



SENSITRON SEMICONDUCTOR

**SUPER FAST RECTIFIERS**

OPERATING AND STORAGE TEMPERATURE -65°C TO +150°C

| TYPE | Maximum Peak Reverse Voltage | Maximum Average Rectified Current @Half-Wave Resistive Load 60Hz |    | Maximum Forward Peak Surge Current @8.3ms Superimposed | Maximum Reverse Current @PRV @25°C T <sub>A</sub> | Maximum Forward Voltage @25°C T <sub>A</sub> |                 | Maximum Reverse Recovery Time |
|------|------------------------------|------------------------------------------------------------------|----|--------------------------------------------------------|---------------------------------------------------|----------------------------------------------|-----------------|-------------------------------|
|      | 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> | T <sub>rr</sub>               |
|      | V <sub>PK</sub>              | A <sub>AV</sub>                                                  | °C | A <sub>PK</sub>                                        | μAdc                                              | V <sub>PK</sub>                              | V <sub>PK</sub> | ns                            |

**1.0 AMPERE-SUPER FAST / SMB/ DO-214AA**

|      |     |     |     |    |     |     |      |    |
|------|-----|-----|-----|----|-----|-----|------|----|
| ER1A | 50  | 1.0 | 100 | 30 | 5.0 | 1.0 | 0.95 | 35 |
| ER1B | 100 | 1.0 | 100 | 30 | 5.0 | 1.0 | 0.95 | 35 |
| ER1C | 150 | 1.0 | 100 | 30 | 5.0 | 1.0 | 0.95 | 35 |
| ER1D | 200 | 1.0 | 100 | 30 | 5.0 | 1.0 | 0.95 | 35 |
| ER1E | 300 | 1.0 | 100 | 30 | 5.0 | 1.0 | 1.25 | 35 |
| ER1G | 400 | 1.0 | 100 | 30 | 5.0 | 1.0 | 1.25 | 35 |
| ER1J | 600 | 1.0 | 100 | 30 | 5.0 | 1.0 | 1.7  | 35 |

**1.0 AMPERE-SUPER FAST / SMB (DO-214AA)**

|      |     |     |    |    |     |     |      |    |
|------|-----|-----|----|----|-----|-----|------|----|
| ER1A | 50  | 1.0 | 55 | 30 | 5.0 | 1.0 | 0.95 | 35 |
| ER1B | 100 | 1.0 | 55 | 30 | 5.0 | 1.0 | 0.95 | 35 |
| ER1C | 150 | 1.0 | 55 | 30 | 5.0 | 1.0 | 0.95 | 35 |
| ER1D | 200 | 1.0 | 55 | 30 | 5.0 | 1.0 | 1.25 | 35 |
| ER1E | 300 | 1.0 | 55 | 30 | 5.0 | 1.0 | 1.25 | 35 |
| ER1G | 400 | 1.0 | 55 | 30 | 5.0 | 1.0 | 1.25 | 55 |
| ER1J | 600 | 1.0 | 55 | 30 | 5.0 | 1.0 | 1.25 | 55 |

**1.0 AMPERE-SUPER FAST / SMA/ DO-214AC**

|      |     |     |     |    |     |     |      |    |
|------|-----|-----|-----|----|-----|-----|------|----|
| ES1A | 50  | 1.0 | 120 | 30 | 5.0 | 1.0 | 0.95 | 35 |
| ES1B | 100 | 1.0 | 120 | 30 | 5.0 | 1.0 | 0.95 | 35 |
| ES1C | 150 | 1.0 | 120 | 30 | 5.0 | 1.0 | 0.95 | 35 |
| ES1D | 200 | 1.0 | 120 | 30 | 5.0 | 1.0 | 0.95 | 35 |
| ES1E | 300 | 1.0 | 120 | 30 | 5.0 | 1.0 | 1.25 | 35 |
| ES1G | 400 | 1.0 | 120 | 30 | 5.0 | 1.0 | 1.25 | 35 |
| ES1J | 600 | 1.0 | 120 | 30 | 5.0 | 1.0 | 1.7  | 35 |

**1.0 AMPERE-SUPER FAST / SMA (DO-214AC)**

|      |     |     |    |    |     |     |      |    |
|------|-----|-----|----|----|-----|-----|------|----|
| ES1A | 50  | 1.0 | 55 | 30 | 5.0 | 1.0 | 0.95 | 35 |
| ES1B | 100 | 1.0 | 55 | 30 | 5.0 | 1.0 | 0.95 | 35 |
| ES1C | 150 | 1.0 | 55 | 30 | 5.0 | 1.0 | 0.95 | 35 |
| ES1D | 200 | 1.0 | 55 | 30 | 5.0 | 1.0 | 1.25 | 35 |
| ES1E | 300 | 1.0 | 55 | 30 | 5.0 | 1.0 | 1.25 | 35 |
| ES1G | 400 | 1.0 | 55 | 30 | 5.0 | 1.0 | 1.25 | 55 |
| ES1J | 600 | 1.0 | 55 | 30 | 5.0 | 1.0 | 1.25 | 55 |

