



# 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-197B |
| Term Matl:   | PHOS BRONZE       |
| Plating:     | 197 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: | 6298-1-197        |
| Term Matl:   | PHOS BRONZE       |
| Plating:     | 197 – 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>AN3</b>              | <u>REV:</u> |  | <u>ECR/ECN INFORMATION:</u>  |                     | <u>TITLE:</u> |   |  | <u>SHEET No.</u>    |              |
|                         |             |  | <u>EC NO.</u>                | <b>UCP2015-1357</b> |               | <b>KK 156 HOUSING ASSY PCB<br/>41815 SERIES DWG</b> |  |                     | <b>- 2 -</b> |
|                         |             |  | <u>DATE:</u>                 | <b>11/10/2014</b>   |               |   |  |                     |              |
| <u>DOCUMENT NUMBER:</u> |             |  | <u>CREATED / REVISED BY:</u> |                     |               | <u>CHECKED BY:</u>                                  |  | <u>APPROVED BY:</u> |              |
| <b>SDA-41815</b>        |             |  | <b>MKIPPER</b>               |                     |               | <b>NNGUYEN</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-197B |
| Term Matl:   | PHOS BRONZE       |
| Plating:     | 197 – 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 |

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

| Ckts | Material No | Engineer Number | Material No | Engineer Number | Material No | Engineer Number | Material No | Engineer Number |
|------|-------------|-----------------|-------------|-----------------|-------------|-----------------|-------------|-----------------|
| 2    | 09-48-4028  | A-41815-0058    | 09-48-5025  | A-41815-0072    | 09-48-2022  | A-41815-0100    | 09-48-2025  | A-41815-0114    |
| 3    | 09-48-4038  | A-41815-0059    | 09-48-5035  | A-41815-0073    | 09-48-2032  | A-41815-0101    | 09-48-2035  | A-41815-0115    |
| 4    | 09-48-4048  | A-41815-0060    | 09-48-5045  | A-41815-0074    | 09-48-2042  | A-41815-0102    | 09-48-2045  | A-41815-0116    |
| 5    | 09-48-4058  | A-41815-0061    | 09-48-5055  | A-41815-0075    | 09-48-2052  | A-41815-0103    | 09-48-2055  | A-41815-0117    |
| 6    | 09-48-4068  | A-41815-0062    | 09-48-5065  | A-41815-0076    | 09-48-2062  | A-41815-0104    | 09-48-2065  | A-41815-0118    |
| 7    | 09-48-4078  | A-41815-0063    | 09-48-5075  | A-41815-0077    | 09-48-2072  | A-41815-0105    | 09-48-2075  | A-41815-0119    |
| 8    | 09-48-4088  | A-41815-0064    | 09-48-5085  | A-41815-0078    | 09-48-2082  | A-41815-0106    | 09-48-2085  | A-41815-0120    |
| 9    | 09-48-4098  | A-41815-0065    | 09-48-5095  | A-41815-0079    | 09-48-2092  | A-41815-0107    | 09-48-2095  | A-41815-0121    |
| 10   | 09-48-4108  | A-41815-0066    | 09-48-5105  | A-41815-0080    | 09-48-2102  | A-41815-0108    | 09-48-2105  | A-41815-0122    |
| 11   | 09-48-4118  | A-41815-0067    | 09-48-5115  | A-41815-0081    | 09-48-2112  | A-41815-0109    | 09-48-2115  | A-41815-0123    |
| 12   | 09-48-4128  | A-41815-0068    | 09-48-5125  | A-41815-0082    | 09-48-2122  | A-41815-0110    | 09-48-2125  | A-41815-0124    |
| 13   | 09-48-4138  | A-41815-0069    | 09-48-5135  | A-41815-0083    | 09-48-2132  | A-41815-0111    | 09-48-2135  | A-41815-0125    |
| 14   | 09-48-4148  | A-41815-0070    | 09-48-5145  | A-41815-0084    | 09-48-2142  | A-41815-0112    | 09-48-2145  | A-41815-0126    |
| 15   | 09-48-4158  | A-41815-0071    | 09-48-5155  | A-41815-0085    | 09-48-2152  | A-41815-0113    | 09-48-2155  | A-41815-0127    |

|   |                             |  |  |                                      |
|---|-----------------------------|--|--|--------------------------------------|
| <b>REV:</b><br><br><b>AN3</b>               | <b>ECR/ECN INFORMATION:</b> |  | <b>TITLE:</b><br><br><b>KK 156 HOUSING ASSY PCB<br/>41815 SERIES DWG</b> | <u>SHEET No.</u>                     |
|   | <b>EC NO.</b>               | <b>UCP2015-1357</b>                            |  | <b>- 3 -</b>                         |
|   | <b>DATE:</b>                | <b>11/10/2014</b>                              |  |                                      |
| <b>DOCUMENT NUMBER:</b><br><b>SDA-41815</b> |                             | <b>CREATED / REVISED BY:</b><br><b>MKIPPER</b> | <b>CHECKED BY:</b><br><b>NGUYEN</b>                                      | <b>APPROVED BY:</b><br><b>FSMITH</b> |



# KK 156 PCB ASSY 2-15 CKT

## 41815 SERIES

| Ckts | Assy. Proc: |                 | Assy. Proc: |                 | Assy. Proc: |                 | Assy. Proc: |                 |
|------|-------------|-----------------|-------------|-----------------|-------------|-----------------|-------------|-----------------|
|      | 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    | 09-48-5080  | 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><br><br><b>AN3</b>               | <b>ECR/ECN INFORMATION:</b> |  | <b>TITLE:</b><br><br><b>KK 156 HOUSING ASSY PCB<br/>41815 SERIES DWG</b> | <u>SHEET No.</u>                     |
|   | <b>EC NO.</b>               | <b>UCP2015-1357</b>                            |  | <b>- 4 -</b>                         |
|   | <b>DATE:</b>                | <b>11/10/2014</b>                              |  |                                      |
| <b>DOCUMENT NUMBER:</b><br><b>SDA-41815</b> |                             | <b>CREATED / REVISED BY:</b><br><b>MKIPPER</b> | <b>CHECKED BY:</b><br><b>NNGUYEN</b>                                     | <b>APPROVED BY:</b><br><b>FSMITH</b> |





