

**SILICON RECTIFIERS**

OPERATING AND STORAGE TEMPERATURE -65°C to +175°C

| TYPE | Maximum Peak Reverse Voltage | Maximum Average Rectified Current @ Half-Wave Resistive Load 60Hz |    | Maximum Forward Peak Surge Current @ 8.3 ms Superimposed | Maximum Reverse Current @ PRV @ 25°C T <sub>A</sub> | Maximum Forward Voltage @ 25°C T <sub>A</sub> |                 |
|------|------------------------------|-------------------------------------------------------------------|----|----------------------------------------------------------|-----------------------------------------------------|-----------------------------------------------|-----------------|
|      | PRV                          | I <sub>o</sub> @ T <sub>A</sub>                                   |    | I <sub>FM</sub> (Surge)                                  | I <sub>R</sub>                                      | I <sub>FM</sub>                               | V <sub>FM</sub> |
|      | V <sub>PK</sub>              | AAV                                                               | °C | APK                                                      | μA <sub>dc</sub>                                    | APK                                           | V <sub>PK</sub> |

**0.6 AMPERE/R-1 (CASE 2)**

|     |      |     |    |    |     |     |     |
|-----|------|-----|----|----|-----|-----|-----|
| 1A1 | 50   | 0.6 | 25 | 45 | 5.0 | 0.6 | 1.0 |
| 1A2 | 100  | 0.6 | 25 | 45 | 5.0 | 0.6 | 1.0 |
| 1A3 | 200  | 0.6 | 25 | 45 | 5.0 | 0.6 | 1.0 |
| 1A4 | 400  | 0.6 | 25 | 45 | 5.0 | 0.6 | 1.0 |
| 1A5 | 600  | 0.6 | 25 | 45 | 5.0 | 0.6 | 1.0 |
| 1A6 | 800  | 0.6 | 25 | 35 | 5.0 | 0.6 | 1.0 |
| 1A7 | 1000 | 0.6 | 25 | 35 | 5.0 | 0.6 | 1.0 |

**1.0 AMPERE/A-405 (CASE 3)**

|       |      |     |    |    |     |     |     |
|-------|------|-----|----|----|-----|-----|-----|
| RL101 | 50   | 1.0 | 55 | 50 | 5.0 | 1.0 | 1.1 |
| RL102 | 100  | 1.0 | 55 | 50 | 5.0 | 1.0 | 1.1 |
| RL103 | 200  | 1.0 | 55 | 50 | 5.0 | 1.0 | 1.1 |
| RL104 | 400  | 1.0 | 55 | 50 | 5.0 | 1.0 | 1.1 |
| RL105 | 600  | 1.0 | 55 | 50 | 5.0 | 1.0 | 1.1 |
| RL106 | 800  | 1.0 | 55 | 50 | 5.0 | 1.0 | 1.1 |
| RL107 | 1000 | 1.0 | 55 | 50 | 5.0 | 1.0 | 1.1 |

**1.0 AMPERE/DO-41 (CASE 4)**

|        |      |     |    |    |     |     |     |
|--------|------|-----|----|----|-----|-----|-----|
| 1N4001 | 50   | 1.0 | 75 | 50 | 5.0 | 1.0 | 1.1 |
| 1N4002 | 100  | 1.0 | 75 | 50 | 5.0 | 1.0 | 1.1 |
| 1N4003 | 200  | 1.0 | 75 | 50 | 5.0 | 1.0 | 1.1 |
| 1N4004 | 400  | 1.0 | 75 | 50 | 5.0 | 1.0 | 1.1 |
| 1N4005 | 600  | 1.0 | 75 | 50 | 5.0 | 1.0 | 1.1 |
| 1N4006 | 800  | 1.0 | 75 | 50 | 5.0 | 1.0 | 1.1 |
| 1N4007 | 1000 | 1.0 | 75 | 50 | 5.0 | 1.0 | 1.1 |