**1.0 AMPERE-SUPER FAST / DO-41**

|      |     |     |    |    |     |     |      |    |
|------|-----|-----|----|----|-----|-----|------|----|
| SF11 | 50  | 1.0 | 55 | 30 | 5.0 | 1.0 | 0.95 | 35 |
| SF12 | 100 | 1.0 | 55 | 30 | 5.0 | 1.0 | 0.95 | 35 |
| SF13 | 150 | 1.0 | 55 | 30 | 5.0 | 1.0 | 0.95 | 35 |
| SF14 | 200 | 1.0 | 55 | 30 | 5.0 | 1.0 | 0.95 | 35 |
| SF15 | 300 | 1.0 | 55 | 30 | 5.0 | 1.0 | 1.25 | 35 |
| SF16 | 400 | 1.0 | 55 | 30 | 5.0 | 1.0 | 1.25 | 35 |
| SF18 | 600 | 1.0 | 55 | 30 | 5.0 | 1.0 | 1.25 | 35 |

**NOTE: T<sub>rr</sub> Test Conditions: I<sub>F</sub>=0.5A, I<sub>R</sub>=1.0A, Recovery to 0.25A.**



SENSITRON SEMICONDUCTOR

**SUPER FAST RECTIFIERS**

OPERATING AND STORAGE TEMPERATURE –65°C TO +150°C

| TYPE | Maximum Peak Reverse Voltage | Maximum Average Rectified Current @Half-Wave Resistive Load 60Hz |    | Maximum Forward Peak Surge Current @8.3ms Superimposed | Maximum Reverse Current @PRV @25°C T <sub>A</sub> | Maximum Forward Voltage @25°C T <sub>A</sub> |                 | Maximum Reverse Recovery Time |
|------|------------------------------|------------------------------------------------------------------|----|--------------------------------------------------------|---------------------------------------------------|----------------------------------------------|-----------------|-------------------------------|
|      | 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> | T <sub>rr</sub>               |
|      | V <sub>PK</sub>              | A <sub>AV</sub>                                                  | °C | A <sub>PK</sub>                                        | μAdc                                              | V <sub>PK</sub>                              | V <sub>PK</sub> | ns                            |

**2.0 AMPERE-SUPER FAST / SMB/ DO-214AA**

|      |     |     |     |    |     |     |      |    |
|------|-----|-----|-----|----|-----|-----|------|----|
| ER2A | 50  | 2.0 | 110 | 50 | 5.0 | 2.0 | 0.95 | 35 |
| ER2B | 100 | 2.0 | 110 | 50 | 5.0 | 2.0 | 0.95 | 35 |
| ER2C | 150 | 2.0 | 110 | 50 | 5.0 | 2.0 | 0.95 | 35 |
| ER2D | 200 | 2.0 | 110 | 50 | 5.0 | 2.0 | 0.95 | 35 |
| ER2E | 300 | 2.0 | 110 | 50 | 5.0 | 2.0 | 1.25 | 35 |
| ER2G | 400 | 2.0 | 110 | 50 | 5.0 | 2.0 | 1.25 | 35 |
| ER2J | 600 | 2.0 | 110 | 50 | 5.0 | 2.0 | 1.7  | 35 |

**2.0 AMPERE-SUPER FAST / SMB (DO-214AA)**

|      |     |     |    |    |     |     |      |    |
|------|-----|-----|----|----|-----|-----|------|----|
| ER2A | 50  | 2.0 | 55 | 50 | 5.0 | 2.0 | 0.95 | 35 |
| ER2B | 100 | 2.0 | 55 | 50 | 5.0 | 2.0 | 0.95 | 35 |
| ER2C | 150 | 2.0 | 55 | 50 | 5.0 | 2.0 | 0.95 | 35 |
| ER2D | 200 | 2.0 | 55 | 50 | 5.0 | 2.0 | 1.25 | 35 |
| ER2E | 300 | 2.0 | 55 | 50 | 5.0 | 2.0 | 1.25 | 35 |
| ER2G | 400 | 2.0 | 55 | 50 | 5.0 | 2.0 | 1.25 | 55 |
| ER2J | 600 | 2.0 | 55 | 50 | 5.0 | 2.0 | 1.25 | 55 |

**2.0 AMPERE-SUPER FAST / DO-15**

|      |     |     |    |    |     |     |      |    |
|------|-----|-----|----|----|-----|-----|------|----|
| SF21 | 50  | 2.0 | 55 | 75 | 5.0 | 2.0 | 0.95 | 35 |
| SF22 | 100 | 2.0 | 55 | 75 | 5.0 | 2.0 | 0.95 | 35 |
| SF23 | 150 | 2.0 | 55 | 75 | 5.0 | 2.0 | 0.95 | 35 |
| SF24 | 200 | 2.0 | 55 | 75 | 5.0 | 2.0 | 0.95 | 35 |
| SF25 | 300 | 2.0 | 55 | 75 | 5.0 | 2.0 | 1.25 | 35 |
| SF26 | 400 | 2.0 | 55 | 75 | 5.0 | 2.0 | 1.25 | 35 |
| SF28 | 600 | 2.0 | 55 | 75 | 5.0 | 2.0 | 1.25 | 35 |

**3.0 AMPERE-SUPER FAST / DPAK/ TO-252**

|        |     |     |    |    |     |     |      |    |
|--------|-----|-----|----|----|-----|-----|------|----|
| ED302S | 200 | 3.0 | 75 | 75 | 5.0 | 3.0 | 0.95 | 35 |
| ED303S | 300 | 3.0 | 75 | 75 | 5.0 | 3.0 | 1.25 | 35 |
| ED304S | 400 | 3.0 | 75 | 75 | 5.0 | 3.0 | 1.25 | 35 |
| ED306S | 600 | 3.0 | 75 | 75 | 5.0 | 3.0 | 1.7  | 35 |

