





# KK 156 PCB ASSY 2-15 CKT

## 41815 SERIES

|      |              |                   |              |                   |              |                   |              |                   |
|------|--------------|-------------------|--------------|-------------------|--------------|-------------------|--------------|-------------------|
|      | Assy. Proc:  | RIGHT ANGLE       | Assy. Proc:  | RIGHT ANGLE       | Assy. Proc:  | BOTTOM ENTRY      | 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: | 2144-BA-A1AA-197B | Terminal No: | 2144-BA-A1AA-208B | Terminal No: | 6298-1-197        | Terminal No: | 6298-1-208        |
|      | Term Matl:   | PHOS BRONZE       | Term Matl:   | PHOS BRONZE       | Term Matl:   | PHOS BRONZE       | Term Matl:   | PHOS BRONZE       |
|      | Plating:     | 197 TIN           | Plating:     | 208 – 15 GOLD     | Plating:     | 197 – TIN         | 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    | 09-48-1024   | A-41815-0002      | 09-48-5024   | A-41815-0016      | 09-48-4029   | A-41815-0030      | 09-48-5026   | A-41815-0044      |
| 3    | 09-48-1034   | A-41815-0003      | 09-48-5034   | A-41815-0017      | 09-48-4039   | A-41815-0031      | 09-48-5036   | A-41815-0045      |
| 4    | 09-48-1044   | A-41815-0004      | 09-48-5044   | A-41815-0018      | 09-48-4049   | A-41815-0032      | 09-48-5046   | A-41815-0046      |
| 5    | 09-48-1054   | A-41815-0005      | 09-48-5054   | A-41815-0019      | 09-48-4059   | A-41815-0033      | 09-48-5056   | A-41815-0047      |
| 6    | 09-48-1064   | A-41815-0006      | 09-48-5064   | A-41815-0020      | 09-48-4069   | A-41815-0034      | 09-48-5066   | A-41815-0048      |
| 7    | 09-48-1074   | A-41815-0007      | 09-48-5074   | A-41815-0021      | 09-48-4079   | A-41815-0035      | 09-48-5076   | A-41815-0049      |
| 8    | 09-48-1084   | A-41815-0008      | 09-48-5084   | A-41815-0022      | 09-48-4089   | A-41815-0036      | 09-48-5086   | A-41815-0050      |
| 9    | 09-48-1094   | A-41815-0009      | 09-48-5094   | A-41815-0023      | 09-48-4099   | A-41815-0037      | 09-48-5096   | A-41815-0051      |
| 10   | 09-48-1104   | A-41815-0010      | 09-48-5104   | A-41815-0024      | 09-48-4109   | A-41815-0038      | 09-48-5106   | A-41815-0052      |
| 11   | 09-48-1114   | A-41815-0011      | 09-48-5114   | A-41815-0025      | 09-48-4119   | A-41815-0039      | 09-48-5116   | A-41815-0053      |
| 12   | 09-48-1124   | A-41815-0012      | 09-48-5124   | A-41815-0026      | 09-48-4129   | A-41815-0040      | 09-48-5126   | A-41815-0054      |
| 13   | 09-48-1134   | A-41815-0013      | 09-48-5134   | A-41815-0027      | 09-48-4139   | A-41815-0041      | 09-48-5136   | A-41815-0055      |
| 14   | 09-48-1144   | A-41815-0014      | 09-48-5144   | A-41815-0028      | 09-48-4149   | A-41815-0042      | 09-48-5146   | A-41815-0056      |
| 15   | 09-48-1154   | A-41815-0015      | 09-48-5154   | A-41815-0029      | 09-48-4159   | A-41815-0043      | 09-48-5156   | A-41815-0057      |

