

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

**Part Number:** [0009483054](#)  
**Status:** **Active**  
**Description:** 3.96mm (.156") Pitch KK® PC Board Connector, Bottom Entry, Polyester Connector, Gold (Au) Selective, 5 Circuits

**Documents:**

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

**Agency Certification**

CSA LR19980  
 UL E29179

**General**

Product Family PCB Receptacles  
 Series [41815](#)  
 Application Board-to-Board  
 Product Name KK®

**Physical**

Circuits (Loaded) 5  
 Flammability 94V-0  
 Glow-Wire Compliant No  
 Lock to Mating Part Yes  
 Material - Plating Mating Gold  
 Material - Plating Termination Tin  
 Number of Rows 1  
 Orientation Bottom Entry  
 PC Tail Length (in) 0.125 In  
 PC Tail Length (mm) 3.18 mm  
 PCB Locator No  
 PCB Retention None  
 PCB Thickness Recommended (in) 0.062 In  
 PCB Thickness Recommended (mm) 1.60 mm  
 Packaging Type Bag  
 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 No  
 Temperature Range - Operating 0°C to +75°C  
 Termination Interface: Style Through Hole

**Electrical**

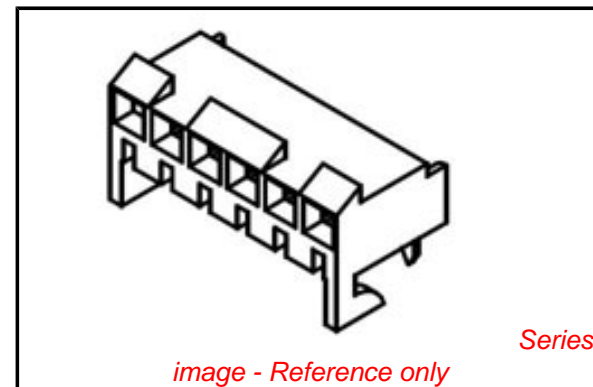
Current - Maximum per Contact 5A  
 Voltage - Maximum 250V

**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-41815-0442



**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**  
[41815Series](#)

**Reference - Drawing Numbers**

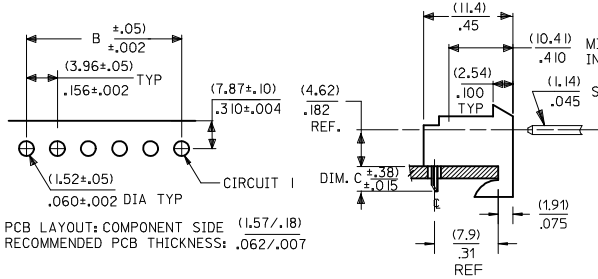
Product Specification  
Sales Drawing

PS-08-50  
SDA-41815

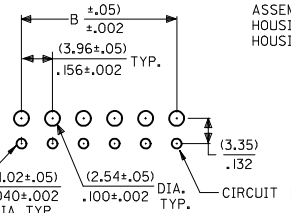
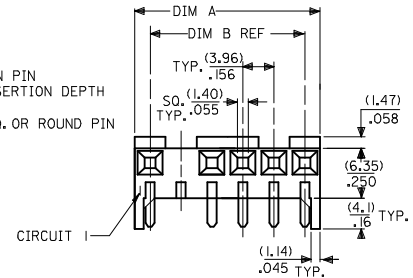
This document was generated on 04/14/2010

**PLEASE CHECK [WWW.MOLEX.COM](http://WWW.MOLEX.COM) FOR LATEST PART INFORMATION**

ASSEMBLY PROCEDURE A  
HOUSING: 41815-N-AN-\*\* (WITH RAMP)  
HOUSING: 41815-N-DN-\*\* (WITHOUT RAMP)

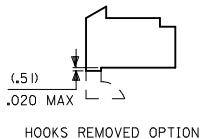
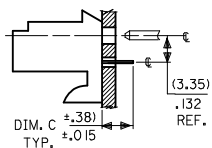


PCB LAYOUT: COMPONENT SIDE (1.57/.18)  
RECOMMENDED PCB THICKNESS: .062/.007



ASSEMBLY PROCEDURE B  
HOUSING: 41815-N-AN-\*\* (WITH RAMP)  
HOUSING: 41815-N-DN-\*\* (WITHOUT RAMP)

PCB LAYOUT: COMPONENT SIDE (1.57/.18)  
RECOMMENDED PCB THICKNESS: .062/.007



HOOKS REMOVED OPTION

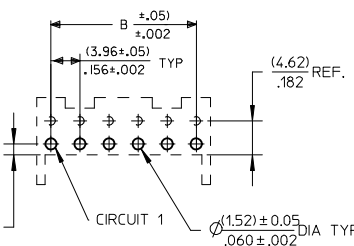
DIM. B	DIM. A	NO. OF CKTS
(3.96) .156	(7.82±.25) .308±.010	2
(7.92) .312	(11.79±.25) .464±.010	3
(11.89) .468	(15.75±.25) .620±.010	4
(15.85) .624	(19.71±.25) .776±.010	5
(19.81) .780	(23.67±.25) .932±.010	6
(23.77) .936	(27.64±.30) 1.088±.012	7
(27.74) 1.092	(31.60±.25) 1.244±.012	8
(31.70) 1.248	(35.56±.30) 1.400±.012	9
(35.66) 1.404	(39.52±.30) 1.556±.012	10
(39.62) 1.560	(43.48±.30) 1.712±.012	11
(43.59) 1.716	(47.45±.30) 1.868±.012	12
(47.55) 1.872	(51.41±.30) 2.024±.012	13
(51.51) 2.028	(55.37±.36) 2.180±.014	14
(55.47) 2.184	(59.33±.36) 2.336±.014	15

NOTES:

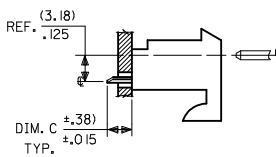
- MATERIAL: HOUSING: POLYESTER, 94V-0 COLOR: NATURAL (WHITE)
- FINISH:
  - (102) OVERALL TIN: 0.00508/.000200 MIN OVER 0.00254/.000100 MIN COPPER.
  - (208) SELECT GOLD: 0.00038/.000015 MIN.
  - \* SELECT TIN: 0.00254/.000100 MIN.
  - OVERALL NICKEL UNDERPLATE: 0.00127/.000050 MIN.
  - (228) SELECT GOLD: 0.00076/.000030 MIN.
  - \* SELECT TIN: 0.00254/.000100 MIN.
  - OVERALL NICKEL UNDERPLATE: 0.00127/.000050 MIN.
  - (505) OVERALL GOLD: 0.00127/.000050 MIN OVER 0.00127/.000050 MIN NICKEL.
  - (909) OVERALL TIN: 0.00254/.000100 MIN.