**3.0 AMPERE-SUPER FAST / DPAK/ TO-252**

|         |     |     |    |    |     |     |      |    |
|---------|-----|-----|----|----|-----|-----|------|----|
| ED302YS | 200 | 3.0 | 75 | 75 | 5.0 | 3.0 | 0.95 | 35 |
| ED303YS | 300 | 3.0 | 75 | 75 | 5.0 | 3.0 | 1.25 | 35 |
| ED304YS | 400 | 3.0 | 75 | 75 | 5.0 | 3.0 | 1.25 | 35 |
| ED306YS | 600 | 3.0 | 75 | 75 | 5.0 | 3.0 | 1.7  | 35 |

**3.0 AMPERE-SUPER FAST / SMC/ DO-214AB**

|      |     |     |    |     |     |     |      |    |
|------|-----|-----|----|-----|-----|-----|------|----|
| ER3A | 50  | 3.0 | 75 | 100 | 5.0 | 3.0 | 0.95 | 35 |
| ER3B | 100 | 3.0 | 75 | 100 | 5.0 | 3.0 | 0.95 | 35 |
| ER3C | 150 | 3.0 | 75 | 100 | 5.0 | 3.0 | 0.95 | 35 |
| ER3D | 200 | 3.0 | 75 | 100 | 5.0 | 3.0 | 0.95 | 35 |
| ER3E | 300 | 3.0 | 75 | 100 | 5.0 | 3.0 | 1.25 | 35 |
| ER3G | 400 | 3.0 | 75 | 100 | 5.0 | 3.0 | 1.25 | 35 |
| ER3J | 600 | 3.0 | 75 | 100 | 5.0 | 3.0 | 1.7  | 35 |

NOTE: T<sub>rr</sub> Test Conditions: I<sub>F</sub>=0.5A, I<sub>R</sub>=1.0A, Recovery to 0.25A.



SENSITRON SEMICONDUCTOR

**SUPER FAST RECTIFIERS**

OPERATING AND STORAGE TEMPERATURE -65°C TO +150°C

| TYPE | Maximum Peak Reverse Voltage | Maximum Average Rectified Current @Half-Wave Resistive Load 60Hz |    | Maximum Forward Peak Surge Current @8.3ms Superimposed | Maximum Reverse Current @PRV @25°C T <sub>A</sub> | Maximum Forward Voltage @25°C T <sub>A</sub> |                 | Maximum Reverse Recovery Time |
|------|------------------------------|------------------------------------------------------------------|----|--------------------------------------------------------|---------------------------------------------------|----------------------------------------------|-----------------|-------------------------------|
|      | 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> | T <sub>rr</sub>               |
|      | V <sub>PK</sub>              | A <sub>AV</sub>                                                  | °C | A <sub>PK</sub>                                        | ? Adc                                             | V <sub>PK</sub>                              | V <sub>PK</sub> | ns                            |

**3.0 AMPERE-SUPER FAST / SMC (DO-214AB)**

|      |     |     |    |     |    |     |      |    |
|------|-----|-----|----|-----|----|-----|------|----|
| ER3A | 50  | 3.0 | 55 | 100 | 10 | 3.0 | 0.95 | 35 |
| ER3B | 100 | 3.0 | 55 | 100 | 10 | 3.0 | 0.95 | 35 |
| ER3C | 150 | 3.0 | 55 | 100 | 10 | 3.0 | 0.95 | 35 |
| ER3D | 200 | 3.0 | 55 | 100 | 10 | 3.0 | 1.25 | 35 |
| ER3E | 300 | 3.0 | 55 | 100 | 10 | 3.0 | 1.25 | 35 |
| ER3G | 400 | 3.0 | 55 | 100 | 10 | 3.0 | 1.25 | 55 |
| ER3J | 600 | 3.0 | 55 | 100 | 10 | 3.0 | 1.25 | 55 |

**3.0 AMPERE-SUPER FAST / DO-27**

|      |     |     |    |     |     |     |      |    |
|------|-----|-----|----|-----|-----|-----|------|----|
| SF31 | 50  | 3.0 | 55 | 125 | 5.0 | 3.0 | 0.95 | 35 |
| SF32 | 100 | 3.0 | 55 | 125 | 5.0 | 3.0 | 0.95 | 35 |
| SF33 | 150 | 3.0 | 55 | 125 | 5.0 | 3.0 | 0.95 | 35 |
| SF34 | 200 | 3.0 | 55 | 125 | 5.0 | 3.0 | 0.95 | 35 |
| SF35 | 300 | 3.0 | 55 | 125 | 5.0 | 3.0 | 1.25 | 35 |
| SF36 | 400 | 3.0 | 55 | 125 | 5.0 | 3.0 | 1.25 | 35 |
| SF38 | 600 | 3.0 | 55 | 125 | 5.0 | 3.0 | 1.25 | 35 |