# KK 156 PCB ASSY 2-15 CKT

## 41815 SERIES

|      | Assy. Proc:  | RIGHT ANGLE       | Assy. Proc:  | RIGHT ANGLE       | Assy. Proc:  | RIGHT ANGLE       | Assy. Proc:  | BOTTOM ENTRY      |
|------|--------------|-------------------|--------------|-------------------|--------------|-------------------|--------------|-------------------|
|      | Housing No:  | 41815-N-AN        | Housing No:  | 41815-N-AN        | Housing No:  | 41815-N-AN        | Housing No:  | 41815-N-AN        |
|      | Options      | WITH RAMP         | Options      | WITH RAMP         | Options      | WITH RAMP         | Options      | WITH RAMP         |
|      | Terminal No: | 4244-A-197A       | Terminal No: | 2144-AA-A1AA-208B | Terminal No: | 2188-1-208        | Terminal No: | 2188-1-208        |
|      | Term Matl:   | PHOS BRONZE       | Term Matl:   | BRASS             | Term Matl:   | BRASS             | Term Matl:   | BRASS             |
|      | Plating:     | 197 – TIN         | Plating:     | 208 – 15 GOLD     | Plating:     | 208 – 15 GOLD     | Plating:     | 208 – 15 GOLD     |
|      | Dim C:       | (3.68) / .145     | Dim C:       | (3.68) / .145     | Dim C:       | (3.18) / .125     | Dim C:       | (3.18) / .125     |
|      | Voids:       | NONE              | Voids:       | NONE              | Voids:       | NONE              | Voids:       | NONE              |
|      | Hooks Cut:   | NO                | Hooks Cut:   | NO                | Hooks Cut:   | NO                | Hooks Cut:   | NO                |
|      | Packaging:   | PK-41815-001 TRAY | 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    | 09-48-1023   | A-41815-0369      |              |                   | 09-48-3025   | A-41815-0425      | 09-48-3024   | A-41815-0439      |
| 3    | 09-48-1033   | A-41815-0370      |              |                   | 09-48-3035   | A-41815-0426      | 09-48-3034   | A-41815-0440      |
| 4    | 09-48-1043   | A-41815-0371      |              |                   | 09-48-3045   | A-41815-0427      | 09-48-3044   | A-41815-0441      |
| 5    | 09-48-1053   | A-41815-0372      |              |                   | 09-48-3055   | A-41815-0428      | 09-48-3054   | A-41815-0442      |
| 6    | 09-48-1063   | A-41815-0373      |              |                   | 09-48-3065   | A-41815-0429      | 09-48-3064   | A-41815-0443      |
| 7    | 09-48-1073   | A-41815-0374      |              |                   | 09-48-3075   | A-41815-0430      | 09-48-3074   | A-41815-0444      |
| 8    | 09-48-1083   | A-41815-0375      |              |                   | 09-48-3085   | A-41815-0431      | 09-48-3084   | A-41815-0445      |
| 9    | 09-48-1093   | A-41815-0376      |              |                   | 09-48-3095   | A-41815-0432      | 09-48-3094   | A-41815-0446      |
| 10   | 09-48-1103   | A-41815-0377      |              |                   | 09-48-3105   | A-41815-0433      | 09-48-3104   | A-41815-0447      |
| 11   | 09-48-1113   | A-41815-0378      |              |                   | 09-48-3115   | A-41815-0434      | 09-48-3114   | A-41815-0448      |
| 12   | 09-48-1123   | A-41815-0379      |              |                   | 09-48-3125   | A-41815-0435      | 09-48-3124   | A-41815-0449      |
| 13   | 09-48-1133   | A-41815-0380      |              |                   | 09-48-3135   | A-41815-0436      | 09-48-3134   | A-41815-0450      |
| 14   | 09-48-1143   | A-41815-0381      |              |                   | 09-48-3145   | A-41815-0437      | 09-48-3144   | A-41815-0451      |
| 15   | 09-48-1153   | A-41815-0382      |              |                   | 09-48-3155   | A-41815-0438      | 09-48-3154   | A-41815-0452      |

|                         |                              |   |                     |
|-------------------------|------------------------------|---|---------------------|
| <b>REV:</b>             | <b>ECR/ECN INFORMATION:</b>  | <b>TITLE:</b>                                       | <b>SHEET No.</b>    |
| <b>AN3</b>              | EC NO. <b>UCP2015-1357</b>   | <b>KK 156 HOUSING ASSY PCB<br/>41815 SERIES DWG</b> | <b>- 6 -</b>        |
|                         | DATE: <b>11/10/2014</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>NNGUYEN</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>AN3</b>              | <u>REV:</u> |  | <u>ECR/ECN INFORMATION:</u>  |                     | <u>TITLE:</u>                  |  |                     | <u>SHEET No.</u> |
|                         |             |  | <u>EC NO.</u>                | <b>UCP2015-1357</b> | <b>KK 156 HOUSING ASSY PCB</b> |  |                     | <b>- 7 -</b>     |
|                         |             |  | <u>DATE:</u>                 | <b>11/10/2014</b>   | <b>41815 SERIES DWG</b>        |  |                     |                  |
| <u>DOCUMENT NUMBER:</u> |             |  | <u>CREATED / REVISED BY:</u> |                     | <u>CHECKED BY:</u>             |  | <u>APPROVED BY:</u> |                  |
| <b>SDA-41815</b>        |             |  | <b>MKIPPER</b>               |                     | <b>NNGUYEN</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-197B |
| Term Matl:   | PHOS BRONZE       |
| Plating:     | 197 – 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>AN3</b>                        | REV: _____ |  | ECR/ECN INFORMATION:                 | <b>TITLE:</b><br><br><b>KK 156 HOUSING ASSY PCB<br/>41815 SERIES DWG</b> | SHEET No.                  |
|                                   |            |  | EC NO. <b>UCP2015-1357</b>           |  | <b>- 8 -</b>               |
|                                   |            |  | DATE: <b>11/10/2014</b>              |  |                            |
| DOCUMENT NUMBER: <b>SDA-41815</b> |            |  | CREATED / REVISED BY: <b>MKIPPER</b> | CHECKED BY: <b>NNGUYEN</b>   | APPROVED BY: <b>FSMITH</b> |