\*THE PRIMARY SHIPPING CARTON WILL BE LABELED "COMPLIANT TO ROHS DIRECTIVE 2002/95/EC AND ELV ANNEX II OF DIRECTIVE 2002/53/EC". CARTONS WITHOUT THIS LABEL MAY CONTAIN PRODUCT WITH TIN-LEAD PLATING.

- PRODUCT SPECIFICATION: PS-08-50
- PACKAGING: SEE CHARTS
- FOR TOP ENTRY AND RIGHT ANGLE ASSEMBLIES WITH LOWER INSERTION FORCE USE SINGLE BEAM CONTACT. (TERMINAL NO. 4244)
- SOLDERABILITY: WHEN PARTS ARE SOLDERED AT A TEMPERATURE OF 230°C OR 446°F FOR 5 SECONDS EACH SOLDERED SURFACE SHALL BE A MINIMUM OF 95% COVERED WITH A SMOOTH CONTINUOUS ADHERENT COATING. FOR ADDITIONAL INFORMATION SEE ES-152.
- PARTS ARE STACKABLE END TO END ON (3.96)/.156 €
- THIS PART CONFORMS TO CLASS B REQUIREMENTS OF COSMETIC SPEC PS-45499-002.



ASSEMBLY PROCEDURE C  
HOUSING: 41815-N-AN-\*\* (WITH RAMP)  
HOUSING: 41815-N-DN-\*\* (WITHOUT RAMP)



PCB LAYOUT: COMPONENT SIDE (1.57/.18)  
RECOMMENDED PCB THICKNESS: .062/.007

ADD .31 REF EC NO: WJEP2009-9850850 DRW:KMSAMIEC 2009/01/27 CHKD: 2009/01/27 APPR: JCOMERCI 2009/01/27 AM	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM/IN		SCALE INCH	DESIGN UNITS INCH	THIRD ANGLE PROJECTION			
		4 PLACES ± --- ± ---	3 PLACES ± --- ± .010	DRAWN BY SAMIEC	DATE 01/28/87	KK 156 HOUSING PCB 41815 SERIES					
		2 PLACES ± --- ± .015	1 PLACE ± --- ± ---	CHECKED BY SAMIEC	DATE 01/28/87	MOLEX INCORPORATED					
		ANGULAR ±1/2°		APPROVED BY LENZ	DATE 01/28/87	MATERIAL NO. SEE CHART		DOCUMENT NO. SDA-41815	SHEET NO. 1 OF 11		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE B		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							



# KK 156 PCB ASSY 2-15 CKT

## 41815 SERIES

Assy. Proc:	RIGHT ANGLE
Housing No:	41815-N-AN
Options	WITH RAMP
Terminal No:	2144-BA-A1AA-102B
Term Matl:	PHOS BRONZE
Plating:	102 TIN
Dim C:	(3.68) / .145
Voids:	NONE
Hooks Cut:	NO
Packaging:	PK-41815-001 TRAY

Assy. Proc:	RIGHT ANGLE
Housing No:	41815-N-AN
Options	WITH RAMP
Terminal No:	2144-BA-A1AA-208B
Term Matl:	PHOS BRONZE
Plating:	208 – 15 GOLD
Dim C:	(3.68) / .145
Voids:	NONE
Hooks Cut:	NO
Packaging:	PK-41815-001 TRAY

Assy. Proc:	BOTTOM ENTRY
Housing No:	41815-N-AN
Options	WITH RAMP
Terminal No:	6298-1-102
Term Matl:	PHOS BRONZE
Plating:	102 – TIN
Dim C:	(3.18)/. 125
Voids:	NONE
Hooks Cut:	NO
Packaging:	PK-41815-001 TRAY

Assy. Proc:	BOTTOM ENTRY
Housing No:	41815-N-AN
Options	WITH RAMP
Terminal No:	6298-1-208
Term Matl:	PHOS BRONZE
Plating:	208 – 15 GOLD
Dim C:	(3.18)/. 125
Voids:	NONE
Hooks Cut:	NO
Packaging:	PK-41815-001 TRAY

Ckts	Material No	Engineer Number
2	09-48-1024	A-41815-0002
3	09-48-1034	A-41815-0003
4	09-48-1044	A-41815-0004
5	09-48-1054	A-41815-0005
6	09-48-1064	A-41815-0006
7	09-48-1074	A-41815-0007
8	09-48-1084	A-41815-0008
9	09-48-1094	A-41815-0009
10	09-48-1104	A-41815-0010
11	09-48-1114	A-41815-0011
12	09-48-1124	A-41815-0012
13	09-48-1134	A-41815-0013
14	09-48-1144	A-41815-0014
15	09-48-1154	A-41815-0015

Material No	Engineer Number
09-48-5024	A-41815-0016
09-48-5034	A-41815-0017
09-48-5044	A-41815-0018
09-48-5054	A-41815-0019
09-48-5064	A-41815-0020
09-48-5074	A-41815-0021
09-48-5084	A-41815-0022
09-48-5094	A-41815-0023
09-48-5104	A-41815-0024
09-48-5114	A-41815-0025
09-48-5124	A-41815-0026
09-48-5134	A-41815-0027
09-48-5144	A-41815-0028
09-48-5154	A-41815-0029