**5.0 AMPERE-SUPER FAST / DPAK/ TO-252**

|        |     |     |    |    |     |     |      |    |
|--------|-----|-----|----|----|-----|-----|------|----|
| ED502S | 200 | 5.0 | 75 | 75 | 5.0 | 5.0 | 0.95 | 35 |
| ED503S | 300 | 5.0 | 75 | 75 | 5.0 | 5.0 | 1.25 | 35 |
| ED504S | 400 | 5.0 | 75 | 75 | 5.0 | 5.0 | 1.25 | 35 |
| ED506S | 600 | 5.0 | 75 | 75 | 5.0 | 5.0 | 1.7  | 35 |

**5.0 AMPERE-SUPER FAST / DPAK/ TO-252**

|         |     |     |    |    |     |     |      |    |
|---------|-----|-----|----|----|-----|-----|------|----|
| ED502YS | 200 | 5.0 | 75 | 75 | 5.0 | 5.0 | 0.95 | 35 |
| ED503YS | 300 | 5.0 | 75 | 75 | 5.0 | 5.0 | 1.25 | 35 |
| ED504YS | 400 | 5.0 | 75 | 75 | 5.0 | 5.0 | 1.25 | 35 |
| ED506YS | 600 | 5.0 | 75 | 75 | 5.0 | 5.0 | 1.7  | 35 |

**5.0 AMPERE-SUPER FAST / DO-27**

|      |     |     |    |     |     |     |      |    |
|------|-----|-----|----|-----|-----|-----|------|----|
| SF51 | 50  | 5.0 | 55 | 150 | 5.0 | 5.0 | 0.95 | 35 |
| SF52 | 100 | 5.0 | 55 | 150 | 5.0 | 5.0 | 0.95 | 35 |
| SF53 | 150 | 5.0 | 55 | 150 | 5.0 | 5.0 | 0.95 | 35 |
| SF54 | 200 | 5.0 | 55 | 150 | 5.0 | 5.0 | 0.95 | 35 |
| SF55 | 300 | 5.0 | 55 | 150 | 5.0 | 5.0 | 1.25 | 35 |
| SF56 | 400 | 5.0 | 55 | 150 | 5.0 | 5.0 | 1.25 | 35 |
| SF58 | 600 | 5.0 | 55 | 150 | 5.0 | 5.0 | 1.25 | 35 |

**6.0 AMPERE-SUPER FAST / DPAK / TO-252AA**

|         |     |     |    |    |     |     |      |    |
|---------|-----|-----|----|----|-----|-----|------|----|
| ER602DC | 200 | 6.0 | 75 | 75 | 5.0 | 6.0 | 0.95 | 35 |
| ER603DC | 300 | 6.0 | 75 | 75 | 5.0 | 6.0 | 1.25 | 35 |
| ED602CS | 200 | 6.0 | 75 | 75 | 5.0 | 6.0 | 0.95 | 35 |
| ED603CS | 300 | 6.0 | 75 | 75 | 5.0 | 6.0 | 1.3  | 35 |
| ED604CS | 400 | 6.0 | 75 | 75 | 5.0 | 6.0 | 1.3  | 35 |
| ED606CS | 600 | 6.0 | 75 | 75 | 5.0 | 6.0 | 1.7  | 35 |

**NOTE: T<sub>rr</sub> Test Conditions: I<sub>F</sub>=0.5A, I<sub>R</sub>=1.0A, Recovery to 0.25A.**



SENSITRON SEMICONDUCTOR

**SUPER FAST RECTIFIERS**

OPERATING AND STORAGE TEMPERATURE -65°C TO +150°C

| TYPE | Maximum Peak Reverse Voltage | Maximum Average Rectified Current @Half-Wave Resistive Load 60Hz |    | Maximum Forward Peak Surge Current @8.3ms Superimposed | Maximum Reverse Current @PRV @25°C T <sub>A</sub> | Maximum Forward Voltage @25°C T <sub>A</sub> |                 | Maximum Reverse Recovery Time |
|------|------------------------------|------------------------------------------------------------------|----|--------------------------------------------------------|---------------------------------------------------|----------------------------------------------|-----------------|-------------------------------|
|      | 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> | T <sub>rr</sub>               |
|      | V <sub>PK</sub>              | A <sub>AV</sub>                                                  | °C | A <sub>PK</sub>                                        | ? Adc                                             | V <sub>PK</sub>                              | V <sub>PK</sub> | ns                            |

**6.0 AMPERE-SUPER FAST / DO-201AD**

|      |     |     |    |     |     |     |       |    |
|------|-----|-----|----|-----|-----|-----|-------|----|
| SF61 | 50  | 6.0 | 50 | 150 | 5.0 | 6.0 | 0.975 | 35 |
| SF62 | 100 | 6.0 | 50 | 150 | 5.0 | 6.0 | 0.975 | 35 |
| SF63 | 150 | 6.0 | 50 | 150 | 5.0 | 6.0 | 0.975 | 35 |
| SF64 | 200 | 6.0 | 50 | 150 | 5.0 | 6.0 | 0.975 | 35 |
| SF65 | 300 | 6.0 | 50 | 150 | 5.0 | 6.0 | 1.3   | 35 |
| SF66 | 400 | 6.0 | 50 | 150 | 5.0 | 6.0 | 1.3   | 35 |