# KK 156 PCB ASSY 2-15 CKT

## 41815 SERIES

|      | Assy. Proc:  | BOTTOM ENTRY      | Assy. Proc:  | BOTTOM ENTRY      | Assy. Proc:  | RIGHT ANGLE       | Assy. Proc:  | TOP ENTRY         |
|------|--------------|-------------------|--------------|-------------------|--------------|-------------------|--------------|-------------------|
|      | Housing No:  | 41815-N-DN        | Housing No:  | 41815-N-DN        | Housing No:  | 41815-N-A15-7     | Housing No:  | 41815-N-DN        |
|      | Options      | WITHOUT RAMPS     | Options      | WITHOUT RAMPS     | Options      | WITH RAMP         | Options      | WITHOUT RAMP      |
|      | Terminal No: | 6298-1-197        | Terminal No: | 6298-1-197        | Terminal No: | 2144-BA-A1AA-197B | Terminal No: | 2144-BA-A1AA-197B |
|      | Term Matl:   | PHOS BRONZE       | Term Matl:   | PHOS BRONZE       | Term Matl:   | PHOS BRONZE       | Term Matl:   | PHOS BRONZE       |
|      | Plating:     | 197 – TIN         | Plating:     | 197 – TIN         | Plating:     | 197 – TIN         | Plating:     | 197 – TIN         |
|      | Dim C:       | 3.18 / .125       | Dim C:       | 3.18 / .125       | Dim C:       | (3.68) / .145     | Dim C:       | (3.05)/.120       |
|      | Voids:       | NONE              | Voids:       | TERMINAL VOID 2   | Voids:       | TERMINAL VOID 7   | Voids:       | NONE              |
|      | Hooks Cut:   | NO                | Hooks Cut:   | NO                | Hooks Cut:   | NO                | Hooks Cut:   | YES               |
|      | Packaging:   | PK-41815-001 TRAY | 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    | 41815-0564   | A-41815-0564      |              |                   |              |                   | 41815-0601   | A-41815-0601      |
| 3    | 41815-0565   | A-41815-0565      | 41815-0579   | A-41815-0579      |              |                   | 41815-0602   | A-41815-0602      |
| 4    | 41815-0566   | A-41815-0566      | 41815-0580   | A-41815-0580      |              |                   |              |                   |
| 5    | 41815-0567   | A-41815-0567      | 41815-0581   | A-41815-0581      |              |                   |              |                   |
| 6    | 41815-0568   | A-41815-0568      | 41815-0582   | A-41815-0582      |              |                   | 41815-0605   | A-41815-0605      |
| 7    | 41815-0569   | A-41815-0569      | 41815-0583   | A-41815-0583      |              |                   |              |                   |
| 8    | 41815-0570   | A-41815-0570      | 41815-0584   | A-41815-0584      |              |                   |              |                   |
| 9    | 41815-0571   | A-41815-0571      | 41815-0585   | A-41815-0585      |              |                   |              |                   |
| 10   | 41815-0572   | A-41815-0572      | 41815-0586   | A-41815-0586      |              |                   |              |                   |
| 11   | 41815-0573   | A-41815-0573      | 41815-0587   | A-41815-0587      |              |                   |              |                   |
| 12   | 41815-0574   | A-41815-0574      | 41815-0588   | A-41815-0588      |              |                   |              |                   |
| 13   | 41815-0575   | A-41815-0575      | 41815-0589   | A-41815-0589      |              |                   |              |                   |
| 14   | 41815-0576   | A-41815-0576      | 41815-0590   | A-41815-0590      |              |                   |              |                   |
| 15   | 41815-0577   | A-41815-0577      | 41815-0591   | A-41815-0591      | 41815-0600   | A-41815-0600      |              |                   |

|                                   |                             |   |                            |
|-----------------------------------|-----------------------------|---|----------------------------|
| <b>REV:</b>                       | <b>ECR/ECN INFORMATION:</b> | <b>TITLE:</b>                                       | <b>SHEET No.</b>           |
| <b>AN3</b>                        | EC NO. <b>UCP2015-1357</b>  | <b>KK 156 HOUSING ASSY PCB<br/>41815 SERIES DWG</b> | <b>- 9 -</b>               |
|                                   | DATE: <b>11/10/2014</b>     |   |                            |
| <b>DOCUMENT NUMBER: SDA-41815</b> |                             | <b>CREATED / REVISED BY: MKIPPER</b>                | <b>CHECKED BY: NNGUYEN</b> |
|                                   |                             | <b>APPROVED BY: FSMITH</b>                          |                            |





# KK 156 PCB ASSY 2-15 CKT

## 41815 SERIES

|      | Assy. Proc:  | RIGHT ANGLE       | Assy. Proc:  | TOP ENTRY          | Assy. Proc:  | RIGHT ANGLE        | Assy. Proc:  | BOTTOM ENTRY      |
|------|--------------|-------------------|--------------|--------------------|--------------|--------------------|--------------|-------------------|
|      | Housing No:  | 41815-N-DN        | Housing No:  | 41815-N-DN         | Housing No:  | 41815-N-AN         | Housing No:  | 41815-N-DN        |
|      | Options      | WITHOUT RAMP      | Options      | WITHOUT RAMP       | Options      | WITH RAMP          | Options      | WITHOUT RAMP      |
|      | Terminal No: | 2144-BA-A1AA-197B | Terminal No: | 2144-AA-A1AA-P909B | Terminal No: | 2144-BA-A1AA-197B  | Terminal No: | 6298-197          |
|      | Term Matl:   | PHOS BRONZE       | Term Matl:   | BRASS              | Term Matl:   | PHOS BRONZE        | Term Matl:   | PHOS BRONZE       |
|      | Plating:     | 197 – TIN         | Plating:     | P909 – TIN         | Plating:     | 197 TIN            | Plating:     | 197 – TIN         |
|      | Dim C:       | (3.68) / .145     | Dim C:       | (3.05) / .120      | Dim C:       | (3.68) / .145      | Dim C:       | (4.60) / .160     |
|      | Voids:       | NONE              | Voids:       | NONE               | Voids:       | TERMINAL VOID 2, 4 | Voids:       | NONE              |
|      | Hooks Cut:   | NO                | Hooks Cut:   | YES                | Hooks Cut:   | NO                 | Hooks Cut:   | YES               |
|      | Packaging:   | PK-41815-001 TRAY | 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    | 41815-0630   | A-41815-0630      |              |                    |              |                    | 41815-0672   | A-41815-0672      |
| 3    | 41815-0631   | A-41815-0631      |              |                    |              |                    |              |                   |
| 4    | 41815-0632   | A-41815-0632      | 41815-0646   | A-41815-0646       |              |                    | 41815-0674   | A-41815-0674      |
| 5    | 41815-0633   | A-41815-0633      |              |                    | 41815-0661   | A-41815-0661       |              |                   |
| 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      |              |                    |              |                    |              |                   |

|                                   |                             |   |                            |
|-----------------------------------|-----------------------------|---|----------------------------|
| <b>REV:</b>                       | <b>ECR/ECN INFORMATION:</b> | <b>TITLE:</b>                                       | <b>SHEET No.</b>           |
| <b>AN3</b>                        | EC NO. <b>UCP2015-1357</b>  | <b>KK 156 HOUSING ASSY PCB<br/>41815 SERIES DWG</b> | <b>- 10 -</b>              |
|                                   | DATE: <b>11/10/2014</b>     |   |                            |
| <b>DOCUMENT NUMBER: SDA-41815</b> |                             | <b>CREATED / REVISED BY: MKIPPER</b>                | <b>CHECKED BY: NNGUYEN</b> |
|                                   |                             | <b>APPROVED BY: FSMITH</b>                          |                            |