Material No	Engineer Number
09-48-4029	A-41815-0030
09-48-4039	A-41815-0031
09-48-4049	A-41815-0032
09-48-4059	A-41815-0033
09-48-4069	A-41815-0034
09-48-4079	A-41815-0035
09-48-4089	A-41815-0036
09-48-4099	A-41815-0037
09-48-4109	A-41815-0038
09-48-4119	A-41815-0039
09-48-4129	A-41815-0040
09-48-4139	A-41815-0041
09-48-4149	A-41815-0042
09-48-4159	A-41815-0043

Material No	Engineer Number
09-48-5026	A-41815-0044
09-48-5036	A-41815-0045
09-48-5046	A-41815-0046
09-48-5056	A-41815-0047
09-48-5066	A-41815-0048
09-48-5076	A-41815-0049
09-48-5086	A-41815-0050
09-48-5096	A-41815-0051
09-48-5106	A-41815-0052
09-48-5116	A-41815-0053
09-48-5126	A-41815-0054
09-48-5136	A-41815-0055
09-48-5146	A-41815-0056
09-48-5156	A-41815-0057

<b>REV:</b>  <b>AL6</b>	<b>ECR/ECN INFORMATION:</b>		<b>TITLE:</b>  <b>KK 156 HOUSING ASSY PCB 41815 SERIES DWG</b>	<b>SHEET No.</b>  <b>- 2 -</b>
	EC NO.	<b>UCP2009-0167</b>		
	DATE:	<b>10/30/2008</b>		
<b>DOCUMENT NUMBER:</b> <b>SDA-41815</b>		<b>CREATED / REVISED BY:</b> <b>MKIPPER</b>	<b>CHECKED BY:</b> <b>JBELL</b>	<b>APPROVED BY:</b> <b>FSMITH</b>



# KK 156 PCB ASSY 2-15 CKT

## 41815 SERIES

Assy. Proc:	TOP ENTRY
Housing No:	41815-N-AN
Options	WITH RAMP
Terminal No:	2144-BA-A1AA-102B
Term Matl:	PHOS BRONZE
Plating:	102 – TIN
Dim C:	(3.05) / .120
Voids:	NONE
Hooks Cut:	NO
Packaging:	PK-41815-001 TRAY

Assy. Proc:	TOP ENTRY
Housing No:	41815-N-AN
Options	WITH RAMP
Terminal No:	2144-BA-A1AA-208B
Term Matl:	PHOS BRONZE
Plating:	208 – 15 GOLD
Dim C:	(3.05) / .120
Voids:	NONE
Hooks Cut:	NO
Packaging:	PK-41815-001 TRAY

Ckts	Material No	Engineer Number
2	09-48-4028	A-41815-0058
3	09-48-4038	A-41815-0059
4	09-48-4048	A-41815-0060
5	09-48-4058	A-41815-0061
6	09-48-4068	A-41815-0062
7	09-48-4078	A-41815-0063
8	09-48-4088	A-41815-0064
9	09-48-4098	A-41815-0065
10	09-48-4108	A-41815-0066
11	09-48-4118	A-41815-0067
12	09-48-4128	A-41815-0068
13	09-48-4138	A-41815-0069
14	09-48-4148	A-41815-0070
15	09-48-4158	A-41815-0071

Material No	Engineer Number
09-48-5025	A-41815-0072
09-48-5035	A-41815-0073
09-48-5045	A-41815-0074
09-48-5055	A-41815-0075
09-48-5065	A-41815-0076
09-48-5075	A-41815-0077
09-48-5085	A-41815-0078
09-48-5095	A-41815-0079
09-48-5105	A-41815-0080
09-48-5115	A-41815-0081
09-48-5125	A-41815-0082
09-48-5135	A-41815-0083
09-48-5145	A-41815-0084
09-48-5155	A-41815-0085

<b>REV:</b>  <b>AL6</b>	<b>ECR/ECN INFORMATION:</b>		<b>TITLE:</b>  <b>KK 156 HOUSING ASSY PCB 41815 SERIES DWG</b>	<u>SHEET No.</u>
	<b>EC NO.</b>	<b>UCP2009-0167</b>		<b>- 3 -</b>
	<b>DATE:</b>	<b>10/30/2008</b>		
<b>DOCUMENT NUMBER:</b> <b>SDA-41815</b>		<b>CREATED / REVISED BY:</b> <b>MKIPPER</b>	<b>CHECKED BY:</b> <b>JBELL</b>	<b>APPROVED BY:</b> <b>FSMITH</b>



# KK 156 PCB ASSY 2-15 CKT

## 41815 SERIES

Assy. Proc:	BOTTOM ENTRY
Housing No:	41815-N-AN
Options	WITH RAMP
Terminal No:	2188-1-P909
Term Matl:	BRASS
Plating:	P909 – TIN
Dim C:	(3.18) / .125
Voids:	NONE
Hooks Cut:	NO
Packaging:	PK-41815-001 TRAY

Assy. Proc:	TOP ENTRY
Housing No:	41815-N-AN
Options	WITH RAMP
Terminal No:	2144-AA-A1AA-P909B
Term Matl:	BRASS
Plating:	P909 – TIN
Dim C:	(3.05) / .120
Voids:	NONE
Hooks Cut:	YES
Packaging:	PK-41815-001 TRAY

Assy. Proc:	RIGHT ANGLE
Housing No:	41815-N-AN
Options	WITH RAMP
Terminal No:	2144-AA-A1AA-122B
Term Matl:	BRASS
Plating:	122 – TIN
Dim C:	(3.68) / .145
Voids:	NONE
Hooks Cut:	NO
Packaging:	PK-41815-001 TRAY

Assy. Proc:	BOTTOM ENTRY
Housing No:	41815-N-AN
Options	WITH RAMP
Terminal No:	2188-1-102
Term Matl:	BRASS
Plating:	102 – TIN
Dim C:	(3.18) / .125
Voids:	NONE
Hooks Cut:	NO
Packaging:	PK-41815-001 TRAY