**8.0 AMPERE-SUPER FAST / DPAK / TO-252**

|         |     |     |    |    |     |     |      |    |
|---------|-----|-----|----|----|-----|-----|------|----|
| ED802CS | 200 | 8.0 | 85 | 85 | 5.0 | 8.0 | 0.95 | 35 |
| ED803CS | 300 | 8.0 | 85 | 85 | 5.0 | 8.0 | 1.3  | 50 |
| ED804CS | 400 | 8.0 | 85 | 85 | 5.0 | 8.0 | 1.3  | 50 |
| ED806CS | 600 | 8.0 | 85 | 85 | 5.0 | 8.0 | 1.7  | 50 |

**8.0 AMPERE-SUPER FAST / TO-220A**

|        |     |     |     |     |    |     |       |    |
|--------|-----|-----|-----|-----|----|-----|-------|----|
| ER800  | 50  | 8.0 | 105 | 125 | 10 | 8.0 | 0.975 | 35 |
| ER801  | 100 | 8.0 | 105 | 125 | 10 | 8.0 | 0.975 | 35 |
| ER801A | 150 | 8.0 | 105 | 125 | 10 | 8.0 | 0.975 | 35 |
| ER802  | 200 | 8.0 | 105 | 125 | 10 | 8.0 | 0.975 | 35 |
| ER803  | 300 | 8.0 | 105 | 125 | 10 | 8.0 | 1.3   | 50 |
| ER804  | 400 | 8.0 | 105 | 125 | 10 | 8.0 | 1.3   | 50 |
| SF801G | 50  | 8.0 | 105 | 125 | 10 | 8.0 | 0.975 | 35 |
| SF802G | 100 | 8.0 | 105 | 125 | 10 | 8.0 | 0.975 | 35 |
| SF803G | 150 | 8.0 | 105 | 125 | 10 | 8.0 | 0.975 | 35 |
| SF804G | 200 | 8.0 | 105 | 125 | 10 | 8.0 | 0.975 | 35 |
| SF805G | 300 | 8.0 | 105 | 125 | 10 | 8.0 | 1.3   | 35 |
| SF806G | 400 | 8.0 | 105 | 125 | 10 | 8.0 | 1.3   | 35 |

**8.0 AMPERE-SUPER FAST / D<sup>2</sup>PAK/TO-263**

|         |     |     |     |     |    |     |      |    |
|---------|-----|-----|-----|-----|----|-----|------|----|
| ER800D  | 50  | 8.0 | 100 | 125 | 10 | 8.0 | 0.95 | 35 |
| ER801D  | 100 | 8.0 | 100 | 125 | 10 | 8.0 | 0.95 | 35 |
| ER801AD | 150 | 8.0 | 100 | 125 | 10 | 8.0 | 0.95 | 35 |
| ER802D  | 200 | 8.0 | 100 | 125 | 10 | 8.0 | 0.95 | 35 |
| ER803D  | 300 | 8.0 | 100 | 125 | 10 | 8.0 | 1.3  | 50 |
| ER804D  | 400 | 8.0 | 100 | 125 | 10 | 8.0 | 1.3  | 50 |

**8.0 AMPERE-SUPER FAST / ITO-220A**

|         |     |     |     |     |    |     |       |    |
|---------|-----|-----|-----|-----|----|-----|-------|----|
| ER800F  | 50  | 8.0 | 105 | 125 | 10 | 8.0 | 0.975 | 35 |
| ER801F  | 100 | 8.0 | 105 | 125 | 10 | 8.0 | 0.975 | 35 |
| ER801AF | 150 | 8.0 | 105 | 125 | 10 | 8.0 | 0.975 | 35 |
| ER802F  | 200 | 8.0 | 105 | 125 | 10 | 8.0 | 0.975 | 35 |
| ER803F  | 300 | 8.0 | 105 | 125 | 10 | 8.0 | 1.3   | 50 |
| ER804F  | 400 | 8.0 | 105 | 125 | 10 | 8.0 | 1.3   | 50 |

**NOTE: T<sub>rr</sub> Test Conditions: I<sub>F</sub>=0.5A, I<sub>R</sub>=1.0A, Recovery to 0.25A.**



# SUPER FAST RECTIFIERS

SENSITRON SEMICONDUCTOR

OPERATING AND STORAGE TEMPERATURE -65°C TO +150°C

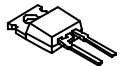
| TYPE | Maximum Peak Reverse Voltage | Maximum Average Rectified Current @Half-Wave Resistive Load 60Hz |    | Maximum Forward Peak Surge Current @8.3ms Superimposed | Maximum Reverse Current @PRV @25°C T <sub>A</sub> | Maximum Forward Voltage @25°C T <sub>A</sub> |                 | Maximum Reverse Recovery Time |
|------|------------------------------|------------------------------------------------------------------|----|--------------------------------------------------------|---------------------------------------------------|----------------------------------------------|-----------------|-------------------------------|
|      | 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> | T <sub>rr</sub>               |
|      | V <sub>PK</sub>              | A <sub>AV</sub>                                                  | °C | A <sub>PK</sub>                                        | μA <sub>dc</sub>                                  | V <sub>PK</sub>                              | V <sub>PK</sub> | ns                            |