|                                      |                      |                     |                                                                   |                                 |                               |
|--------------------------------------|----------------------|---------------------|-------------------------------------------------------------------|---------------------------------|-------------------------------|
| REV:<br><br><b>AN2</b>               | ECR/ECN INFORMATION: |                     | TITLE:<br><br><b>KK 156 HOUSING ASSY PCB<br/>41815 SERIES DWG</b> | SHEET No.<br><br><b>- 2 -</b>   |                               |
|                                      | EC NO.               | <b>UCP2013-1138</b> |                                                                   |                                 |                               |
|                                      | DATE:                | <b>10/1/2012</b>    |                                                                   |                                 |                               |
| DOCUMENT NUMBER:<br><b>SDA-41815</b> |                      |                     | CREATED / REVISED BY:<br><b>MKIPPER</b>                           | CHECKED BY:<br><b>BANDERSON</b> | APPROVED BY:<br><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    |

|                                      |                      |                     |                                                               |                                 |                               |
|--------------------------------------|----------------------|---------------------|---------------------------------------------------------------|---------------------------------|-------------------------------|
| REV:<br><b>AN2</b>                   | ECR/ECN INFORMATION: |                     | TITLE:<br><b>KK 156 HOUSING ASSY PCB<br/>41815 SERIES DWG</b> | SHEET No.<br><b>- 3 -</b>       |                               |
|                                      | EC NO.               | <b>UCP2013-1138</b> |                                                               |                                 |                               |
|                                      | DATE:                | <b>10/1/2012</b>    |                                                               |                                 |                               |
| DOCUMENT NUMBER:<br><b>SDA-41815</b> |                      |                     | CREATED / REVISED BY:<br><b>MKIPPER</b>                       | CHECKED BY:<br><b>BANDERSON</b> | APPROVED BY:<br><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: | 6298-197          | 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:     | 197 – 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      | 09-48-5080   | 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       |

|                                          |                      |              |                                                                   |                                     |                                   |
|------------------------------------------|----------------------|--------------|-------------------------------------------------------------------|-------------------------------------|-----------------------------------|
| REV:<br><br><b>AN2</b>                   | ECR/ECN INFORMATION: |              | TITLE:<br><br><b>KK 156 HOUSING ASSY PCB<br/>41815 SERIES DWG</b> | SHEET No.<br><br><b>- 4 -</b>       |                                   |
|                                          | EC NO.               | UCP2013-1138 |                                                                   |                                     |                                   |
|                                          | DATE:                | 10/1/2012    |                                                                   |                                     |                                   |
| DOCUMENT NUMBER:<br><br><b>SDA-41815</b> |                      |              | CREATED / REVISED BY:<br><br><b>MKIPPER</b>                       | CHECKED BY:<br><br><b>BANDERSON</b> | APPROVED BY:<br><br><b>FSMITH</b> |