Ckts	Material No	Engineer Number
2	09-48-2022	A-41815-0100
3	09-48-2032	A-41815-0101
4	09-48-2042	A-41815-0102
5	09-48-2052	A-41815-0103
6	09-48-2062	A-41815-0104
7	09-48-2072	A-41815-0105
8	09-48-2082	A-41815-0106
9	09-48-2092	A-41815-0107
10	09-48-2102	A-41815-0108
11	09-48-2112	A-41815-0109
12	09-48-2122	A-41815-0110
13	09-48-2132	A-41815-0111
14	09-48-2142	A-41815-0112
15	09-48-2152	A-41815-0113

Material No	Engineer Number
09-48-2025	A-41815-0114
09-48-2035	A-41815-0115
09-48-2045	A-41815-0116
09-48-2055	A-41815-0117
09-48-2065	A-41815-0118
09-48-2075	A-41815-0119
09-48-2085	A-41815-0120
09-48-2095	A-41815-0121
09-48-2105	A-41815-0122
09-48-2115	A-41815-0123
09-48-2125	A-41815-0124
09-48-2135	A-41815-0125
09-48-2145	A-41815-0126
09-48-2155	A-41815-0127

Material No	Engineer Number
41815-0128	A-41815-0128
41815-0129	A-41815-0129
41815-0130	A-41815-0130
41815-0131	A-41815-0131
41815-0132	A-41815-0132
41815-0133	A-41815-0133
41815-0134	A-41815-0134
41815-0135	A-41815-0135
41815-0136	A-41815-0136
41815-0137	A-41815-0137
09-48-1122	A-41815-0138
41815-0139	A-41815-0139
41815-0140	A-41815-0140
41815-0141	A-41815-0141

Material No	Engineer Number
09-48-4022	A-41815-0142
09-48-4032	A-41815-0143
09-48-4042	A-41815-0144
09-48-4052	A-41815-0145
09-48-4062	A-41815-0146
09-48-4072	A-41815-0147
09-48-4082	A-41815-0148
09-48-4092	A-41815-0149
09-48-4102	A-41815-0150
09-48-4112	A-41815-0151
09-48-4122	A-41815-0152
09-48-4132	A-41815-0153
09-48-4142	A-41815-0154
09-48-4152	A-41815-0155

<b>REV:</b>  <b>AL6</b>	<b>ECR/ECN INFORMATION:</b>		<b>TITLE:</b>  <b>KK 156 HOUSING ASSY PCB 41815 SERIES DWG</b>	<b>SHEET No.</b>  <b>- 4 -</b>
	EC NO.	<b>UCP2009-0167</b>		
	DATE:	<b>10/30/2008</b>		
<b>DOCUMENT NUMBER:</b> <b>SDA-41815</b>		<b>CREATED / REVISED BY:</b> <b>MKIPPER</b>	<b>CHECKED BY:</b> <b>JBELL</b>	<b>APPROVED BY:</b> <b>FSMITH</b>



# KK 156 PCB ASSY 2-15 CKT

## 41815 SERIES

Assy. Proc:		Assy. Proc:	BOTTOM ENTRY	Assy. Proc:	BOTTOM ENTRY	Assy. Proc:	RIGHT ANGLE
Housing No:		Housing No:	41815-N-AN	Housing No:	41815-N-AN	Housing No:	41815-N-AN
Options		Options	WITH RAMP	Options	WITH RAMP	Options	WITH RAMP
Terminal No:		Terminal No:	6298-1-102	Terminal No:	2188-1-228	Terminal No:	2144-AA-A1AA-P909B
Term Matl:		Term Matl:	PHOS BRONZE	Term Matl:	BRASS	Term Matl:	BRASS
Plating:		Plating:	102 – TIN	Plating:	228 – GOLD	Plating:	P909 – TIN
Dim C:		Dim C:	(4.60) / .160	Dim C:	(3.18) / .125	Dim C:	(3.68) / .145
Voids:		Voids:	NONE	Voids:	NONE	Voids:	NONE
Hooks Cut:		Hooks Cut:	NO	Hooks Cut:	NO	Hooks Cut:	NO
Packaging:		Packaging:	PK-41815-001 TRAY	Packaging:	PK-41815-001 TRAY	Packaging:	PK-41815-001 TRAY

Ckts	Material No	Engineer Number	Material No	Engineer Number	Material No	Engineer Number	Material No	Engineer Number
2			09-48-4021	A-41815-0170	41815-0184	A-41815-0184	09-48-2021	A-41815-0198
3			09-48-4031	A-41815-0171	09-48-5030	A-41815-0185	09-48-2031	A-41815-0199
4			09-48-4041	A-41815-0172	09-48-5040	A-41815-0186	09-48-2041	A-41815-0200
5			09-48-4051	A-41815-0173	09-48-5050	A-41815-0187	09-48-2051	A-41815-0201
6			09-48-4061	A-41815-0174	41815-0188	A-41815-0188	09-48-2061	A-41815-0202
7			09-48-4071	A-41815-0175	41815-0189	A-41815-0189	09-48-2071	A-41815-0203
8			09-48-4081	A-41815-0176	09-48-5090	A-41815-0190	09-48-2081	A-41815-0204
9			09-48-4091	A-41815-0177	41815-0191	A-41815-0191	09-48-2091	A-41815-0205
10			09-48-4101	A-41815-0178	09-48-5100	A-41815-0192	09-48-2101	A-41815-0206
11			09-48-4111	A-41815-0179	41815-0193	A-41815-0193	09-48-2111	A-41815-0207
12			09-48-4121	A-41815-0180	41815-0194	A-41815-0194	09-48-2121	A-41815-0208
13			09-48-4131	A-41815-0181	41815-0195	A-41815-0195	09-48-2131	A-41815-0209
14			09-48-4141	A-41815-0182	41815-0196	A-41815-0196	09-48-2141	A-41815-0210
15			09-48-4151	A-41815-0183	41815-0197	A-41815-0197	09-48-2151	A-41815-0211