## 10.0 AMPERE-SUPER FAST / DPAK / TO-252



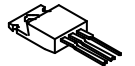
|          |     |      |     |     |     |      |      |    |
|----------|-----|------|-----|-----|-----|------|------|----|
| ED1002CS | 200 | 10.0 | 100 | 100 | 5.0 | 10.0 | 0.95 | 35 |
| ED1003CS | 300 | 10.0 | 100 | 100 | 5.0 | 10.0 | 1.3  | 50 |
| ED1004CS | 400 | 10.0 | 100 | 100 | 5.0 | 10.0 | 1.3  | 50 |
| ED1006CS | 600 | 10.0 | 100 | 100 | 5.0 | 10.0 | 1.7  | 50 |

## 10.0 AMPERE-SUPER FAST / TO-220A



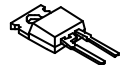
|         |     |      |     |     |    |      |      |    |
|---------|-----|------|-----|-----|----|------|------|----|
| ER1000  | 50  | 10.0 | 105 | 150 | 10 | 10.0 | 0.95 | 35 |
| ER1001  | 100 | 10.0 | 105 | 150 | 10 | 10.0 | 0.95 | 35 |
| ER1001A | 150 | 10.0 | 105 | 150 | 10 | 10.0 | 0.95 | 35 |
| ER1002  | 200 | 10.0 | 105 | 150 | 10 | 10.0 | 0.95 | 35 |
| ER1003  | 300 | 10.0 | 105 | 150 | 10 | 10.0 | 1.3  | 50 |
| ER1004  | 400 | 10.0 | 105 | 150 | 10 | 10.0 | 1.3  | 50 |

## 10.0 AMPERE-SUPER FAST / TO-220



|           |     |      |     |     |    |     |      |    |
|-----------|-----|------|-----|-----|----|-----|------|----|
| ER1000CT  | 50  | 10.0 | 100 | 150 | 10 | 5.0 | 0.95 | 35 |
| ER1001CT  | 100 | 10.0 | 100 | 150 | 10 | 5.0 | 0.95 | 35 |
| ER1001ACT | 150 | 10.0 | 100 | 150 | 10 | 5.0 | 0.95 | 35 |
| ER1002CT  | 200 | 10.0 | 100 | 150 | 10 | 5.0 | 0.95 | 35 |
| ER1003CT  | 300 | 10.0 | 100 | 150 | 10 | 5.0 | 1.3  | 50 |
| ER1004CT  | 400 | 10.0 | 100 | 150 | 10 | 5.0 | 1.3  | 50 |
| ER1006CT  | 600 | 10.0 | 100 | 150 | 10 | 5.0 | 1.7  | 50 |

## 10.0 AMPERE-SUPER FAST / ITO-220A



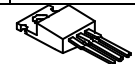
|          |     |      |     |     |    |      |      |    |
|----------|-----|------|-----|-----|----|------|------|----|
| ER1000F  | 50  | 10.0 | 105 | 150 | 10 | 10.0 | 0.95 | 35 |
| ER1001F  | 100 | 10.0 | 105 | 150 | 10 | 10.0 | 0.95 | 35 |
| ER1001AF | 150 | 10.0 | 105 | 150 | 10 | 10.0 | 0.95 | 35 |
| ER1002F  | 200 | 10.0 | 105 | 150 | 10 | 10.0 | 0.95 | 35 |
| ER1003F  | 300 | 10.0 | 105 | 150 | 10 | 10.0 | 1.3  | 50 |
| ER1004F  | 400 | 10.0 | 105 | 150 | 10 | 10.0 | 1.3  | 50 |

## 10.0 AMPERE-SUPER FAST / ITO-220



|            |     |      |     |     |    |     |      |    |
|------------|-----|------|-----|-----|----|-----|------|----|
| ER1000FCT  | 50  | 10.0 | 100 | 150 | 10 | 5.0 | 0.95 | 35 |
| ER1001FCT  | 100 | 10.0 | 100 | 150 | 10 | 5.0 | 0.95 | 35 |
| ER1001AFCT | 150 | 10.0 | 100 | 150 | 10 | 5.0 | 0.95 | 35 |
| ER1002FCT  | 200 | 10.0 | 100 | 150 | 10 | 5.0 | 0.95 | 35 |
| ER1003FCT  | 300 | 10.0 | 100 | 150 | 10 | 5.0 | 1.3  | 50 |
| ER1004FCT  | 400 | 10.0 | 100 | 150 | 10 | 5.0 | 1.3  | 50 |
| ER1006FCT  | 600 | 10.0 | 100 | 150 | 10 | 5.0 | 1.7  | 50 |

## 10.0 AMPERE-SUPER FAST / TO-220



|         |     |      |     |     |    |      |       |    |
|---------|-----|------|-----|-----|----|------|-------|----|
| SF1001G | 50  | 10.0 | 100 | 125 | 10 | 10.0 | 0.975 | 35 |
| SF1002G | 100 | 10.0 | 100 | 125 | 10 | 10.0 | 0.975 | 35 |
| SF1003G | 150 | 10.0 | 100 | 125 | 10 | 10.0 | 0.975 | 35 |
| SF1004G | 200 | 10.0 | 100 | 125 | 10 | 10.0 | 0.975 | 35 |
| SF1005G | 300 | 10.0 | 100 | 125 | 10 | 10.0 | 1.3   | 35 |
| SF1006G | 400 | 10.0 | 100 | 125 | 10 | 10.0 | 1.3   | 35 |

NOTE: T<sub>rr</sub> Test Conditions: I<sub>F</sub>=0.5A, I<sub>R</sub>=1.0A, Recovery to 0.25A.