# KK 156 PCB ASSY 2-15 CKT

## 41815 SERIES

|      |              |                         |                         |                   |              |                 |                         |                    |
|------|--------------|-------------------------|-------------------------|-------------------|--------------|-----------------|-------------------------|--------------------|
|      | Assy. Proc:  | RIGHT ANGLE             | Assy. Proc:             | BOTTOM ENTRY      | Assy. Proc:  |                 | Assy. Proc:             | TOP ENTRY          |
|      | Housing No:  | 41815-N-AN              | Housing No:             | 41815-N-DN        | Housing No:  |                 | Housing No:             | 41815-N-DN         |
|      | Options      | WITH RAMP               | Options                 | NO RAMPS          | Options      |                 | Options                 | NO RAMPS           |
|      | Terminal No: | 2144-AA-A1AA-228B       | Terminal No:            | 2188-P909         | Terminal No: |                 | Terminal No:            | 2144-AA-A1AA-P909B |
|      | Term Matl:   | BRASS                   | Term Matl:              | BRASS             | Term Matl:   |                 | Term Matl:              | BRASS              |
|      | Plating:     | 228 – GOLD              | Plating:                | P909 – TIN        | Plating:     |                 | Plating:                | P909 – TIN         |
|      | Dim C:       | (3.68) / .145           | Dim C:                  | (4.06) / .160     | Dim C:       |                 | Dim C:                  | (3.05) / .120      |
|      | Voids:       | NONE                    | Voids:                  | NONE              | Voids:       |                 | Voids:                  | NONE               |
|      | Hooks Cut:   | NO                      | Hooks Cut:              | YES               | Hooks Cut:   |                 | Hooks Cut:              | NO                 |
|      | Packaging:   | PK-41815-001 TRAY       | Packaging:              | PK-41815-001 TRAY | Packaging:   |                 | 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 |                   |              |                 | 41815-0355 A-41815-0355 |                    |
|      | 3            | 09-48-5033 A-41815-0314 | 41815-0328 A-41815-0328 |                   |              |                 | 41815-0356 A-41815-0356 |                    |
|      | 4            | 09-48-5043 A-41815-0315 | 41815-0329 A-41815-0329 |                   |              |                 | 09-48-2047 A-41815-0357 |                    |
|      | 5            | 09-48-5053 A-41815-0316 | 09-48-2056 A-41815-0330 |                   |              |                 | 41815-0358 A-41815-0358 |                    |
|      | 6            | 09-48-5063 A-41815-0317 | 41815-0331 A-41815-0331 |                   |              |                 | 41815-0359 A-41815-0359 |                    |
|      | 7            | 09-48-5073 A-41815-0318 | 41815-0332 A-41815-0332 |                   |              |                 | 41815-0360 A-41815-0360 |                    |
|      | 8            | 09-48-5083 A-41815-0319 | 09-48-2086 A-41815-0333 |                   |              |                 | 41815-0361 A-41815-0361 |                    |
|      | 9            | 09-48-5093 A-41815-0320 | 41815-0334 A-41815-0334 |                   |              |                 | 41815-0362 A-41815-0362 |                    |
|      | 10           | 09-48-5103 A-41815-0321 | 09-48-2106 A-41815-0335 |                   |              |                 | 09-48-2107 A-41815-0363 |                    |
|      | 11           | 09-48-5113 A-41815-0322 | 41815-0336 A-41815-0336 |                   |              |                 | 41815-0364 A-41815-0364 |                    |
|      | 12           | 09-48-5123 A-41815-0323 | 41815-0337 A-41815-0337 |                   |              |                 | 41815-0365 A-41815-0365 |                    |
|      | 13           | 09-48-5133 A-41815-0324 | 41815-0338 A-41815-0338 |                   |              |                 | 41815-0366 A-41815-0366 |                    |
|      | 14           | 09-48-5143 A-41815-0325 | 41815-0339 A-41815-0339 |                   |              |                 | 41815-0367 A-41815-0367 |                    |
|      | 15           | 09-48-5153 A-41815-0326 | 41815-0340 A-41815-0340 |                   |              |                 | 41815-0368 A-41815-0368 |                    |

|                                      |                      |              |                                         |                                             |                               |
|--------------------------------------|----------------------|--------------|-----------------------------------------|---------------------------------------------|-------------------------------|
| REV:                                 | ECR/ECN INFORMATION: |              | TITLE:                                  | KK 156 HOUSING ASSY PCB<br>41815 SERIES DWG | SHEET No.<br><b>- 5 -</b>     |
|                                      | EC NO.               | UCP2013-1138 |                                         |                                             |                               |
|                                      | DATE:                | 10/1/2012    |                                         |                                             |                               |
| DOCUMENT NUMBER:<br><b>SDA-41815</b> |                      |              | CREATED / REVISED BY:<br><b>MKIPPER</b> | CHECKED BY:<br><b>BANDERSON</b>             | APPROVED BY:<br><b>FSMITH</b> |



# KK 156 PCB ASSY 2-15 CKT

## 41815 SERIES

|      |              |                         |              |                 |                         |                   |                         |                   |
|------|--------------|-------------------------|--------------|-----------------|-------------------------|-------------------|-------------------------|-------------------|
|      | Assy. Proc:  | RIGHT ANGLE             | Assy. Proc:  |                 | Assy. Proc:             | RIGHT ANGLE       | Assy. Proc:             | BOTTOM ENTRY      |
|      | Housing No:  | 41815-N-AN              | Housing No:  |                 | Housing No:             | 41815-N-AN        | Housing No:             | 41815-N-AN        |
|      | Options      | WITH RAMP               | Options      |                 | 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 |                   |