# KK 156 PCB ASSY 2-15 CKT

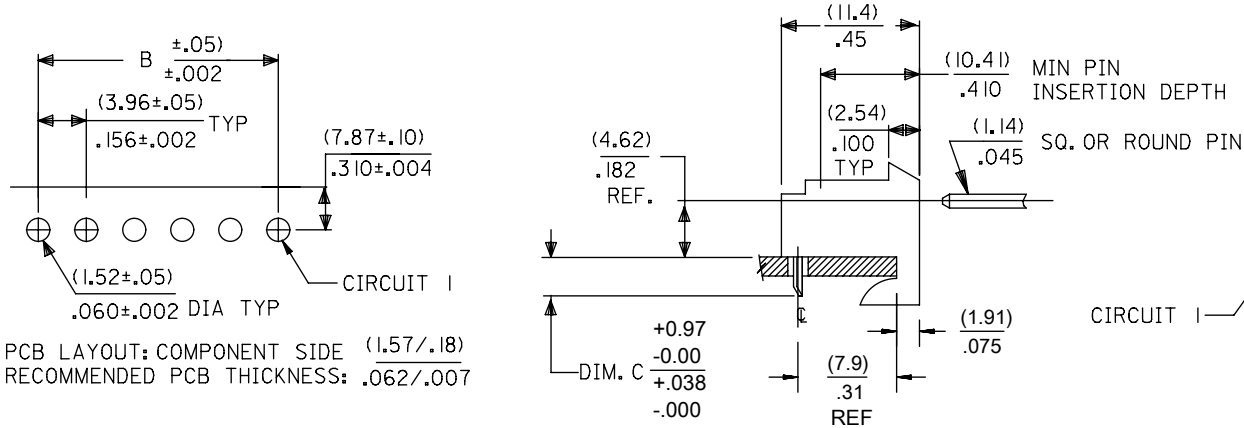
## 41815 SERIES

|      | Assy. Proc:  | RIGHT ANGLE       | Assy. Proc:  | Assy. Proc:  | Assy. Proc:  |
|------|--------------|-------------------|--------------|--------------|--------------|
|      | Housing No:  | 41815-N-AN        | Housing No:  | Housing No:  | Housing No:  |
|      | Options      | WITH RAMP         | Options      | Options      | Options      |
|      | Terminal No: | 2144-BA-A1AA-197B | Terminal No: | Terminal No: | Terminal No: |
|      | Term Matl:   | PHOS BRONZE       | Term Matl:   | Term Matl:   | Term Matl:   |
|      | Plating:     | 197 TIN           | Plating:     | Plating:     | Plating:     |
|      | Dim C:       | (3.68) / .145     | Dim C:       | Dim C:       | Dim C:       |
|      | Voids:       | TERMINAL VOID 2   | Voids:       | Voids:       | Voids:       |
|      | Hooks Cut:   | NO                | Hooks Cut:   | Hooks Cut:   | Hooks Cut:   |
|      | Packaging:   | PK-41815-001 TRAY | Packaging:   | Packaging:   | Packaging:   |
|      |              |                   |              |              |              |
| Ckts | Material No  | Engineer Number   | Material No  | Material No  | Material No  |
| 2    |              |                   |              |              |              |
| 3    | 41815-0687   | A-41815-0687      |              |              |              |
| 4    |              |                   |              |              |              |
| 5    |              |                   |              |              |              |
| 6    |              |                   |              |              |              |
| 7    |              |                   |              |              |              |
| 8    |              |                   |              |              |              |
| 9    |              |                   |              |              |              |
| 10   |              |                   |              |              |              |
| 11   |              |                   |              |              |              |
| 12   |              |                   |              |              |              |
| 13   |              |                   |              |              |              |
| 14   |              |                   |              |              |              |
| 15   |              |                   |              |              |              |

|                                   |                             |   |                            |
|-----------------------------------|-----------------------------|---|----------------------------|
| <b>REV:</b>                       | <b>ECR/ECN INFORMATION:</b> | <b>TITLE:</b>                                       | <b>SHEET No.</b>           |
| <b>AN3</b>                        | EC NO. <b>UCP2015-1357</b>  | <b>KK 156 HOUSING ASSY PCB<br/>41815 SERIES DWG</b> | <b>- 11 -</b>              |
|                                   | DATE: <b>11/10/2014</b>     |   |                            |
| <b>DOCUMENT NUMBER: SDA-41815</b> |                             | <b>CREATED / REVISED BY: MKIPPER</b>                | <b>CHECKED BY: NNGUYEN</b> |
|                                   |                             | <b>APPROVED BY: FSMITH</b>                          |                            |