<b>REV:</b>	<b>ECR/ECN INFORMATION:</b>		<b>TITLE:</b>				<b>SHEET No.</b>
<b>AL6</b>	EC NO.	<b>UCP2009-0167</b>	<b>KK 156 HOUSING ASSY PCB 41815 SERIES DWG</b>				<b>- 5 -</b>
	DATE:	<b>10/30/2008</b>					
<b>DOCUMENT NUMBER:</b>			<b>CREATED / REVISED BY:</b>		<b>CHECKED BY:</b>		<b>APPROVED BY:</b>
<b>SDA-41815</b>			<b>MKIPPER</b>		<b>JBELL</b>		<b>FSMITH</b>



# KK 156 PCB ASSY 2-15 CKT

## 41815 SERIES

Assy. Proc:	RIGHT ANGLE
Housing No:	41815-N-AN
Options	WITH RAMP
Terminal No:	2144-AA-A1AA-228B
Term Matl:	BRASS
Plating:	228 – GOLD
Dim C:	(3.68) / .145
Voids:	NONE
Hooks Cut:	NO
Packaging:	PK-41815-001 TRAY

Assy. Proc:	BOTTOM ENTRY
Housing No:	41815-N-DN
Options	NO RAMPS
Terminal No:	2188-P909
Term Matl:	BRASS
Plating:	P909 – TIN
Dim C:	(4.06) / .160
Voids:	NONE
Hooks Cut:	YES
Packaging:	PK-41815-001 TRAY

Assy. Proc:	RIGHT ANGLE
Housing No:	41815-N-AN
Options	WITH RAMP
Terminal No:	2144-AA-A1AA-505B
Term Matl:	BRASS
Plating:	505 – GOLD
Dim C:	(3.68) / .145
Voids:	NONE
Hooks Cut:	NO
Packaging:	PK-41815-001 TRAY

Assy. Proc:	TOP ENTRY
Housing No:	41815-N-DN
Options	NO RAMPS
Terminal No:	2144-AA-A1AA-P909B
Term Matl:	BRASS
Plating:	P909 – TIN
Dim C:	(3.05) / .120
Voids:	NONE
Hooks Cut:	NO
Packaging:	PK-41815-001 TRAY

Ckts	Material No	Engineer Number	Material No	Engineer Number	Material No	Engineer Number	Material No	Engineer Number
2	09-48-5023	A-41815-0313	41815-0327	A-41815-0327	41815-0341	A-41815-0341	41815-0355	A-41815-0355
3	09-48-5033	A-41815-0314	41815-0328	A-41815-0328	09-48-3037	A-41815-0342	41815-0356	A-41815-0356
4	09-48-5043	A-41815-0315	41815-0329	A-41815-0329	41815-0343	A-41815-0343	09-48-2047	A-41815-0357
5	09-48-5053	A-41815-0316	09-48-2056	A-41815-0330	41815-0344	A-41815-0344	41815-0358	A-41815-0358
6	09-48-5063	A-41815-0317	41815-0331	A-41815-0331	41815-0345	A-41815-0345	41815-0359	A-41815-0359
7	09-48-5073	A-41815-0318	41815-0332	A-41815-0332	41815-0346	A-41815-0346	41815-0360	A-41815-0360
8	09-48-5083	A-41815-0319	09-48-2086	A-41815-0333	41815-0347	A-41815-0347	41815-0361	A-41815-0361
9	09-48-5093	A-41815-0320	41815-0334	A-41815-0334	41815-0348	A-41815-0348	41815-0362	A-41815-0362
10	09-48-5103	A-41815-0321	09-48-2106	A-41815-0335	41815-0349	A-41815-0349	09-48-2107	A-41815-0363
11	09-48-5113	A-41815-0322	41815-0336	A-41815-0336	41815-0350	A-41815-0350	41815-0364	A-41815-0364
12	09-48-5123	A-41815-0323	41815-0337	A-41815-0337	41815-0351	A-41815-0351	41815-0365	A-41815-0365
13	09-48-5133	A-41815-0324	41815-0338	A-41815-0338	41815-0352	A-41815-0352	41815-0366	A-41815-0366
14	09-48-5143	A-41815-0325	41815-0339	A-41815-0339	41815-0353	A-41815-0353	41815-0367	A-41815-0367
15	09-48-5153	A-41815-0326	41815-0340	A-41815-0340	41815-0354	A-41815-0354	41815-0368	A-41815-0368

<b>REV:</b>  <b>AL6</b>	<b>ECR/ECN INFORMATION:</b>		<b>TITLE:</b>  <b>KK 156 HOUSING ASSY PCB 41815 SERIES DWG</b>	<b>SHEET No.</b>  <b>- 6 -</b>
	EC NO.	<b>UCP2009-0167</b>		
	DATE:	<b>10/30/2008</b>		
<b>DOCUMENT NUMBER:</b> <b>SDA-41815</b>		<b>CREATED / REVISED BY:</b> <b>MKIPPER</b>	<b>CHECKED BY:</b> <b>JBELL</b>	<b>APPROVED BY:</b> <b>FSMITH</b>





# KK 156 PCB ASSY 2-15 CKT

## 41815 SERIES

Assy. Proc:	RIGHT ANGLE
Housing No:	41815-N-AN
Options	WITH RAMP
Terminal No:	4244-A-102A
Term Matl:	PHOS BRONZE
Plating:	102 – TIN
Dim C:	(3.68) / .145
Voids:	NONE
Hooks Cut:	NO
Packaging:	PK-41815-001 TRAY

Assy. Proc:	BOTTOM ENTRY
Housing No:	41815-N-AN
Options	WITH RAMP
Terminal No:	2188-1-122
Term Matl:	BRASS
Plating:	TIN – 122
Dim C:	(3.18) / .125
Voids:	NONE
Hooks Cut:	NO
Packaging:	PK-41815-001 TRAY

Assy. Proc:	RIGHT ANGLE
Housing No:	41815-N-AN
Options	WITH RAMP
Terminal No:	2144-AA-A1AA-208B
Term Matl:	BRASS
Plating:	208 – 15 GOLD
Dim C:	(3.68) / .145
Voids:	NONE
Hooks Cut:	NO
Packaging:	PK-41815-001 TRAY