|                                          |                      |              |                                                                   |                                     |                                   |
|------------------------------------------|----------------------|--------------|-------------------------------------------------------------------|-------------------------------------|-----------------------------------|
| REV:<br><br><b>AN2</b>                   | ECR/ECN INFORMATION: |              | TITLE:<br><br><b>KK 156 HOUSING ASSY PCB<br/>41815 SERIES DWG</b> | SHEET No.<br><br><b>- 6 -</b>       |                                   |
|                                          | EC NO.               | UCP2013-1138 |                                                                   |                                     |                                   |
|                                          | DATE:                | 10/1/2012    |                                                                   |                                     |                                   |
| DOCUMENT NUMBER:<br><br><b>SDA-41815</b> |                      |              | CREATED / REVISED BY:<br><br><b>MKIPPER</b>                       | CHECKED BY:<br><br><b>BANDERSON</b> | APPROVED BY:<br><br><b>FSMITH</b> |



# KK 156 PCB ASSY 2-15 CKT

## 41815 SERIES

|      |              |                    |              |                   |              |                    |              |                   |
|------|--------------|--------------------|--------------|-------------------|--------------|--------------------|--------------|-------------------|
|      | Assy. Proc:  | TOP ENTRY          | Assy. Proc:  | TOP ENTRY         | 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: | 2144-AA-A1AA-P909B | Terminal No: | 2144-AA-A1AA-208B | Terminal No: | 2144-BA-A1AA-P909B | Terminal No: | 6298-1-P909       |
|      | Term Matl:   | BRASS              | Term Matl:   | BRASS             | Term Matl:   | PHOS BRONZE        | Term Matl:   | PHOS BRONZE       |
|      | Plating:     | P909 – TIN         | Plating:     | 208 – 15 GOLD     | Plating:     | P909 – TIN         | Plating:     | P909 – TIN        |
|      | Dim C:       | (3.05) / .120      | Dim C:       | (3.05) / .120     | Dim C:       | (3.68) / .145      | 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    | 09-48-2023   | A-41815-0453       | 09-48-3026   | A-41815-0467      | 09-48-2020   | A-41815-0481       | 09-48-2029   | A-41815-0495      |
| 3    | 09-48-2033   | A-41815-0454       | 09-48-3036   | A-41815-0468      | 09-48-2030   | A-41815-0482       | 09-48-2039   | A-41815-0496      |
| 4    | 09-48-2043   | A-41815-0455       | 09-48-3046   | A-41815-0469      | 09-48-2040   | A-41815-0483       | 09-48-2049   | A-41815-0497      |
| 5    | 09-48-2053   | A-41815-0456       | 09-48-3056   | A-41815-0470      | 09-48-2050   | A-41815-0484       | 09-48-2059   | A-41815-0498      |
| 6    | 09-48-2063   | A-41815-0457       | 09-48-3066   | A-41815-0471      | 09-48-2060   | A-41815-0485       | 09-48-2069   | A-41815-0499      |
| 7    | 09-48-2073   | A-41815-0458       | 09-48-3076   | A-41815-0472      | 09-48-2070   | A-41815-0486       | 09-48-2079   | A-41815-0500      |
| 8    | 09-48-2083   | A-41815-0459       | 09-48-3086   | A-41815-0473      | 09-48-2080   | A-41815-0487       | 09-48-2089   | A-41815-0501      |
| 9    | 09-48-2093   | A-41815-0460       | 09-48-3096   | A-41815-0474      | 09-48-2090   | A-41815-0488       | 09-48-2099   | A-41815-0502      |
| 10   | 09-48-2103   | A-41815-0461       | 09-48-3106   | A-41815-0475      | 09-48-2100   | A-41815-0489       | 09-48-2109   | A-41815-0503      |
| 11   | 09-48-2113   | A-41815-0462       | 09-48-3116   | A-41815-0476      | 09-48-2110   | A-41815-0490       | 09-48-2119   | A-41815-0504      |
| 12   | 09-48-2123   | A-41815-0463       | 09-48-3126   | A-41815-0477      | 09-48-2120   | A-41815-0491       | 09-48-2129   | A-41815-0505      |
| 13   | 09-48-2133   | A-41815-0464       | 09-48-3136   | A-41815-0478      | 09-48-2130   | A-41815-0492       | 09-48-2139   | A-41815-0506      |
| 14   | 09-48-2143   | A-41815-0465       | 09-48-3146   | A-41815-0479      | 09-48-2140   | A-41815-0493       | 09-48-2149   | A-41815-0507      |
| 15   | 09-48-2153   | A-41815-0466       | 09-48-3156   | A-41815-0480      | 09-48-2150   | A-41815-0494       | 09-48-2159   | A-41815-0508      |