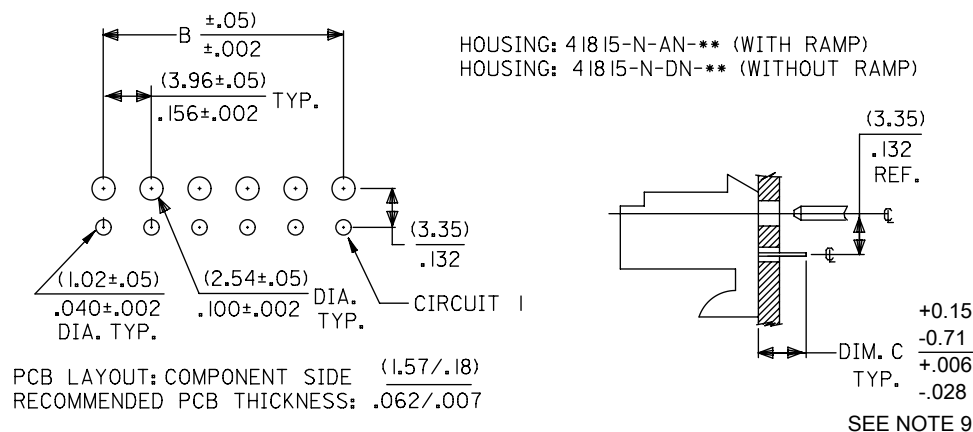
### RIGHT ANGLE

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



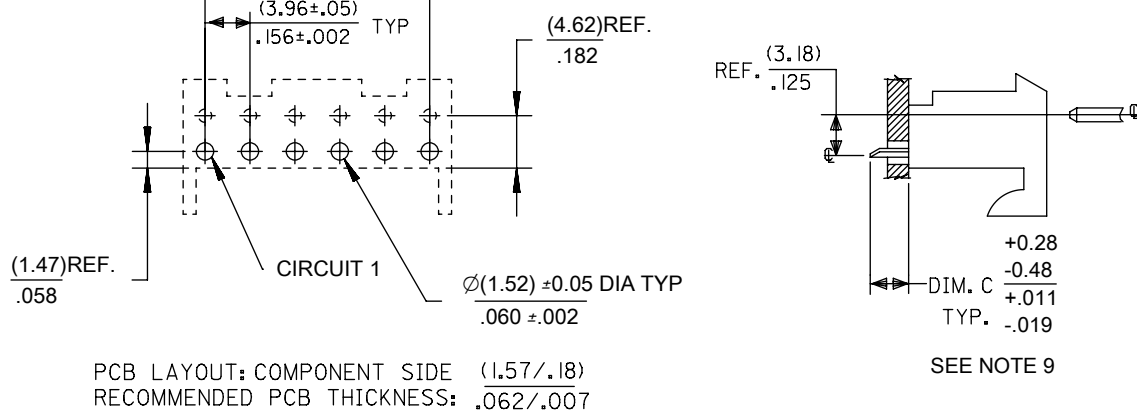
### BOTTOM ENTRY

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



### TOP ENTRY

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



| 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, RATED UL 94V-0, COLOR: NATURAL (WHITE)
- FINISH:
  - (197) = OVERALL REFLOWED MATTE TIN: 0.00152/.000060 MIN OVER 0.00127/.000050 MIN NICKEL.
  - (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.
  - (909) = OVERALL TIN: 0.00254/.000100 MIN.
- 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 (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 SMES-152.
- PARTS ARE STACKABLE END TO END ON (3.96)/.156 CENTERLINE.
- THIS PART CONFORMS TO CLASS B REQUIREMENTS OF COSMETIC SPEC PS-45499-002.
- DIMENSION 'C' MEASURED WITH TERMINAL PUSHED IN AGAINST THE STOP.

HOOKS REMOVED OPTION  
(NOT AVAILABLE ON RIGHT ANGLE)

PRE-RELEASE  
REFERENCE  
USE ONLY

|   |                 |   |                                       |                        |                 |          |  |  |  |  |  |            |
|---|-----------------|---|---------------------------------------|------------------------|-----------------|----------|--|--|--|--|--|------------|
| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                 |   |                                       |                        |                 |          |  |  |  |  |  |            |
| QUALITY SYMBOLS   | DIM C TOLERANCE | EC NO: 107740<br>DRWN: MKIPPER<br>CHK'D: JBELL<br>REV APPR: | GENERAL TOLERANCES (UNLESS SPECIFIED) |                        | DIMENSION UNITS | SCALE    | <br>KK 156 HOUSING PCB<br>41815 SERIES<br>PRODUCT CUSTOMER DRAWING<br>SERIES: 41815 MATERIAL NUMBER: SEE CHART CUSTOMER: GENERAL MARKET<br>DOCUMENT NUMBER: SDA-41815 DOC TYPE: PSD DOC PART: 000 SHEET NUMBER: 1 OF * |  |  |  |  |            |
|   |                 |   |                                       |                        | MM/IN           | NTS      |  |  |  |  |  |            |
|   |                 |   | 4 PLACES                              | ±                      | ±               | SAMIEC   |  |  |  |  |  | 1987/01/28 |
|   |                 |   | 3 PLACES                              | ±                      | ± 0.01          | CHK'D BY |  |  |  |  |  | DATE       |
|   |                 |   | 2 PLACES                              | ± 0.25                 | ± 0.015         | SAMIEC   |  |  |  |  |  | 1987/01/28 |
| 1 PLACES  | ± 0.38          | ±   | APPR BY                               | DATE                   |                 |          |  |  |  |  |  |            |
| 0 PLACES  | ±               | ±   | SAMIEC                                | 1987/01/28             |                 |          |  |  |  |  |  |            |
| ANGULAR TOL ± 0.5   |                 |   | DRAWING SIZE                          | THIRD ANGLE PROJECTION |                 |          |  |  |  |  |  |            |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS  |                 |   | B                                     |                        |                 |          |  |  |  |  |  |            |

|                |              |
|----------------|--------------|
| RELEASE STATUS | RELEASE DATE |
|----------------|--------------|



# 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-197B |
| Term Matl:   | PHOS BRONZE       |
| Plating:     | 197 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: | 6298-1-197        |
| Term Matl:   | PHOS BRONZE       |
| Plating:     | 197 – 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>AN3</b>              | <u>REV:</u> |  | <u>ECR/ECN INFORMATION:</u>  |                     | <u>TITLE:</u>                                       |  |                     | <u>SHEET No.</u> |
|                         |             |  | <u>EC NO.</u>                | <b>UCP2015-1357</b> | <b>KK 156 HOUSING ASSY PCB<br/>41815 SERIES DWG</b> |  |                     | <b>- 2 -</b>     |
|                         |             |  | <u>DATE:</u>                 | <b>11/10/2014</b>   |   |  |                     |                  |
| <u>DOCUMENT NUMBER:</u> |             |  | <u>CREATED / REVISED BY:</u> |                     | <u>CHECKED BY:</u>                                  |  | <u>APPROVED BY:</u> |                  |
| <b>SDA-41815</b>        |             |  | <b>MKIPPER</b>               |                     | <b>NNGUYEN</b>                                      |  | <b>FSMITH</b>       |                  |



# KK 156 PCB ASSY 2-15 CKT

## 41815 SERIES

| Ckts | Assy. Proc: TOP ENTRY |                 | Assy. Proc: TOP ENTRY |                 | Assy. Proc: BOTTOM ENTRY |                 | Assy. Proc: TOP ENTRY |                 |
|------|-----------------------|-----------------|-----------------------|-----------------|--------------------------|-----------------|-----------------------|-----------------|
|      | Material No           | Engineer Number | Material No           | Engineer Number | Material No              | Engineer Number | Material No           | Engineer Number |
| 2    | 09-48-4028            | A-41815-0058    | 09-48-5025            | A-41815-0072    | 09-48-2022               | A-41815-0100    | 09-48-2025            | A-41815-0114    |
| 3    | 09-48-4038            | A-41815-0059    | 09-48-5035            | A-41815-0073    | 09-48-2032               | A-41815-0101    | 09-48-2035            | A-41815-0115    |
| 4    | 09-48-4048            | A-41815-0060    | 09-48-5045            | A-41815-0074    | 09-48-2042               | A-41815-0102    | 09-48-2045            | A-41815-0116    |
| 5    | 09-48-4058            | A-41815-0061    | 09-48-5055            | A-41815-0075    | 09-48-2052               | A-41815-0103    | 09-48-2055            | A-41815-0117    |
| 6    | 09-48-4068            | A-41815-0062    | 09-48-5065            | A-41815-0076    | 09-48-2062               | A-41815-0104    | 09-48-2065            | A-41815-0118    |
| 7    | 09-48-4078            | A-41815-0063    | 09-48-5075            | A-41815-0077    | 09-48-2072               | A-41815-0105    | 09-48-2075            | A-41815-0119    |
| 8    | 09-48-4088            | A-41815-0064    | 09-48-5085            | A-41815-0078    | 09-48-2082               | A-41815-0106    | 09-48-2085            | A-41815-0120    |
| 9    | 09-48-4098            | A-41815-0065    | 09-48-5095            | A-41815-0079    | 09-48-2092               | A-41815-0107    | 09-48-2095            | A-41815-0121    |
| 10   | 09-48-4108            | A-41815-0066    | 09-48-5105            | A-41815-0080    | 09-48-2102               | A-41815-0108    | 09-48-2105            | A-41815-0122    |
| 11   | 09-48-4118            | A-41815-0067    | 09-48-5115            | A-41815-0081    | 09-48-2112               | A-41815-0109    | 09-48-2115            | A-41815-0123    |
| 12   | 09-48-4128            | A-41815-0068    | 09-48-5125            | A-41815-0082    | 09-48-2122               | A-41815-0110    | 09-48-2125            | A-41815-0124    |
| 13   | 09-48-4138            | A-41815-0069    | 09-48-5135            | A-41815-0083    | 09-48-2132               | A-41815-0111    | 09-48-2135            | A-41815-0125    |
| 14   | 09-48-4148            | A-41815-0070    | 09-48-5145            | A-41815-0084    | 09-48-2142               | A-41815-0112    | 09-48-2145            | A-41815-0126    |
| 15   | 09-48-4158            | A-41815-0071    | 09-48-5155            | A-41815-0085    | 09-48-2152               | A-41815-0113    | 09-48-2155            | A-41815-0127    |