Assy. Proc:	BOTTOM ENTRY
Housing No:	41815-N-AN
Options	WITH RAMP
Terminal No:	2188-1-208
Term Matl:	BRASS
Plating:	208 – 15 GOLD
Dim C:	(3.18) / .125
Voids:	NONE
Hooks Cut:	NO
Packaging:	PK-41815-001 TRAY

Ckts	Material No	Engineer Number	Material No	Engineer Number	Material No	Engineer Number	Material No	Engineer Number
2	09-48-1023	A-41815-0369	09-48-4025	A-41815-0383	09-48-3025	A-41815-0425	09-48-3024	A-41815-0439
3	09-48-1033	A-41815-0370	09-48-4035	A-41815-0384	09-48-3035	A-41815-0426	09-48-3034	A-41815-0440
4	09-48-1043	A-41815-0371	09-48-4045	A-41815-0385	09-48-3045	A-41815-0427	09-48-3044	A-41815-0441
5	09-48-1053	A-41815-0372	09-48-4055	A-41815-0386	09-48-3055	A-41815-0428	09-48-3054	A-41815-0442
6	09-48-1063	A-41815-0373	09-48-4065	A-41815-0387	09-48-3065	A-41815-0429	09-48-3064	A-41815-0443
7	09-48-1073	A-41815-0374	09-48-4075	A-41815-0388	09-48-3075	A-41815-0430	09-48-3074	A-41815-0444
8	09-48-1083	A-41815-0375	09-48-4085	A-41815-0389	09-48-3085	A-41815-0431	09-48-3084	A-41815-0445
9	09-48-1093	A-41815-0376	09-48-4095	A-41815-0390	09-48-3095	A-41815-0432	09-48-3094	A-41815-0446
10	09-48-1103	A-41815-0377	09-48-4105	A-41815-0391	09-48-3105	A-41815-0433	09-48-3104	A-41815-0447
11	09-48-1113	A-41815-0378	09-48-4115	A-41815-0392	09-48-3115	A-41815-0434	09-48-3114	A-41815-0448
12	09-48-1123	A-41815-0379	09-48-4125	A-41815-0393	09-48-3125	A-41815-0435	09-48-3124	A-41815-0449
13	09-48-1133	A-41815-0380	09-48-4135	A-41815-0394	09-48-3135	A-41815-0436	09-48-3134	A-41815-0450
14	09-48-1143	A-41815-0381	09-48-4145	A-41815-0395	09-48-3145	A-41815-0437	09-48-3144	A-41815-0451
15	09-48-1153	A-41815-0382	09-48-4155	A-41815-0396	09-48-3155	A-41815-0438	09-48-3154	A-41815-0452

<b>REV:</b>  <b>AL6</b>	<b>ECR/ECN INFORMATION:</b>		<b>TITLE:</b>  <b>KK 156 HOUSING ASSY PCB 41815 SERIES DWG</b>	<b>SHEET No.</b>  <b>- 7 -</b>
	EC NO.	<b>UCP2009-0167</b>		
	DATE:	<b>10/30/2008</b>		
<b>DOCUMENT NUMBER:</b> <b>SDA-41815</b>		<b>CREATED / REVISED BY:</b> <b>MKIPPER</b>	<b>CHECKED BY:</b> <b>JBELL</b>	<b>APPROVED BY:</b> <b>FSMITH</b>



# KK 156 PCB ASSY 2-15 CKT

## 41815 SERIES

Assy. Proc:	TOP ENTRY
Housing No:	41815-N-AN
Options	WITH RAMP
Terminal No:	2144-AA-A1AA-P909B
Term Matl:	BRASS
Plating:	P909 – TIN
Dim C:	(3.05) / .120
Voids:	NONE
Hooks Cut:	NO
Packaging:	PK-41815-001 TRAY

Assy. Proc:	TOP ENTRY
Housing No:	41815-N-AN
Options	WITH RAMP
Terminal No:	2144-AA-A1AA-208B
Term Matl:	BRASS
Plating:	208 – 15 GOLD
Dim C:	(3.05) / .120
Voids:	NONE
Hooks Cut:	NO
Packaging:	PK-41815-001 TRAY

Assy. Proc:	RIGHT ANGLE
Housing No:	41815-N-AN
Options	WITH RAMP
Terminal No:	2144-BA-A1AA-P909B
Term Matl:	PHOS BRONZE
Plating:	P909 – TIN
Dim C:	(3.68) / .145
Voids:	NONE
Hooks Cut:	NO
Packaging:	PK-41815-001 TRAY

Assy. Proc:	BOTTOM ENTRY
Housing No:	41815-N-AN
Options	WITH RAMP
Terminal No:	6298-1-P909
Term Matl:	PHOS BRONZE
Plating:	P909 – TIN
Dim C:	(3.18) / .125
Voids:	NONE
Hooks Cut:	NO
Packaging:	PK-41815-001 TRAY

Ckts	Material No	Engineer Number
2	09-48-2023	A-41815-0453
3	09-48-2033	A-41815-0454
4	09-48-2043	A-41815-0455
5	09-48-2053	A-41815-0456
6	09-48-2063	A-41815-0457
7	09-48-2073	A-41815-0458
8	09-48-2083	A-41815-0459
9	09-48-2093	A-41815-0460
10	09-48-2103	A-41815-0461
11	09-48-2113	A-41815-0462
12	09-48-2123	A-41815-0463
13	09-48-2133	A-41815-0464
14	09-48-2143	A-41815-0465
15	09-48-2153	A-41815-0466

Material No	Engineer Number
09-48-3026	A-41815-0467
09-48-3036	A-41815-0468
09-48-3046	A-41815-0469
09-48-3056	A-41815-0470
09-48-3066	A-41815-0471
09-48-3076	A-41815-0472
09-48-3086	A-41815-0473
09-48-3096	A-41815-0474
09-48-3106	A-41815-0475
09-48-3116	A-41815-0476
09-48-3126	A-41815-0477
09-48-3136	A-41815-0478
09-48-3146	A-41815-0479
09-48-3156	A-41815-0480