**1.5 AMPERES/DO-15 (CASE 5)**

|        |      |     |     |    |     |     |     |
|--------|------|-----|-----|----|-----|-----|-----|
| 1N5391 | 50   | 1.5 | *70 | 50 | 5.0 | 1.5 | 1.4 |
| 1N5392 | 100  | 1.5 | *70 | 50 | 5.0 | 1.5 | 1.4 |
| 1N5393 | 200  | 1.5 | *70 | 50 | 5.0 | 1.5 | 1.4 |
| 1N5394 | 300  | 1.5 | *70 | 50 | 5.0 | 1.5 | 1.4 |
| 1N5395 | 400  | 1.5 | *70 | 50 | 5.0 | 1.5 | 1.4 |
| 1N5396 | 500  | 1.5 | *70 | 50 | 5.0 | 1.5 | 1.4 |
| 1N5397 | 600  | 1.5 | *70 | 50 | 5.0 | 1.5 | 1.4 |
| 1N5398 | 800  | 1.5 | *70 | 50 | 5.0 | 1.5 | 1.4 |
| 1N5399 | 1000 | 1.5 | *70 | 50 | 5.0 | 1.5 | 1.4 |
| J05    | 50   | 1.5 | 75  | 60 | 5.0 | 1.5 | 1.0 |
| J1     | 100  | 1.5 | 75  | 60 | 5.0 | 1.5 | 1.0 |
| J2     | 200  | 1.5 | 75  | 60 | 5.0 | 1.5 | 1.0 |
| J4     | 400  | 1.5 | 75  | 60 | 5.0 | 1.5 | 1.0 |
| J6     | 600  | 1.5 | 75  | 60 | 5.0 | 1.5 | 1.0 |
| J8     | 800  | 1.5 | 75  | 60 | 5.0 | 1.5 | 1.0 |
| J10    | 1000 | 1.5 | 75  | 60 | 5.0 | 1.5 | 1.0 |
| RL151  | 50   | 1.5 | 75  | 60 | 5.0 | 1.5 | 1.0 |
| RL152  | 100  | 1.5 | 75  | 60 | 5.0 | 1.5 | 1.0 |
| RL153  | 200  | 1.5 | 75  | 60 | 5.0 | 1.5 | 1.0 |
| RL154  | 400  | 1.5 | 75  | 60 | 5.0 | 1.5 | 1.0 |
| RL155  | 600  | 1.5 | 75  | 60 | 5.0 | 1.5 | 1.0 |
| RL156  | 800  | 1.5 | 75  | 60 | 5.0 | 1.5 | 1.0 |
| RL157  | 1000 | 1.5 | 75  | 60 | 5.0 | 1.5 | 1.0 |

NOTE: "\*" Lead Temp. @3/8" From Body

**SILICON RECTIFIERS**OPERATING AND STORAGE TEMPERATURE  $-65^{\circ}\text{C}$  to  $+175^{\circ}\text{C}$ 

| TYPE | Maximum Peak Reverse Voltage | Maximum Average Rectified Current @ Half-Wave Resistive Load 60Hz |                    | Maximum Forward Peak Surge Current @ 8.3 ms Superimposed | Maximum Reverse Current @ PRV @ $25^{\circ}\text{C } T_A$ | Maximum Forward Voltage @ $25^{\circ}\text{C } T_A$ |                 |
|------|------------------------------|-------------------------------------------------------------------|--------------------|----------------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------|-----------------|
|      | PRV                          | $I_o @ T_A$                                                       |                    | $I_{FM}$ (Surge)                                         | $I_R$                                                     | $I_{FM}$                                            | $V_{FM}$        |
|      | V <sub>PK</sub>              | A <sub>AV</sub>                                                   | $^{\circ}\text{C}$ | A <sub>PK</sub>                                          | $\mu\text{A}_{dc}$                                        | A <sub>PK</sub>                                     | V <sub>PK</sub> |

