

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0009623091](#)
Status: **Active**
Description: 3.96mm (.156") Pitch KK® PC Board Connector, Right Angle, Nylon Connector, 0.38µm (15µ") Gold (Au) Selective, 9 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) 9
 Flammability 94V-2
 Glow-Wire Compliant No
 Keying to Mating Part Yes
 Lock to Mating Part Yes
 Material - Plating Mating Gold
 Material - Plating Termination Tin
 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) 15
 Plating min: Mating (µm) 0.375
 Plating min: Termination (µin) 100
 Plating min: Termination (µm) 2.5
 Polarized to PCB Yes
 Temperature Range - Operating 0°C to +75°C
 Termination Interface: Style Through Hole

Electrical

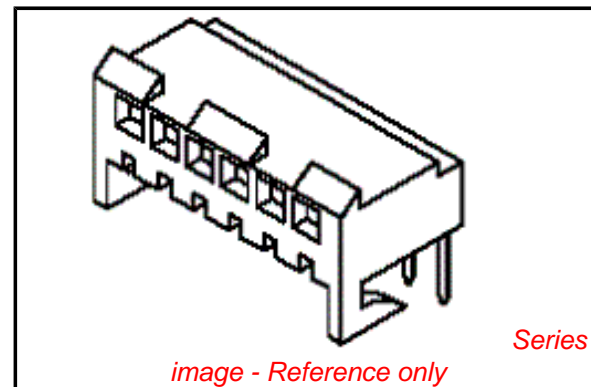
Current - Maximum per Contact 5A
 Voltage - Maximum 250V

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

Material Info

Old Part Number A-2145-AA09A-208



EU RoHS

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

China RoHS



Not Reviewed

**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

[2145Series](#)

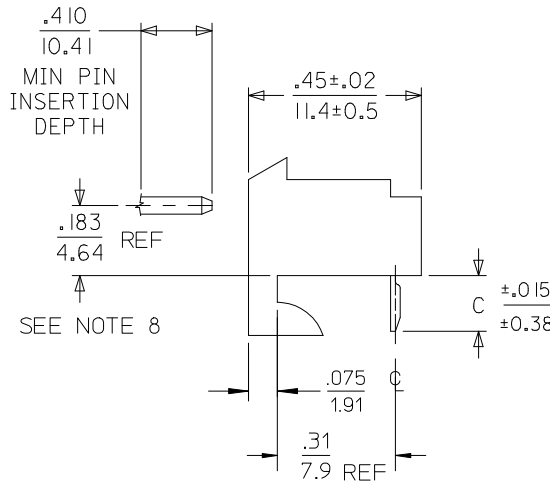
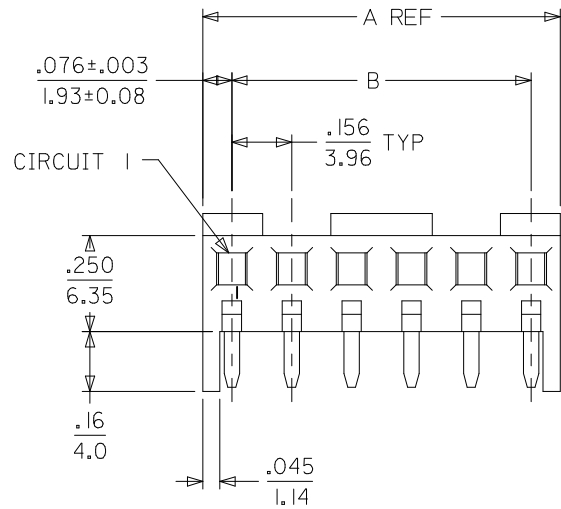
Reference - Drawing Numbers

Product Specification
Sales Drawing

PS-08-50
SDA-2145-001, SDA-2145-004

This document was generated on 04/08/2010

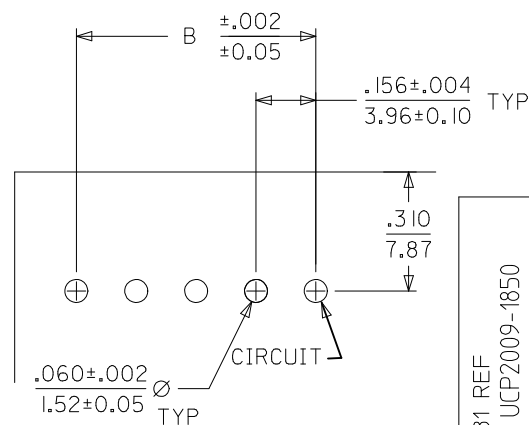
PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION



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.