Material No	Engineer Number
09-48-2020	A-41815-0481
09-48-2030	A-41815-0482
09-48-2040	A-41815-0483
09-48-2050	A-41815-0484
09-48-2060	A-41815-0485
09-48-2070	A-41815-0486
09-48-2080	A-41815-0487
09-48-2090	A-41815-0488
09-48-2100	A-41815-0489
09-48-2110	A-41815-0490
09-48-2120	A-41815-0491
09-48-2130	A-41815-0492
09-48-2140	A-41815-0493
09-48-2150	A-41815-0494

Material No	Engineer Number
09-48-2029	A-41815-0495
09-48-2039	A-41815-0496
09-48-2049	A-41815-0497
09-48-2059	A-41815-0498
09-48-2069	A-41815-0499
09-48-2079	A-41815-0500
09-48-2089	A-41815-0501
09-48-2099	A-41815-0502
09-48-2109	A-41815-0503
09-48-2119	A-41815-0504
09-48-2129	A-41815-0505
09-48-2139	A-41815-0506
09-48-2149	A-41815-0507
09-48-2159	A-41815-0508

<b>REV:</b>  <b>AL6</b>	<b>ECR/ECN INFORMATION:</b>		<b>TITLE:</b>  <b>KK 156 HOUSING ASSY PCB 41815 SERIES DWG</b>	<b>SHEET No.</b>  <b>- 8 -</b>
	EC NO.	<b>UCP2009-0167</b>		
	DATE:	<b>10/30/2008</b>		
<b>DOCUMENT NUMBER:</b> <b>SDA-41815</b>		<b>CREATED / REVISED BY:</b> <b>MKIPPER</b>	<b>CHECKED BY:</b> <b>JBELL</b>	<b>APPROVED BY:</b> <b>FSMITH</b>



# KK 156 PCB ASSY 2-15 CKT

## 41815 SERIES

Assy. Proc:	TOP ENTRY
Housing No:	41815-N-AN
Options	WITH RAMP
Terminal No:	2144-BA-A1AA-P909B
Term Matl:	PHOS BRONZE
Plating:	P909 – TIN
Dim C:	(3.05) / .120
Voids:	NONE
Hooks Cut:	NO
Packaging:	PK-41815-001 TRAY

Assy. Proc:	TOP ENTRY
Housing No:	41815-N-AN
Options	WITH RAMP
Terminal No:	2144-BA-A1AA-102B
Term Matl:	PHOS BRONZE
Plating:	102 – TIN
Dim C:	(3.05) / .120
Voids:	NONE
Hooks Cut:	YES
Packaging:	PK-41815-001 TRAY

Assy. Proc:	TOP ENTRY
Housing No:	41815-N-AN
Options	WITH RAMP
Terminal No:	2144-BA-A1AA-208B
Term Matl:	PHOS BRONZE
Plating:	208 – 15 GOLD
Dim C:	(3.05) / .120
Voids:	NONE
Hooks Cut:	YES
Packaging:	PK-41815-001 TRAY

Assy. Proc:	BOTTOM ENTRY
Housing No:	41815-N-AN
Options	WITH RAMP
Terminal No:	2188-1-208
Term Matl:	BRASS
Plating:	208 – 15 GOLD
Dim C:	(3.18) / .125
Voids:	TERMINAL VOID 2
Hooks Cut:	NO
Packaging:	PK-41815-001 TRAY

Ckts	Material No	Engineer Number
2	09-48-2028	A-41815-0509
3	09-48-2038	A-41815-0510
4	09-48-2048	A-41815-0511
5	09-48-2058	A-41815-0512
6	09-48-2068	A-41815-0513
7	09-48-2078	A-41815-0514
8	09-48-2088	A-41815-0515
9	09-48-2098	A-41815-0516
10	09-48-2108	A-41815-0517
11	09-48-2118	A-41815-0518
12	09-48-2128	A-41815-0519
13	09-48-2138	A-41815-0520
14	09-48-2148	A-41815-0521
15	09-48-2158	A-41815-0522

Material No	Engineer Number
09-48-5028	A-41815-0523
09-48-5038	A-41815-0524
09-48-5048	A-41815-0525
09-48-5058	A-41815-0526
09-48-5068	A-41815-0527
09-48-5078	A-41815-0528
09-48-5088	A-41815-0529
09-48-5098	A-41815-0530
09-48-5108	A-41815-0531
09-48-5118	A-41815-0532
09-48-5128	A-41815-0533
09-48-5138	A-41815-0534
09-48-5148	A-41815-0535
09-48-5158	A-41815-0536

Material No	Engineer Number
09-48-1025	A-41815-0537
09-48-1035	A-41815-0538
09-48-1045	A-41815-0539
09-48-1055	A-41815-0540
09-48-1065	A-41815-0541
09-48-1075	A-41815-0542
09-48-1085	A-41815-0543
09-48-1095	A-41815-0544
09-48-1105	A-41815-0545
09-48-1115	A-41815-0546
09-48-1125	A-41815-0547
09-48-1135	A-41815-0548
09-48-1145	A-41815-0549
09-48-1155	A-41815-0550

Material No	Engineer Number
41815-0551	41815-0551
41815-0552	41815-0552
41815-0553	41815-0553
41815-0554	41815-0554
41815-0555	41815-0555
41815-0556	41815-0556
41815-0557	41815-0557
41815-0558	41815-0558
41815-0559	41815-0559
41815-0560	41815-0560
41815-0561	41815-0561
41815-0562	41815-0562
41815-0563	41815-0563

