-2145-001
Ckt	Material No		Material No		Material No		Material No	
2	09-52-1021		09-86-3021		09-62-3025		09-52-3021	
3	09-52-1031		09-86-3031		09-62-3035		09-52-3031	
4	09-52-1041		09-86-3041		09-62-3045		09-52-3041	
5	09-52-1051		09-86-3051		09-62-3055		09-52-3051	
6	09-52-1061		09-86-3061		09-62-3065		09-52-3061	
7	09-52-1071		09-86-3071		09-62-3075		09-52-3071	
8	09-52-1081		09-86-3081		09-62-3085		09-52-3081	
9	09-52-1091		09-86-3091		09-62-3095		09-52-3091	
10	09-52-1101		09-86-3101		09-62-3105		09-52-3101	
11	09-52-1111		09-86-3111		09-62-3115		09-52-3111	
12	09-52-1121		09-86-3121		09-62-3125		09-52-3121	
13	09-52-1131		09-86-3131		09-62-3135		09-52-3131	
14	09-52-1141		09-86-3141		09-62-3145		09-52-3141	
15	09-52-1151		09-86-3151		09-62-3155		09-52-3151	

<input type="checkbox"/> - <input type="checkbox"/>	RAMPS	YES	RAMPS	YES	RAMPS	NO	RAMPS	YES
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REV:	3/9/2005	<u>TITLE:</u>	<u>SHEET No.</u>
Y <sub>2</sub>	SAMIEC	KK 156 PCB ASSY 2145 RIGHT ANGLE SERIES	- 3 -

<u>DOCUMENT NUMBER:</u> <b>SDA-2145-001</b>	<u>CREATED / REVISED BY:</u> <b>SAMIEC</b>	<u>CHECKED BY:</u> <b>SAMIEC</b>	<u>APPROVED BY:</u> <b>MARGULIS</b>
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# KK 156 PCB ASSY

## 2145 RIGHT ANGLE SERIES

	HOOKS:	YES	HOOKS:	YES	HOOKS:	YES	HOOKS:	YES
	COLOR:	BLACK	COLOR:	WHITE	COLOR:	WHITE	COLOR:	WHITE
	MOLD VOID:	NONE	MOLD VOID:	NONE	MOLD VOID:	NONE	MOLD VOID:	NONE
	TERM MATL:	BRASS	TERM MATL:	BRASS	TERM MATL:	BRASS	TERM MATL:	BRASS
	CONTACT:	STANDARD	CONTACT:	STANDARD	CONTACT:	STANDARD	CONTACT:	LOW INSERTION
	PC TAIL (C):	.145 / 3.68	PC TAIL (C):	.145 / 3.68	PC TAIL (C):	.145 / 3.68	PC TAIL (C):	.145 / 3.68
	PLT CODE:	P909 – TIN	PLT CODE:	208 – 15 GOLD	PLT CODE:	P909 – TIN	PLT CODE:	P909 – TIN
	TERM VOID:	NONE	TERM VOID:	NONE	TERM VOID:	NONE	TERM VOID:	NONE
	PACKAGING:	TRAY PK-2145-001	PACKAGING:	TRAY PK-2145-001	PACKAGING:	TRAY PK-2145-001	PACKAGING:	TRAY PK-2145-001
Ckt	Material No		Material No		Material No		Material No	
2	09-53-3021		09-62-3021					
3	09-53-3031		09-62-3031				09-52-3035	
4	09-53-3041		09-62-3041				09-52-3045	
5	09-53-3051		09-62-3051				09-52-3055	
6	09-53-3061		09-62-3061				09-52-3065	
7	09-53-3071		09-62-3071					
8	09-53-3081		09-62-3081				09-52-3085	
9	09-53-3091		09-62-3091		09-52-2097		09-52-3095	
10	09-53-3101		09-62-3101				09-52-3105	
11	09-53-3111		09-62-3111					
12	09-53-3121		09-62-3121				09-52-3125	
13	09-53-3131		09-62-3131					
14	09-53-3141		09-62-3141					
15	09-53-3151		09-62-3151				09-52-3155	

REV:	3/9/2005	<u>TITLE:</u>	<u>SHEET No.</u>
<b>Y<sub>2</sub></b>	SAMIEC	<b>KK 156 PCB ASSY 2145 RIGHT ANGLE SERIES</b>	<b>- 4 -</b>
<u>DOCUMENT NUMBER:</u>	<u>CREATED / REVISED BY:</u>	<u>CHECKED BY:</u>	<u>APPROVED BY:</u>
<b>SDA-2145-001</b>	<b>SAMIEC</b>	<b>SAMIEC</b>	<b>MARGULIS</b>