# SUPER FAST RECTIFIERS

SENSITRON SEMICONDUCTOR

OPERATING AND STORAGE TEMPERATURE -65°C TO +150°C

| TYPE | Maximum Peak Reverse Voltage | Maximum Average Rectified Current @Half-Wave Resistive Load 60Hz |    | Maximum Forward Peak Surge Current @8.3ms Superimposed | Maximum Reverse Current @PRV @25°C T <sub>A</sub> | Maximum Forward Voltage @25°C T <sub>A</sub> |                 | Maximum Reverse Recovery Time |
|------|------------------------------|------------------------------------------------------------------|----|--------------------------------------------------------|---------------------------------------------------|----------------------------------------------|-----------------|-------------------------------|
|      | 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> | T <sub>rr</sub>               |
|      | V <sub>PK</sub>              | A <sub>AV</sub>                                                  | °C | A <sub>PK</sub>                                        | μA <sub>dc</sub>                                  | V <sub>PK</sub>                              | V <sub>PK</sub> | ns                            |

## 16.0 AMPERE-SUPER FAST / TO-220



|         |     |      |     |     |    |      |       |    |
|---------|-----|------|-----|-----|----|------|-------|----|
| ER1600  | 50  | 16.0 | 105 | 125 | 10 | 16.0 | 0.95  | 35 |
| ER1601  | 100 | 16.0 | 105 | 125 | 10 | 16.0 | 0.95  | 35 |
| ER1601A | 150 | 16.0 | 105 | 125 | 10 | 16.0 | 0.95  | 35 |
| ER1602  | 200 | 16.0 | 105 | 125 | 10 | 16.0 | 0.95  | 35 |
| ER1603  | 300 | 16.0 | 105 | 125 | 10 | 16.0 | 1.3   | 50 |
| ER1604  | 400 | 16.0 | 105 | 125 | 10 | 16.0 | 1.3   | 50 |
| SF1601G | 50  | 16.0 | 105 | 125 | 10 | 16.0 | 0.975 | 35 |
| SF1602G | 100 | 16.0 | 105 | 125 | 10 | 16.0 | 0.975 | 35 |
| SF1603G | 150 | 16.0 | 105 | 125 | 10 | 16.0 | 0.975 | 35 |
| SF1604G | 200 | 16.0 | 105 | 125 | 10 | 16.0 | 0.975 | 35 |
| SF1605G | 300 | 16.0 | 105 | 125 | 10 | 16.0 | 1.3   | 35 |
| SF1606G | 400 | 16.0 | 105 | 125 | 10 | 16.0 | 1.3   | 35 |

## 16.0 AMPERE-SUPER FAST / D<sup>2</sup>PAK / TO-263



|           |     |      |    |     |    |      |      |    |
|-----------|-----|------|----|-----|----|------|------|----|
| ER1600DC  | 50  | 16.0 | 90 | 125 | 10 | 16.0 | 0.95 | 35 |
| ER1601DC  | 100 | 16.0 | 90 | 125 | 10 | 16.0 | 0.95 | 35 |
| ER1601ADC | 150 | 16.0 | 90 | 125 | 10 | 16.0 | 0.95 | 35 |
| ER1602DC  | 200 | 16.0 | 90 | 125 | 10 | 16.0 | 0.95 | 35 |
| ER1603DC  | 300 | 16.0 | 90 | 125 | 10 | 16.0 | 1.3  | 50 |
| ER1604DC  | 400 | 16.0 | 90 | 125 | 10 | 16.0 | 1.3  | 50 |

## 16.0 AMPERE-SUPER FAST / TO-220



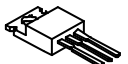
|           |     |      |     |     |    |     |      |    |
|-----------|-----|------|-----|-----|----|-----|------|----|
| ER1600CT  | 50  | 16.0 | 105 | 125 | 10 | 8.0 | 0.95 | 35 |
| ER1601CT  | 100 | 16.0 | 105 | 125 | 10 | 8.0 | 0.95 | 35 |
| ER1601ACT | 150 | 16.0 | 105 | 125 | 10 | 8.0 | 0.95 | 35 |
| ER1602CT  | 200 | 16.0 | 105 | 125 | 10 | 8.0 | 0.95 | 35 |
| ER1603CT  | 300 | 16.0 | 105 | 125 | 10 | 8.0 | 1.3  | 50 |
| ER1604CT  | 400 | 16.0 | 105 | 125 | 10 | 8.0 | 1.3  | 50 |
| ER1606CT  | 600 | 16.0 | 105 | 125 | 10 | 8.0 | 1.7  | 50 |

## 16.0 AMPERE-SUPER FAST / ITO-220



|            |     |      |     |     |    |     |      |    |
|------------|-----|------|-----|-----|----|-----|------|----|
| ER1600FCT  | 50  | 16.0 | 105 | 125 | 10 | 8.0 | 0.95 | 35 |
| ER1601FCT  | 100 | 16.0 | 105 | 125 | 10 | 8.0 | 0.95 | 35 |
| ER1601AFCT | 150 | 16.0 | 105 | 125 | 10 | 8.0 | 0.95 | 35 |
| ER1602FCT  | 200 | 16.0 | 105 | 125 | 10 | 8.0 | 0.95 | 35 |
| ER1603FCT  | 300 | 16.0 | 105 | 125 | 10 | 8.0 | 1.3  | 50 |
| ER1604FCT  | 400 | 16.0 | 105 | 125 | 10 | 8.0 | 1.3  | 50 |
| ER1606FCT  | 600 | 16.0 | 105 | 125 | 10 | 8.0 | 1.7  | 50 |