**2.0 AMPERES/DO-15 (CASE 5)**

|       |      |     |    |    |     |     |     |
|-------|------|-----|----|----|-----|-----|-----|
| RL201 | 50   | 2.0 | 75 | 70 | 5.0 | 2.0 | 1.0 |
| RL202 | 100  | 2.0 | 75 | 70 | 5.0 | 2.0 | 1.0 |
| RL203 | 200  | 2.0 | 75 | 70 | 5.0 | 2.0 | 1.0 |
| RL204 | 400  | 2.0 | 75 | 70 | 5.0 | 2.0 | 1.0 |
| RL205 | 600  | 2.0 | 75 | 70 | 5.0 | 2.0 | 1.0 |
| RL206 | 800  | 2.0 | 75 | 70 | 5.0 | 2.0 | 1.0 |
| RL207 | 1000 | 2.0 | 75 | 70 | 5.0 | 2.0 | 1.0 |

**2.5 AMPERES/R-3 (CASE 6)**

|       |      |     |    |     |     |     |     |
|-------|------|-----|----|-----|-----|-----|-----|
| RL251 | 50   | 2.5 | 75 | 150 | 5.0 | 2.5 | 1.0 |
| RL252 | 100  | 2.5 | 75 | 150 | 5.0 | 2.5 | 1.0 |
| RL253 | 200  | 2.5 | 75 | 150 | 5.0 | 2.5 | 1.0 |
| RL254 | 400  | 2.5 | 75 | 150 | 5.0 | 2.5 | 1.0 |
| RL255 | 600  | 2.5 | 75 | 150 | 5.0 | 2.5 | 1.0 |
| RL256 | 800  | 2.5 | 75 | 150 | 5.0 | 2.5 | 1.0 |
| RL257 | 1000 | 2.5 | 75 | 150 | 5.0 | 2.5 | 1.0 |

**3.0 AMPERES/DO-201AD (CASE 7)**

|        |      |     |      |     |     |     |      |
|--------|------|-----|------|-----|-----|-----|------|
| 1N5400 | 50   | 3.0 | *105 | 200 | 5.0 | 3.0 | 0.95 |
| 1N5401 | 100  | 3.0 | *105 | 200 | 5.0 | 3.0 | 0.95 |
| 1N5402 | 200  | 3.0 | *105 | 200 | 5.0 | 3.0 | 0.95 |
| 1N5404 | 400  | 3.0 | *105 | 200 | 5.0 | 3.0 | 0.95 |
| 1N5406 | 600  | 3.0 | *105 | 200 | 5.0 | 3.0 | 0.95 |
| 1N5407 | 800  | 3.0 | *105 | 200 | 5.0 | 3.0 | 0.95 |
| 1N5408 | 1000 | 3.0 | *105 | 200 | 5.0 | 3.0 | 0.95 |

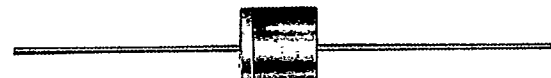
NOTE: "\*" Lead Temp. @3/8" From Body

**3.0 AMPERES/DO-201AD (CASE 7)**

|       |      |     |    |     |     |     |     |
|-------|------|-----|----|-----|-----|-----|-----|
| RL500 | 50   | 3.0 | 95 | 100 | 5.0 | 9.4 | 1.1 |
| RL501 | 100  | 3.0 | 95 | 100 | 5.0 | 9.4 | 1.1 |
| RL502 | 200  | 3.0 | 95 | 100 | 5.0 | 9.4 | 1.1 |
| RL504 | 400  | 3.0 | 95 | 100 | 5.0 | 9.4 | 1.1 |
| RL506 | 600  | 3.0 | 95 | 100 | 5.0 | 9.4 | 1.1 |
| RL508 | 800  | 3.0 | 95 | 100 | 5.0 | 9.4 | 1.1 |
| RL510 | 1000 | 3.0 | 95 | 100 | 5.0 | 9.4 | 1.1 |

**SILICON RECTIFIERS**OPERATING AND STORAGE TEMPERATURE  $-65^{\circ}\text{C}$  to  $+175^{\circ}\text{C}$ 

| TYPE | Maximum Peak Reverse Voltage | Maximum Average Rectified Current @ Half-Wave Resistive Load 60Hz |                    | Maximum Forward Peak Surge Current @ 8.3 ms Superimposed | Maximum Reverse Current @ PRV @ $25^{\circ}\text{C } T_A$ | Maximum Forward Voltage @ $25^{\circ}\text{C } T_A$ |          |
|------|------------------------------|-------------------------------------------------------------------|--------------------|----------------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------|----------|
|      | PRV                          | $I_o @ T_A$                                                       |                    | $I_{FM}$ (Surge)                                         | $I_R$                                                     | $I_{FM}$                                            | $V_{FM}$ |
|      | VPK                          | AAV                                                               | $^{\circ}\text{C}$ | APK                                                      | $\mu\text{Adc}$                                           | APK                                                 | VPK      |