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



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

ADD .31 REF	DESCRIPTION
EC NO: UCP2009-1850	
DRWN:KSAMIEC 2009/01/27	
CHKD: 2009/01/27	
APPR:JCOMERCI 2009/01/27	
Z	REV

GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE	
		IN/MM	
	mm	INCH	
4 PLACES	± ---	± ---	
3 PLACES	± ---	± .010	
2 PLACES	± 0.25	± .015	
1 PLACE	± 0.38	± ---	
ANGULAR		± 1/2°	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			

SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
INCH	INCH	2*	Y2
		1	Y5
		SHT	REV.
DRAWN BY DATE		TITLE KK 156 PCB ASSY RIGHT ANGLE ENTRY	
SAMI EC			
CHECKED BY DATE			
APPROVED BY DATE		MATERIAL NO. MARGUL IS	
SAMI EC			
MATERIAL NO.		DOCUMENT NO.	
SEE CHART		SDA-2145-001	
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	RAMPS	YES
	HOOKS:	YES	HOOKS:	YES
	COLOR:	WHITE	COLOR:	WHITE
	MOLD VOID:	NONE	MOLD VOID:	NONE
	TERM MATL:	PHOS BRONZE	TERM MATL:	PHOS BRONZE
	CONTACT:	STANDARD	CONTACT:	STANDARD
	PC TAIL (C):	.145 / 3.68	PC TAIL (C):	.145 / 3.68
	PLATING:	102 - TIN	PLATING:	208 - GOLD
	TERM VOID:	NONE	TERM VOID:	NONE
	PACKAGING:	TRAY PK-2145-001	PACKAGING:	TRAY PK-2145-001
Ckts	Material No	Material No		
2	09-52-1026	09-62-4027		
3	09-52-1036	09-62-4037		
4	09-52-1046	09-62-4047		
5	09-52-1056	09-62-4057		
6	09-52-1066	09-62-4067		
7	09-52-1076	09-62-4077		
8	09-52-1086	09-62-4087		
9	09-52-1096	09-62-4097		
10	09-52-1106	09-62-4107		
11	09-52-1116	09-62-4117		
12	09-52-1126	09-62-4127		
13	09-52-1136	09-62-4137		
14	09-52-1146	09-62-4147		
15	09-52-1156	09-62-4157		

REV:	3/9/2005 SAMIEC	TITLE:		SHEET No.
Y₂		KK 156 PCB ASSY		- 2 -
DOCUMENT NUMBER:		CREATED / REVISED BY:	CHECKED BY:	APPROVED BY:
SDA-2145-001		SAMIEC	SAMIEC	MARGULIS



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
---	-------	-----	-------	-----	-------	----	-------	-----

REV:	3/9/2005	<u>TITLE:</u>	<u>SHEET No.</u>
Y ₂	SAMIEC	KK 156 PCB ASSY 2145 RIGHT ANGLE SERIES	- 3 -

<u>DOCUMENT NUMBER:</u>	<u>CREATED / REVISED BY:</u>	<u>CHECKED BY:</u>	<u>APPROVED BY:</u>
SDA-2145-001	SAMIEC	SAMIEC	MARGULIS



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>
Y₂	SAMIEC	KK 156 PCB ASSY 2145 RIGHT ANGLE SERIES	- 4 -
<u>DOCUMENT NUMBER:</u>	<u>CREATED / REVISED BY:</u>	<u>CHECKED BY:</u>	<u>APPROVED BY:</u>
SDA-2145-001	SAMIEC	SAMIEC	MARGULIS



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>
Y₂	SAMIEC	KK 156 PCB ASSY 2145 RIGHT ANGLE SERIES	- 5 -
<u>DOCUMENT NUMBER:</u>	<u>CREATED / REVISED BY:</u>	<u>CHECKED BY:</u>	<u>APPROVED BY:</u>
SDA-2145-001	SAMIEC	SAMIEC	MARGULIS



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.		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>
A		KK 156 PCB ASSY 2145 RIGHT ANGLE SERIES	- 2 -
<u>DOCUMENT NUMBER:</u>	<u>CREATED / REVISED BY:</u>	<u>CHECKED BY:</u>	<u>APPROVED BY:</u>
SDA-2145-004	DRATNOL 12/09/2004	SAMIEC 12/09/2004	MARGULIS 12/09/2004