

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0009623041](#)
Status: **Active**
Description: 3.96mm (.156") Pitch KK® PC Board Connector, Right Angle, Nylon Connector, 0.38µm (15µ") Gold (Au) Selective, 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
 Flammability 94V-2
 Glow-Wire Compliant No
 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-AA04A-208

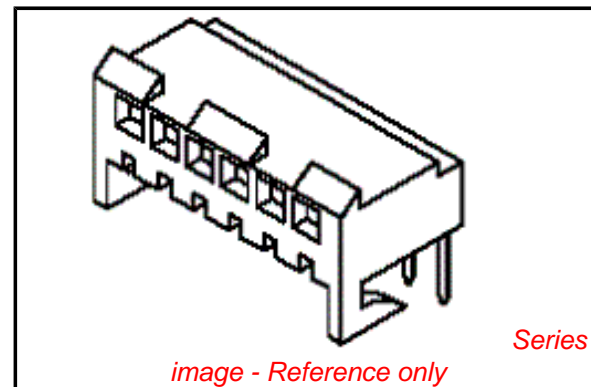


image - Reference only

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](#)

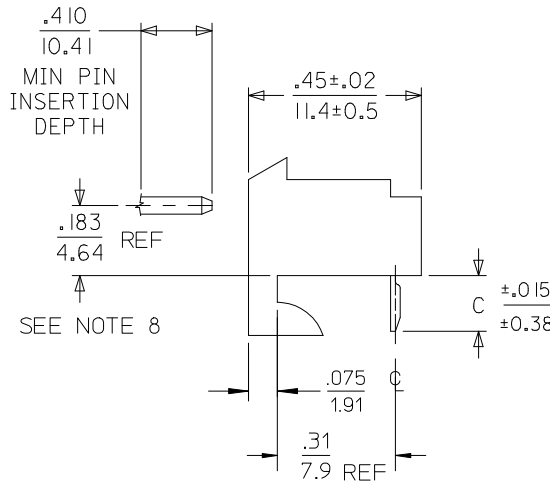
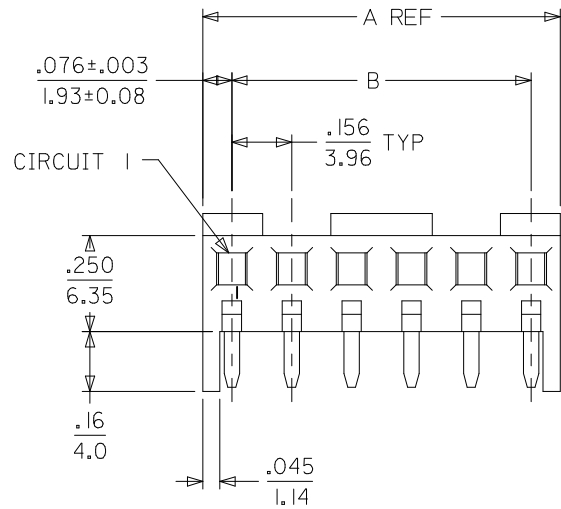
Reference - Drawing Numbers

Product Specification
Sales Drawing

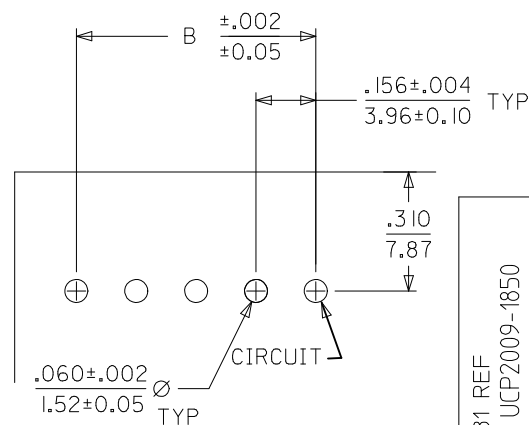
PS-08-50
SDA-2145-001, SDA-2145-004

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.



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 | | |
| | | mm | INCH | IN/MM | | | INCH | | |
| | 4 PLACES | ± --- | ± --- | DRAWN BY | DATE | TITLE | | | |
| | 3 PLACES | ± --- | ± .010 | SAMIEC | | KK 156 PCB ASSY RIGHT ANGLE ENTRY | | | |
| 2 PLACES | ± 0.25 | ± .015 | CHECKED BY | DATE | MATERIAL NO. | | | | |
| 1 PLACE | ± 0.38 | ± --- | SAMIEC | | MARGUL IS | | | | |
| ANGULAR ±1/2° | | | APPROVED BY | | DATE | DOCUMENT NO. | | | |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | | MATERIAL NO. | | | SEE CHART | | | |
| | | | SIZE | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | | |
| | | | A | MOLEX INCORPORATED | | | | | |
| | | | | | | SDA-2145-001 | | SHEET NO. 1 OF * | |



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 |

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|----------------------|--------------------|------------------------|---------------|-----------------|
| 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 - |

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|-------------------------|------------------------------|--------------------|---------------------|
| <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 | |

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| 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. |
| 2 | | | | | | | | |
| 3 | | | | | | | | |
| 4 | | | | | | | | |
| 5 | | | | | | | | |
| 6 | | | | | | | | |
| 7 | | | | | | | | |
| 8 | | | | | | | | |
| 9 | | | | | | | | |
| 10 | | | | | | | | |
| 11 | | | | | | | | |
| 12 | 50-29-1880 | A-2145-AA12A-P909 | | | | | | |
| 13 | | | | | | | | |
| 14 | | | | | | | | |
| 15 | | | | | | | | |

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|-------------------------|---------------------|--|---|
| REV: | | <u>TITLE:</u> <h2 style="margin: 0;">KK 156 PCB ASSY</h2> <h3 style="margin: 0;">2145 RIGHT ANGLE SERIES</h3> | <u>SHEET No.</u> <h2 style="margin: 0;">- 2 -</h2> |
| <u>DOCUMENT NUMBER:</u> | SDA-2145-004 | <u>CREATED / REVISED BY:</u> | DRATNOL 12/09/2004 |
| | | <u>CHECKED BY:</u> | SAMIEC 12/09/2004 |
| | | <u>APPROVED BY:</u> | MARGULIS 12/09/2004 |