**6.0 AMPERES/R-6 (CASE 8)**

|      |      |     |    |     |    |     |      |
|------|------|-----|----|-----|----|-----|------|
| 6A05 | 50   | 6.0 | 60 | 400 | 10 | 6.0 | 0.95 |
| 6A1  | 100  | 6.0 | 60 | 400 | 10 | 6.0 | 0.95 |
| 6A2  | 200  | 6.0 | 60 | 400 | 10 | 6.0 | 0.95 |
| 6A4  | 400  | 6.0 | 60 | 400 | 10 | 6.0 | 0.95 |
| 6A6  | 600  | 6.0 | 60 | 400 | 10 | 6.0 | 0.95 |
| 6A8  | 800  | 6.0 | 60 | 400 | 10 | 6.0 | 0.95 |
| 6A10 | 1000 | 6.0 | 60 | 400 | 10 | 6.0 | 0.95 |

**6.0 AMPERES/RA-L (CASE 28)**

|       |     |     |    |     |    |     |      |
|-------|-----|-----|----|-----|----|-----|------|
| RL750 | 50  | 6.0 | 60 | 400 | 25 | 6.0 | 0.90 |
| RL751 | 100 | 6.0 | 60 | 400 | 25 | 6.0 | 0.90 |
| RL752 | 200 | 6.0 | 60 | 400 | 25 | 6.0 | 0.90 |
| RL754 | 400 | 6.0 | 60 | 400 | 25 | 6.0 | 0.90 |
| RL756 | 600 | 6.0 | 60 | 400 | 25 | 6.0 | 0.90 |

**8.0 AMPERES/TO-220A (CASE 9)**

|       |     |     |      |     |    |     |     |
|-------|-----|-----|------|-----|----|-----|-----|
| RL801 | 50  | 8.0 | *100 | 200 | 10 | 8.0 | 1.1 |
| RL802 | 100 | 8.0 | *100 | 200 | 10 | 8.0 | 1.1 |
| RL803 | 200 | 8.0 | *100 | 200 | 10 | 8.0 | 1.1 |
| RL804 | 400 | 8.0 | *100 | 200 | 10 | 8.0 | 1.1 |
| RL805 | 600 | 8.0 | *100 | 200 | 10 | 8.0 | 1.1 |
| RL806 | 800 | 8.0 | *100 | 200 | 10 | 8.0 | 1.1 |

NOTE: 1. Suffix "R" for Reverse Polarity.  
 2. "\*" Case Temperature Measured At Metal Tap.  
 3. Operating and Storage Temperature:  $-65^{\circ}\text{C}$  to  $+150^{\circ}\text{C}$ .

**16 AMPERES/TO-220 (CASE 10)**

|        |     |    |      |     |    |     |     |
|--------|-----|----|------|-----|----|-----|-----|
| RL1601 | 50  | 16 | *100 | 200 | 10 | 8.0 | 1.1 |
| RL1602 | 100 | 16 | *100 | 200 | 10 | 8.0 | 1.1 |
| RL1603 | 200 | 16 | *100 | 200 | 10 | 8.0 | 1.1 |
| RL1604 | 400 | 16 | *100 | 200 | 10 | 8.0 | 1.1 |
| RL1605 | 600 | 16 | *100 | 200 | 10 | 8.0 | 1.1 |
| RL1606 | 800 | 16 | *100 | 200 | 10 | 8.0 | 1.1 |

NOTE: 1. Suffix "C" = Common Cathode, "A" = Common Anode,  
 2. "\*" Case Temperature Measured At Metal Tap.  
 3. Operating and Storage Temperature:  $-65^{\circ}\text{C}$  to  $+150^{\circ}\text{C}$ .