|                         |             |  |                              |                     |   |  |                     |                  |
|-------------------------|-------------|--|------------------------------|---------------------|---|--|---------------------|------------------|
| <b>AN3</b>              | <u>REV:</u> |  | <u>ECR/ECN INFORMATION:</u>  |                     | <b>KK 156 HOUSING ASSY PCB<br/>41815 SERIES DWG</b> |  |                     | <u>SHEET No.</u> |
|                         |             |  | <u>EC NO.</u>                | <b>UCP2015-1357</b> |   |  |                     | <b>- 3 -</b>     |
|                         |             |  | <u>DATE:</u>                 | <b>11/10/2014</b>   |   |  |                     |                  |
| <u>DOCUMENT NUMBER:</u> |             |  | <u>CREATED / REVISED BY:</u> |                     | <u>CHECKED BY:</u>                                  |  | <u>APPROVED BY:</u> |                  |
| <b>SDA-41815</b>        |             |  | <b>MKIPPER</b>               |                     | <b>NNGUYEN</b>                                      |  | <b>FSMITH</b>       |                  |



# KK 156 PCB ASSY 2-15 CKT

## 41815 SERIES

| Ckts | Assy. Proc: |                 | Assy. Proc: |                 | Assy. Proc: |                 | Assy. Proc: |                 |
|------|-------------|-----------------|-------------|-----------------|-------------|-----------------|-------------|-----------------|
|      | 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    | 09-48-5080  | 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: AN3</b>                             | <b>ECR/ECN INFORMATION:</b> |  | <b>TITLE:</b><br><br><b>KK 156 HOUSING ASSY PCB<br/>41815 SERIES DWG</b> | <b>SHEET No.</b>                     |
|   | <b>EC NO.</b>               | <b>UCP2015-1357</b>                            |  | <b>- 4 -</b>                         |
|   | <b>DATE:</b>                | <b>11/10/2014</b>                              |  |                                      |
| <b>DOCUMENT NUMBER:</b><br><b>SDA-41815</b> |                             | <b>CREATED / REVISED BY:</b><br><b>MKIPPER</b> | <b>CHECKED BY:</b><br><b>NNGUYEN</b>                                     | <b>APPROVED BY:</b><br><b>FSMITH</b> |





# KK 156 PCB ASSY 2-15 CKT

## 41815 SERIES

|      | Assy. Proc:  | RIGHT ANGLE       | Assy. Proc:  | RIGHT ANGLE     | Assy. Proc:  | RIGHT ANGLE       | Assy. Proc:  | BOTTOM ENTRY      |
|------|--------------|-------------------|--------------|-----------------|--------------|-------------------|--------------|-------------------|
|      | Housing No:  | 41815-N-AN        | Housing No:  | 41815-N-AN      | Housing No:  | 41815-N-AN        | Housing No:  | 41815-N-AN        |
|      | Options      | WITH RAMP         | Options      | WITH RAMP       | Options      | WITH RAMP         | Options      | WITH RAMP         |
|      | Terminal No: | 4244-A-197A       | Terminal No: |                 | Terminal No: | 2144-AA-A1AA-208B | Terminal No: | 2188-1-208        |
|      | Term Matl:   | PHOS BRONZE       | Term Matl:   |                 | Term Matl:   | BRASS             | Term Matl:   | BRASS             |
|      | Plating:     | 197 – TIN         | Plating:     |                 | Plating:     | 208 – 15 GOLD     | Plating:     | 208 – 15 GOLD     |
|      | Dim C:       | (3.68) / .145     | Dim C:       |                 | Dim C:       | (3.68) / .145     | Dim C:       | (3.18) / .125     |
|      | Voids:       | NONE              | Voids:       |                 | Voids:       | NONE              | Voids:       | NONE              |
|      | Hooks Cut:   | NO                | Hooks Cut:   |                 | Hooks Cut:   | NO                | Hooks Cut:   | NO                |
|      | Packaging:   | PK-41815-001 TRAY | Packaging:   |                 | 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    | 09-48-1023   | A-41815-0369      |              |                 | 09-48-3025   | A-41815-0425      | 09-48-3024   | A-41815-0439      |
| 3    | 09-48-1033   | A-41815-0370      |              |                 | 09-48-3035   | A-41815-0426      | 09-48-3034   | A-41815-0440      |
| 4    | 09-48-1043   | A-41815-0371      |              |                 | 09-48-3045   | A-41815-0427      | 09-48-3044   | A-41815-0441      |
| 5    | 09-48-1053   | A-41815-0372      |              |                 | 09-48-3055   | A-41815-0428      | 09-48-3054   | A-41815-0442      |
| 6    | 09-48-1063   | A-41815-0373      |              |                 | 09-48-3065   | A-41815-0429      | 09-48-3064   | A-41815-0443      |
| 7    | 09-48-1073   | A-41815-0374      |              |                 | 09-48-3075   | A-41815-0430      | 09-48-3074   | A-41815-0444      |
| 8    | 09-48-1083   | A-41815-0375      |              |                 | 09-48-3085   | A-41815-0431      | 09-48-3084   | A-41815-0445      |
| 9    | 09-48-1093   | A-41815-0376      |              |                 | 09-48-3095   | A-41815-0432      | 09-48-3094   | A-41815-0446      |
| 10   | 09-48-1103   | A-41815-0377      |              |                 | 09-48-3105   | A-41815-0433      | 09-48-3104   | A-41815-0447      |
| 11   | 09-48-1113   | A-41815-0378      |              |                 | 09-48-3115   | A-41815-0434      | 09-48-3114   | A-41815-0448      |
| 12   | 09-48-1123   | A-41815-0379      |              |                 | 09-48-3125   | A-41815-0435      | 09-48-3124   | A-41815-0449      |
| 13   | 09-48-1133   | A-41815-0380      |              |                 | 09-48-3135   | A-41815-0436      | 09-48-3134   | A-41815-0450      |
| 14   | 09-48-1143   | A-41815-0381      |              |                 | 09-48-3145   | A-41815-0437      | 09-48-3144   | A-41815-0451      |
| 15   | 09-48-1153   | A-41815-0382      |              |                 | 09-48-3155   | A-41815-0438      | 09-48-3154   | A-41815-0452      |