## 16.0 AMPERE-SUPER FAST / ITO-220



|          |     |      |     |     |    |      |      |    |
|----------|-----|------|-----|-----|----|------|------|----|
| ER1600F  | 50  | 16.0 | 105 | 125 | 10 | 16.0 | 0.95 | 35 |
| ER1601F  | 100 | 16.0 | 105 | 125 | 10 | 16.0 | 0.95 | 35 |
| ER1601AF | 150 | 16.0 | 105 | 125 | 10 | 16.0 | 0.95 | 35 |
| ER1602F  | 200 | 16.0 | 105 | 125 | 10 | 16.0 | 0.95 | 35 |
| ER1603F  | 300 | 16.0 | 105 | 125 | 10 | 16.0 | 1.3  | 50 |
| ER1604F  | 400 | 16.0 | 105 | 125 | 10 | 16.0 | 1.3  | 50 |

NOTE: T<sub>rr</sub> Test Conditions: I<sub>F</sub>=0.5A, I<sub>R</sub>=1.0A, Recovery to 0.25A.



SENSITRON SEMICONDUCTOR

**SUPER FAST RECTIFIERS**

OPERATING AND STORAGE TEMPERATURE –65°C TO +150°C

| TYPE | Maximum Peak Reverse Voltage | Maximum Average Rectified Current @Half-Wave Resistive Load 60Hz |    | Maximum Forward Peak Surge Current @8.3ms Superimposed | Maximum Reverse Current @PRV @25°C T <sub>A</sub> | Maximum Forward Voltage @25°C T <sub>A</sub> |                 | Maximum Reverse Recovery Time |
|------|------------------------------|------------------------------------------------------------------|----|--------------------------------------------------------|---------------------------------------------------|----------------------------------------------|-----------------|-------------------------------|
|      | 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> | T <sub>rr</sub>               |
|      | V <sub>PK</sub>              | A <sub>AV</sub>                                                  | °C | A <sub>PK</sub>                                        | μA <sub>dc</sub>                                  | V <sub>PK</sub>                              | V <sub>PK</sub> | ns                            |

**16.0 AMPERE-SUPER FAST / TO-220A**

|         |     |      |     |     |    |      |       |    |
|---------|-----|------|-----|-----|----|------|-------|----|
| SF1601G | 50  | 16.0 | 105 | 200 | 10 | 16.0 | 0.975 | 35 |
| SF1602G | 100 | 16.0 | 105 | 200 | 10 | 16.0 | 0.975 | 35 |
| SF1603G | 150 | 16.0 | 105 | 200 | 10 | 16.0 | 0.975 | 35 |
| SF1604G | 200 | 16.0 | 105 | 200 | 10 | 16.0 | 0.975 | 35 |
| SF1605G | 300 | 16.0 | 105 | 200 | 10 | 16.0 | 1.3   | 35 |
| SF1606G | 400 | 16.0 | 105 | 200 | 10 | 16.0 | 1.3   | 35 |

**16.0 AMPERE-SUPER FAST / TO-3P**

|          |     |      |     |     |    |      |      |    |
|----------|-----|------|-----|-----|----|------|------|----|
| SF1601PT | 50  | 16.0 | 105 | 200 | 10 | 16.0 | 0.95 | 35 |
| SF1602PT | 100 | 16.0 | 105 | 200 | 10 | 16.0 | 0.95 | 35 |
| SF1603PT | 150 | 16.0 | 105 | 200 | 10 | 16.0 | 0.95 | 35 |
| SF1604PT | 200 | 16.0 | 105 | 200 | 10 | 16.0 | 0.95 | 35 |
| SF1605PT | 300 | 16.0 | 105 | 200 | 10 | 16.0 | 1.3  | 35 |
| SF1606PT | 400 | 16.0 | 105 | 200 | 10 | 16.0 | 1.3  | 35 |

**30.0 AMPERE-SUPER FAST / TO-3P**

|          |     |      |     |     |    |      |      |    |
|----------|-----|------|-----|-----|----|------|------|----|
| SF3001PT | 50  | 16.0 | 100 | 300 | 10 | 30.0 | 0.95 | 35 |
| SF3002PT | 100 | 16.0 | 100 | 300 | 10 | 30.0 | 0.95 | 35 |
| SF3003PT | 150 | 16.0 | 100 | 300 | 10 | 30.0 | 0.95 | 35 |
| SF3004PT | 200 | 16.0 | 100 | 300 | 10 | 30.0 | 0.95 | 35 |
| SF3005PT | 300 | 16.0 | 100 | 300 | 10 | 30.0 | 1.3  | 35 |
| SF3006PT | 400 | 16.0 | 100 | 300 | 10 | 30.0 | 1.3  | 35 |

**NOTE: T<sub>rr</sub> Test Conditions: I<sub>F</sub>=0.5A, I<sub>R</sub>=1.0A, Recovery to 0.25A.**