|                                      |                      |              |                                                               |                                 |
|--------------------------------------|----------------------|--------------|---------------------------------------------------------------|---------------------------------|
| REV:<br><b>AN2</b>                   | ECR/ECN INFORMATION: |              | TITLE:<br><b>KK 156 HOUSING ASSY PCB<br/>41815 SERIES DWG</b> | SHEET No.<br><b>- 7 -</b>       |
|                                      | EC NO.               | UCP2013-1138 |                                                               |                                 |
|                                      | DATE:                | 10/1/2012    |                                                               |                                 |
| DOCUMENT NUMBER:<br><b>SDA-41815</b> |                      |              | CREATED / REVISED BY:<br><b>MKIPPER</b>                       | CHECKED BY:<br><b>BANDERSON</b> |
|                                      |                      |              | APPROVED BY:<br><b>FSMITH</b>                                 |                                 |



# KK 156 PCB ASSY 2-15 CKT

## 41815 SERIES

|      |              |                    |              |                   |              |                   |              |                   |
|------|--------------|--------------------|--------------|-------------------|--------------|-------------------|--------------|-------------------|
|      | Assy. Proc:  | TOP ENTRY          | Assy. Proc:  | TOP ENTRY         | Assy. Proc:  | TOP ENTRY         | 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: | 2144-BA-A1AA-P909B | Terminal No: | 2144-BA-A1AA-197B | Terminal No: | 2144-BA-A1AA-208B | Terminal No: | 2188-1-208        |
|      | Term Matl:   | PHOS BRONZE        | Term Matl:   | PHOS BRONZE       | Term Matl:   | PHOS BRONZE       | Term Matl:   | BRASS             |
|      | Plating:     | P909 – TIN         | Plating:     | 197 – TIN         | Plating:     | 208 – 15 GOLD     | Plating:     | 208 – 15 GOLD     |
|      | Dim C:       | (3.05) / .120      | Dim C:       | (3.05) / .120     | Dim C:       | (3.05) / .120     | Dim C:       | (3.18) / .125     |
|      | Voids:       | NONE               | Voids:       | NONE              | Voids:       | NONE              | Voids:       | TERMINAL VOID 2   |
|      | Hooks Cut:   | NO                 | Hooks Cut:   | YES               | Hooks Cut:   | YES               | 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    | 09-48-2028   | A-41815-0509       | 09-48-5028   | A-41815-0523      | 09-48-1025   | A-41815-0537      |              |                   |
| 3    | 09-48-2038   | A-41815-0510       | 09-48-5038   | A-41815-0524      | 09-48-1035   | A-41815-0538      | 41815-0551   | 41815-0551        |
| 4    | 09-48-2048   | A-41815-0511       | 09-48-5048   | A-41815-0525      | 09-48-1045   | A-41815-0539      | 41815-0552   | 41815-0552        |
| 5    | 09-48-2058   | A-41815-0512       | 09-48-5058   | A-41815-0526      | 09-48-1055   | A-41815-0540      | 41815-0553   | 41815-0553        |
| 6    | 09-48-2068   | A-41815-0513       | 09-48-5068   | A-41815-0527      | 09-48-1065   | A-41815-0541      | 41815-0554   | 41815-0554        |
| 7    | 09-48-2078   | A-41815-0514       | 09-48-5078   | A-41815-0528      | 09-48-1075   | A-41815-0542      | 41815-0555   | 41815-0555        |
| 8    | 09-48-2088   | A-41815-0515       | 09-48-5088   | A-41815-0529      | 09-48-1085   | A-41815-0543      | 41815-0556   | 41815-0556        |
| 9    | 09-48-2098   | A-41815-0516       | 09-48-5098   | A-41815-0530      | 09-48-1095   | A-41815-0544      | 41815-0557   | 41815-0557        |
| 10   | 09-48-2108   | A-41815-0517       | 09-48-5108   | A-41815-0531      | 09-48-1105   | A-41815-0545      | 41815-0558   | 41815-0558        |
| 11   | 09-48-2118   | A-41815-0518       | 09-48-5118   | A-41815-0532      | 09-48-1115   | A-41815-0546      | 41815-0559   | 41815-0559        |
| 12   | 09-48-2128   | A-41815-0519       | 09-48-5128   | A-41815-0533      | 09-48-1125   | A-41815-0547      | 41815-0560   | 41815-0560        |
| 13   | 09-48-2138   | A-41815-0520       | 09-48-5138   | A-41815-0534      | 09-48-1135   | A-41815-0548      | 41815-0561   | 41815-0561        |
| 14   | 09-48-2148   | A-41815-0521       | 09-48-5148   | A-41815-0535      | 09-48-1145   | A-41815-0549      | 41815-0562   | 41815-0562        |
| 15   | 09-48-2158   | A-41815-0522       | 09-48-5158   | A-41815-0536      | 09-48-1155   | A-41815-0550      | 41815-0563   | 41815-0563        |