|                                   |                             |   |                            |
|-----------------------------------|-----------------------------|---|----------------------------|
| <b>REV:</b>                       | <b>ECR/ECN INFORMATION:</b> | <b>TITLE:</b>                                       | <b>SHEET No.</b>           |
| <b>AN3</b>                        | EC NO. <b>UCP2015-1357</b>  | <b>KK 156 HOUSING ASSY PCB<br/>41815 SERIES DWG</b> | <b>- 6 -</b>               |
|                                   | DATE: <b>11/10/2014</b>     |   |                            |
| <b>DOCUMENT NUMBER: SDA-41815</b> |                             | <b>CREATED / REVISED BY: MKIPPER</b>                | <b>CHECKED BY: NNGUYEN</b> |
|                                   |                             | <b>APPROVED BY: 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>AN3</b>              | <u>REV:</u> |  | <u>ECR/ECN INFORMATION:</u>  |                     | <u>TITLE:</u>                  |  |                     | <u>SHEET No.</u> |
|                         |             |  | <u>EC NO.</u>                | <b>UCP2015-1357</b> | <b>KK 156 HOUSING ASSY PCB</b> |  |                     | <b>- 7 -</b>     |
|                         |             |  | <u>DATE:</u>                 | <b>11/10/2014</b>   | <b>41815 SERIES DWG</b>        |  |                     |                  |
| <u>DOCUMENT NUMBER:</u> |             |  | <u>CREATED / REVISED BY:</u> |                     | <u>CHECKED BY:</u>             |  | <u>APPROVED BY:</u> |                  |
| <b>SDA-41815</b>        |             |  | <b>MKIPPER</b>               |                     | <b>NNGUYEN</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-197B |
| Term Matl:   | PHOS BRONZE       |
| Plating:     | 197 – 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>AN3</b>              | <u>REV:</u> |  | <u>ECR/ECN INFORMATION:</u>  |                     | <u>TITLE:</u>                                       |  |                     | <u>SHEET No.</u> |
|                         |             |  | <u>EC NO.</u>                | <b>UCP2015-1357</b> | <b>KK 156 HOUSING ASSY PCB<br/>41815 SERIES DWG</b> |  |                     | <b>- 8 -</b>     |
|                         |             |  | <u>DATE:</u>                 | <b>11/10/2014</b>   |   |  |                     |                  |
| <u>DOCUMENT NUMBER:</u> |             |  | <u>CREATED / REVISED BY:</u> |                     | <u>CHECKED BY:</u>                                  |  | <u>APPROVED BY:</u> |                  |
| <b>SDA-41815</b>        |             |  | <b>MKIPPER</b>               |                     | <b>NNGUYEN</b>                                      |  | <b>FSMITH</b>       |                  |



# KK 156 PCB ASSY 2-15 CKT

## 41815 SERIES

|      | Assy. Proc:  | BOTTOM ENTRY      | Assy. Proc:  | BOTTOM ENTRY      | Assy. Proc:  | RIGHT ANGLE       | Assy. Proc:  | TOP ENTRY         |
|------|--------------|-------------------|--------------|-------------------|--------------|-------------------|--------------|-------------------|
|      | Housing No:  | 41815-N-DN        | Housing No:  | 41815-N-DN        | Housing No:  | 41815-N-A15-7     | Housing No:  | 41815-N-DN        |
|      | Options      | WITHOUT RAMPS     | Options      | WITHOUT RAMPS     | Options      | WITH RAMP         | Options      | WITHOUT RAMP      |
|      | Terminal No: | 6298-1-197        | Terminal No: | 6298-1-197        | Terminal No: | 2144-BA-A1AA-197B | Terminal No: | 2144-BA-A1AA-197B |
|      | Term Matl:   | PHOS BRONZE       | Term Matl:   | PHOS BRONZE       | Term Matl:   | PHOS BRONZE       | Term Matl:   | PHOS BRONZE       |
|      | Plating:     | 197 – TIN         | Plating:     | 197 – TIN         | Plating:     | 197 – TIN         | Plating:     | 197 – TIN         |
|      | Dim C:       | 3.18 / .125       | Dim C:       | 3.18 / .125       | Dim C:       | (3.68) / .145     | Dim C:       | (3.05)/.120       |
|      | Voids:       | NONE              | Voids:       | TERMINAL VOID 2   | Voids:       | TERMINAL VOID 7   | Voids:       | NONE              |
|      | Hooks Cut:   | NO                | Hooks Cut:   | NO                | Hooks Cut:   | NO                | Hooks Cut:   | YES               |
|      | Packaging:   | PK-41815-001 TRAY | 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    | 41815-0564   | A-41815-0564      |              |                   |              |                   | 41815-0601   | A-41815-0601      |
| 3    | 41815-0565   | A-41815-0565      | 41815-0579   | A-41815-0579      |              |                   | 41815-0602   | A-41815-0602      |
| 4    | 41815-0566   | A-41815-0566      | 41815-0580   | A-41815-0580      |              |                   |              |                   |
| 5    | 41815-0567   | A-41815-0567      | 41815-0581   | A-41815-0581      |              |                   |              |                   |
| 6    | 41815-0568   | A-41815-0568      | 41815-0582   | A-41815-0582      |              |                   | 41815-0605   | A-41815-0605      |
| 7    | 41815-0569   | A-41815-0569      | 41815-0583   | A-41815-0583      |              |                   |              |                   |
| 8    | 41815-0570   | A-41815-0570      | 41815-0584   | A-41815-0584      |              |                   |              |                   |
| 9    | 41815-0571   | A-41815-0571      | 41815-0585   | A-41815-0585      |              |                   |              |                   |
| 10   | 41815-0572   | A-41815-0572      | 41815-0586   | A-41815-0586      |              |                   |              |                   |
| 11   | 41815-0573   | A-41815-0573      | 41815-0587   | A-41815-0587      |              |                   |              |                   |
| 12   | 41815-0574   | A-41815-0574      | 41815-0588   | A-41815-0588      |              |                   |              |                   |
| 13   | 41815-0575   | A-41815-0575      | 41815-0589   | A-41815-0589      |              |                   |              |                   |
| 14   | 41815-0576   | A-41815-0576      | 41815-0590   | A-41815-0590      |              |                   |              |                   |
| 15   | 41815-0577   | A-41815-0577      | 41815-0591   | A-41815-0591      | 41815-0600   | A-41815-0600      |              |                   |

|                                   |                             |   |                            |
|-----------------------------------|-----------------------------|---|----------------------------|
| <b>REV:</b>                       | <b>ECR/ECN INFORMATION:</b> | <b>TITLE:</b>                                       | <b>SHEET No.</b>           |
| <b>AN3</b>                        | EC NO. <b>UCP2015-1357</b>  | <b>KK 156 HOUSING ASSY PCB<br/>41815 SERIES DWG</b> | <b>- 9 -</b>               |
|                                   | DATE: <b>11/10/2014</b>     |   |                            |
| <b>DOCUMENT NUMBER: SDA-41815</b> |                             | <b>CREATED / REVISED BY: MKIPPER</b>                | <b>CHECKED BY: NNGUYEN</b> |
|                                   |                             | <b>APPROVED BY: FSMITH</b>                          |                            |