<b>REV:</b>  <b>AL6</b>	<b>ECR/ECN INFORMATION:</b>		<b>TITLE:</b>  <b>KK 156 HOUSING ASSY PCB 41815 SERIES DWG</b>	<b>SHEET No.</b>
	EC NO.	<b>UCP2009-0167</b>		<b>- 9 -</b>
	DATE:	<b>10/30/2008</b>		
<b>DOCUMENT NUMBER:</b> <b>SDA-41815</b>		<b>CREATED / REVISED BY:</b> <b>MKIPPER</b>	<b>CHECKED BY:</b> <b>JBELL</b>	<b>APPROVED BY:</b> <b>FSMITH</b>



# KK 156 PCB ASSY 2-15 CKT

## 41815 SERIES

Assy. Proc:	BOTTOM ENTRY
Housing No:	41815-N-DN
Options	WITHOUT RAMPS
Terminal No:	6298-1-102
Term Matl:	PHOS BRONZE
Plating:	102
Dim C:	3.18 / .125
Voids:	NONE
Hooks Cut:	NO
Packaging:	PK-41815-001 TRAY

Assy. Proc:	BOTTOM ENTRY
Housing No:	41815-N-DN
Options	WITHOUT RAMPS
Terminal No:	6298-1-102
Term Matl:	PHOS BRONZE
Plating:	102
Dim C:	3.18 / .125
Voids:	TERMINAL VOID 2
Hooks Cut:	NO
Packaging:	PK-41815-001 TRAY

Assy. Proc:	RIGHT ANGLE
Housing No:	41815-N-A15-7
Options	WITH RAMP
Terminal No:	2144-BA-A1AA-102B
Term Matl:	PHOS BRONZE
Plating:	102 TIN
Dim C:	(3.68) / .145
Voids:	TERMINAL VOID 7
Hooks Cut:	NO
Packaging:	PK-41815-001 TRAY

Assy. Proc:	TOP ENTRY
Housing No:	41815-N-DN
Options	WITHOUT RAMP
Terminal No:	2144-BA-A1AA-102B
Term Matl:	PHOS BRONZE
Plating:	102 TIN
Dim C:	(3.05)/.120
Voids:	NONE
Hooks Cut:	YES
Packaging:	PK-41815-001 TRAY

Ckts	Material No	Engineer Number
2	41815-0564	A-41815-0564
3	41815-0565	A-41815-0565
4	41815-0566	A-41815-0566
5	41815-0567	A-41815-0567
6	41815-0568	A-41815-0568
7	41815-0569	A-41815-0569
8	41815-0570	A-41815-0570
9	41815-0571	A-41815-0571
10	41815-0572	A-41815-0572
11	41815-0573	A-41815-0573
12	41815-0574	A-41815-0574
13	41815-0575	A-41815-0575
14	41815-0576	A-41815-0576
15	41815-0577	A-41815-0577

Material No	Engineer Number
41815-0579	A-41815-0579
41815-0580	A-41815-0580
41815-0581	A-41815-0581
41815-0582	A-41815-0582
41815-0583	A-41815-0583
41815-0584	A-41815-0584
41815-0585	A-41815-0585
41815-0586	A-41815-0586
41815-0587	A-41815-0587
41815-0588	A-41815-0588
41815-0589	A-41815-0589
41815-0590	A-41815-0590
41815-0591	A-41815-0591

Material No	Engineer Number
41815-0600	A-41815-0600

Material No	Engineer Number
41815-0601	A-41815-0601
41815-0602	A-41815-0602
41815-0605	A-41815-0605

<b>REV:</b>  <b>AL6</b>	<b>ECR/ECN INFORMATION:</b>		<b>TITLE:</b>  <b>KK 156 HOUSING ASSY PCB 41815 SERIES DWG</b>	<b>SHEET No.</b>  <b>- 10 -</b>
	EC NO.	<b>UCP2009-0167</b>		
	DATE:	<b>10/30/2008</b>		
<b>DOCUMENT NUMBER:</b> <b>SDA-41815</b>		<b>CREATED / REVISED BY:</b> <b>MKIPPER</b>	<b>CHECKED BY:</b> <b>JBELL</b>	<b>APPROVED BY:</b> <b>FSMITH</b>



# KK 156 PCB ASSY 2-15 CKT

## 41815 SERIES

Assy. Proc:	RIGHT ANGLE
Housing No:	41815-N-DN
Options	WITHOUT RAMP
Terminal No:	2144-BA-A1AA-102B
Term Matl:	PHOS BRONZE
Plating:	102 TIN
Dim C:	(3.68) / .145
Voids:	NONE
Hooks Cut:	NO
Packaging:	PK-41815-001 TRAY

Assy. Proc:	TOP ENTRY
Housing No:	41815-N-DN
Options	WITHOUT RAMP
Terminal No:	2144-AA-A1AA-P909B
Term Matl:	BRASS
Plating:	P909 – TIN
Dim C:	(3.05) / .120
Voids:	NONE
Hooks Cut:	YES
Packaging:	PK-41815-001 TRAY

Ckts	Material No	Engineer Number
2	41815-0630	A-41815-0630
3	41815-0631	A-41815-0631
4	41815-0632	A-41815-0632
5	41815-0633	A-41815-0633
6	41815-0634	A-41815-0634
7	41815-0635	A-41815-0635
8	41815-0636	A-41815-0636
9	41815-0637	A-41815-0637
10	41815-0638	A-41815-0638
11	41815-0639	A-41815-0639
12	41815-0640	A-41815-0640
13	41815-0641	A-41815-0641
14	41815-0642	A-41815-0642
15	41815-0643	A-41815-0643

Material No	Engineer Number
41815-0646	A-41815-0646

REV:	ECR/ECN INFORMATION:	TITLE:	SHEET No.				
AL6	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">EC NO.</td> <td>UCP2009-0167</td> </tr> <tr> <td>DATE:</td> <td>10/30/2008</td> </tr> </table>	EC NO.	UCP2009-0167	DATE:	10/30/2008	KK 156 HOUSING ASSY PCB 41815 SERIES DWG	- 11 -
EC NO.	UCP2009-0167						
DATE:	10/30/2008						
DOCUMENT NUMBER: <b>SDA-41815</b>		CREATED / REVISED BY: <b>MKIPPER</b>	APPROVED BY: <b>FSMITH</b>				