|                                      |                      |              |                                                               |                                 |
|--------------------------------------|----------------------|--------------|---------------------------------------------------------------|---------------------------------|
| REV:<br><b>AN2</b>                   | ECR/ECN INFORMATION: |              | TITLE:<br><b>KK 156 HOUSING ASSY PCB<br/>41815 SERIES DWG</b> | SHEET No.<br><b>- 8 -</b>       |
|                                      | EC NO.               | UCP2013-1138 |                                                               |                                 |
|                                      | DATE:                | 10/1/2012    |                                                               |                                 |
| DOCUMENT NUMBER:<br><b>SDA-41815</b> |                      |              | CREATED / REVISED BY:<br><b>MKIPPER</b>                       | CHECKED BY:<br><b>BANDERSON</b> |
|                                      |                      |              | APPROVED BY:<br><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      |              |                   |

|                                          |                      |              |                                                                   |                                     |                                   |
|------------------------------------------|----------------------|--------------|-------------------------------------------------------------------|-------------------------------------|-----------------------------------|
| REV:<br><br><b>AN2</b>                   | ECR/ECN INFORMATION: |              | TITLE:<br><br><b>KK 156 HOUSING ASSY PCB<br/>41815 SERIES DWG</b> | SHEET No.<br><br><b>- 9 -</b>       |                                   |
|                                          | EC NO.               | UCP2013-1138 |                                                                   |                                     |                                   |
|                                          | DATE:                | 10/1/2012    |                                                                   |                                     |                                   |
| DOCUMENT NUMBER:<br><br><b>SDA-41815</b> |                      |              | CREATED / REVISED BY:<br><br><b>MKIPPER</b>                       | CHECKED BY:<br><br><b>BANDERSON</b> | APPROVED BY:<br><br><b>FSMITH</b> |

KK 156 HOUSING ASSY PCB  
41815 SERIES DWG

SHEET No.

- 9 -



# 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 |              |                    |              |                    |              |                   |

|                                      |                      |              |                                         |                                             |                               |
|--------------------------------------|----------------------|--------------|-----------------------------------------|---------------------------------------------|-------------------------------|
| REV:                                 | ECR/ECN INFORMATION: |              | TITLE:                                  | KK 156 HOUSING ASSY PCB<br>41815 SERIES DWG | SHEET No.<br><b>- 10 -</b>    |
|                                      | EC NO.               | UCP2013-1138 |                                         |                                             |                               |
|                                      | DATE:                | 10/1/2012    |                                         |                                             |                               |
| DOCUMENT NUMBER:<br><b>SDA-41815</b> |                      |              | CREATED / REVISED BY:<br><b>MKIPPER</b> | CHECKED BY:<br><b>BANDERSON</b>             | APPROVED BY:<br><b>FSMITH</b> |