# KK 156 PCB ASSY 2-15 CKT

## 41815 SERIES

|      | Assy. Proc:  | RIGHT ANGLE       | Assy. Proc:  | TOP ENTRY          | Assy. Proc:  | RIGHT ANGLE        | Assy. Proc:  | BOTTOM ENTRY      |
|------|--------------|-------------------|--------------|--------------------|--------------|--------------------|--------------|-------------------|
|      | Housing No:  | 41815-N-DN        | Housing No:  | 41815-N-DN         | Housing No:  | 41815-N-AN         | Housing No:  | 41815-N-DN        |
|      | Options      | WITHOUT RAMP      | Options      | WITHOUT RAMP       | Options      | WITH RAMP          | Options      | WITHOUT RAMP      |
|      | Terminal No: | 2144-BA-A1AA-197B | Terminal No: | 2144-AA-A1AA-P909B | Terminal No: | 2144-BA-A1AA-197B  | Terminal No: | 6298-197          |
|      | Term Matl:   | PHOS BRONZE       | Term Matl:   | BRASS              | Term Matl:   | PHOS BRONZE        | Term Matl:   | PHOS BRONZE       |
|      | Plating:     | 197 – TIN         | Plating:     | P909 – TIN         | Plating:     | 197 TIN            | Plating:     | 197 – TIN         |
|      | Dim C:       | (3.68) / .145     | Dim C:       | (3.05) / .120      | Dim C:       | (3.68) / .145      | Dim C:       | (4.60) / .160     |
|      | Voids:       | NONE              | Voids:       | NONE               | Voids:       | TERMINAL VOID 2, 4 | Voids:       | NONE              |
|      | Hooks Cut:   | NO                | Hooks Cut:   | YES                | Hooks Cut:   | NO                 | Hooks Cut:   | YES               |
|      | Packaging:   | PK-41815-001 TRAY | 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    | 41815-0630   | A-41815-0630      |              |                    |              |                    | 41815-0672   | A-41815-0672      |
| 3    | 41815-0631   | A-41815-0631      |              |                    |              |                    |              |                   |
| 4    | 41815-0632   | A-41815-0632      | 41815-0646   | A-41815-0646       |              |                    | 41815-0674   | A-41815-0674      |
| 5    | 41815-0633   | A-41815-0633      |              |                    | 41815-0661   | A-41815-0661       |              |                   |
| 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      |              |                    |              |                    |              |                   |

|                                   |                             |   |                            |
|-----------------------------------|-----------------------------|---|----------------------------|
| <b>REV:</b>                       | <b>ECR/ECN INFORMATION:</b> | <b>TITLE:</b>                                       | <b>SHEET No.</b>           |
| <b>AN3</b>                        | EC NO. <b>UCP2015-1357</b>  | <b>KK 156 HOUSING ASSY PCB<br/>41815 SERIES DWG</b> | <b>- 10 -</b>              |
|                                   | DATE: <b>11/10/2014</b>     |   |                            |
| <b>DOCUMENT NUMBER: SDA-41815</b> |                             | <b>CREATED / REVISED BY: MKIPPER</b>                | <b>CHECKED BY: NNGUYEN</b> |
|                                   |                             | <b>APPROVED BY: FSMITH</b>                          |                            |



# KK 156 PCB ASSY 2-15 CKT

## 41815 SERIES

|      | Assy. Proc:  | RIGHT ANGLE       | Assy. Proc:  | Assy. Proc:  | Assy. Proc:  |
|------|--------------|-------------------|--------------|--------------|--------------|
|      | Housing No:  | 41815-N-AN        | Housing No:  | Housing No:  | Housing No:  |
|      | Options      | WITH RAMP         | Options      | Options      | Options      |
|      | Terminal No: | 2144-BA-A1AA-197B | Terminal No: | Terminal No: | Terminal No: |
|      | Term Matl:   | PHOS BRONZE       | Term Matl:   | Term Matl:   | Term Matl:   |
|      | Plating:     | 197 TIN           | Plating:     | Plating:     | Plating:     |
|      | Dim C:       | (3.68) / .145     | Dim C:       | Dim C:       | Dim C:       |
|      | Voids:       | TERMINAL VOID 2   | Voids:       | Voids:       | Voids:       |
|      | Hooks Cut:   | NO                | Hooks Cut:   | Hooks Cut:   | Hooks Cut:   |
|      | Packaging:   | PK-41815-001 TRAY | Packaging:   | Packaging:   | Packaging:   |
|      |              |                   |              |              |              |
| Ckts | Material No  | Engineer Number   | Material No  | Material No  | Material No  |
| 2    |              |                   |              |              |              |
| 3    | 41815-0687   | A-41815-0687      |              |              |              |
| 4    |              |                   |              |              |              |
| 5    |              |                   |              |              |              |
| 6    |              |                   |              |              |              |
| 7    |              |                   |              |              |              |
| 8    |              |                   |              |              |              |
| 9    |              |                   |              |              |              |
| 10   |              |                   |              |              |              |
| 11   |              |                   |              |              |              |
| 12   |              |                   |              |              |              |
| 13   |              |                   |              |              |              |
| 14   |              |                   |              |              |              |
| 15   |              |                   |              |              |              |

|                         |                             |   |                    |
|-------------------------|-----------------------------|---|--------------------|
| <b>REV:</b>             | <b>ECR/ECN INFORMATION:</b> | <b>TITLE:</b>                                       | <b>SHEET No.</b>   |
| <b>AN3</b>              | EC NO. <b>UCP2015-1357</b>  | <b>KK 156 HOUSING ASSY PCB<br/>41815 SERIES DWG</b> | <b>- 11 -</b>      |
|                         | DATE: <b>11/10/2014</b>     |   |                    |
| <b>DOCUMENT NUMBER:</b> |                             | <b>CREATED / REVISED BY:</b>                        | <b>CHECKED BY:</b> |
| <b>SDA-41815</b>        |                             | <b>MKIPPER</b>                                      | <b>NNGUYEN</b>     |
|                         |                             | <b>APPROVED BY:</b>                                 |                    |
|                         |                             | <b>FSMITH</b>                                       |                    |