# KK 156 PCB ASSY

## 2145 RIGHT ANGLE SERIES

OPTIONS	RAMPS:	YES	RAMPS:	YES	RAMPS:	YES	RAMPS:	
	HOOKS:	YES	HOOKS:	YES	HOOKS:	YES	HOOKS:	
	COLOR:	WHITE	COLOR:	WHITE	COLOR:	WHITE	COLOR:	
	MOLD VOID:	NONE	MOLD VOID:	NONE	MOLD VOID:	NONE	MOLD VOID:	
	TERM MATL:	PHOS BRONZE	TERM MATL:	PHOS BRONZE	TERM MATL:	PHOS BRONZE	TERM MATL:	
	CONTACT:	STANDARD	CONTACT:	STANDARD	CONTACT:	LOW FORCE	CONTACT:	
	PC TAIL (C):	.145 / 3.68	PC TAIL (C):	.145 / 3.68	PC TAIL (C):	.145 / 3.68	PC TAIL (C):	
	PLT CODE:	122 – TIN	PLT CODE:	P909 – TIN	PLT CODE:	102 – TIN	PLT CODE:	
	TERM VOID:	NONE	TERM VOID:	NONE	TERM VOID:	NONE	TERM VOID:	
	PACKAGING:	TRAY PK-2145-001	PACKAGING:	TRAY PK-2145-001	PACKAGING:	TRAY PK-2145-001	PACKAGING:	
Ckt	Material No		Material No		Material No		Material No	
2			09-52-3028		50-29-0036			
3			09-52-3038		50-29-0037 09-52-1030			
4	09-86-3044		09-52-3048		50-29-0038			
5	09-86-3054		09-52-3058		50-29-0039			
6	09-86-3064		09-52-3068		09-52-1060			
7			09-52-3078		50-29-0040			
8	09-86-3084		09-52-3088		09-52-1080			
9			09-52-3098		50-29-0041			
10	09-86-3104		09-52-3108		09-52-1100			
11			09-52-3118		50-29-0042			
12	09-86-3124		09-52-3128		09-52-1120			
13			09-52-3138		50-29-0043			
14			09-52-3148		09-52-1140			
15			09-52-3158		50-29-0044			

REV:	3/9/2005	<u>TITLE:</u>	<u>SHEET No.</u>
<b>Y<sub>2</sub></b>	SAMIEC	<b>KK 156 PCB ASSY 2145 RIGHT ANGLE SERIES</b>	<b>- 5 -</b>
<u>DOCUMENT NUMBER:</u>	<u>CREATED / REVISED BY:</u>	<u>CHECKED BY:</u>	<u>APPROVED BY:</u>
<b>SDA-2145-001</b>	<b>SAMIEC</b>	<b>SAMIEC</b>	<b>MARGULIS</b>



# KK 156 PCB ASSY

## 2145 RIGHT ANGLE SERIES

CUSTOM PRODUCTS

OPTIONS	RAMPS	YES	RAMPS		RAMPS		RAMPS	
	HOOKS:	YES	HOOKS:		HOOKS:		HOOKS:	
	COLOR:	WHITE	COLOR:		COLOR:		COLOR:	
	MOLD VOID:	NONE	MOLD VOID:		MOLD VOID:		MOLD VOID:	
	TERM MATL:	BRASS	TERM MATL:		TERM MATL:		TERM MATL:	
	CONTACT:	STANDARD	CONTACT:		CONTACT:		CONTACT:	
	PC TAIL (C):	.145 / 3.68	PC TAIL (C):		PC TAIL (C):		PC TAIL (C):	
	PLT CODE:	P909 – TIN	PLT CODE:		PLT CODE:		PLT CODE:	
	TERM VOID:	NONE	TERM VOID:		TERM VOID:		TERM VOID:	
	PACKAGING:	TRAY PK-2145-001	PACKAGING:		PACKAGING:		PACKAGING:	
Ckt	Material No.	Engineering No.	Material No.	Engineering No.	Material No.	Engineering No.	Material No.	Engineering No.
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12	50-29-1880	A-2145-AA12A-P909						
13								
14								
15								

REV:		<u>TITLE:</u>	<u>SHEET No.</u>
<b>A</b>		<b>KK 156 PCB ASSY 2145 RIGHT ANGLE SERIES</b>	<b>- 2 -</b>
<u>DOCUMENT NUMBER:</u>	<u>CREATED / REVISED BY:</u>	<u>CHECKED BY:</u>	<u>APPROVED BY:</u>
<b>SDA-2145-004</b>	<b>DRATNOL 12/09/2004</b>	<b>SAMIEC 12/09/2004</b>	<b>MARGULIS 12/09/2004</b>