

# High Voltage Rectifier Stacks

Original Release: 01-15-08  
 Revised Date: 08-21-12

**0.5A - 2.2A • 70ns - 150ns • Axial Leaded**

## ELECTRICAL CHARACTERISTICS AND MAXIMUM RATINGS

| Part Number        | Working Reverse Voltage<br>(V <sub>rw</sub> )<br>Volts | Average Rectified Current<br>(in oil)<br>(I <sub>o</sub> ) |              | Reverse Current<br>@ V <sub>rw</sub><br>(I <sub>r</sub> ) |          | Forward Voltage<br>(V <sub>f</sub> ) |            | 1 Cycle Surge Current<br>I <sub>p</sub> =8.3ms<br>(I <sub>fsm</sub> ) | Repetitive Surge Current<br>(I <sub>frm</sub> ) | Reverse Recovery Time<br>(1)<br>(T <sub>rr</sub> ) | Case Length<br>(L) |
|--------------------|--|--|--------------|---|----------|--------------------------------------|------------|---|---|--|--------------------|
|                    |  | 55°C   | 100°C        | 25°C  | 100°C    | 25°C                                 |            |   |   |  |                    |
|                    |  | Amps   | Amps         | µA  | µA       | Volts                                | Amps       |   |   |  |                    |
| SP25UF<br>SP50UF   | 2500<br>5000   | 0.5<br>0.5   | 0.33<br>0.33 | 1.0<br>1.0  | 25<br>25 | 6.0<br>11.0                          | 1.5<br>1.0 | 60<br>40  | 10<br>8   | 70<br>70   | 1.125<br>2.000     |
| SP75UF<br>SP100UF  | 7500<br>10000  | 0.5<br>0.5   | 0.33<br>0.33 | 1.0<br>1.0  | 25<br>25 | 16.0<br>16.0                         | 1.0<br>1.0 | 40<br>40  | 8<br>8  | 70<br>70   | 2.750<br>3.500     |
| SP125UF<br>SP150UF | 12500<br>15000   | 0.5<br>0.5   | 0.33<br>0.33 | 1.0<br>1.0  | 25<br>25 | 24.0<br>24.0                         | 1.0<br>1.0 | 40<br>40  | 8<br>8  | 70<br>70   | 4.250<br>4.250     |
| SP200UF<br>SP250UF | 20000<br>25000   | 0.5<br>0.5   | 0.33<br>0.33 | 1.0<br>1.0  | 25<br>25 | 32.0<br>40.0                         | 1.0<br>1.0 | 40<br>40  | 8<br>8  | 70<br>70   | 4.250<br>4.250     |
| SP25F<br>SP50F     | 2500<br>5000   | 0.5<br>0.5   | 0.33<br>0.33 | 1.0<br>1.0  | 25<br>25 | 6.0<br>8.0                           | 1.5<br>1.0 | 60<br>40  | 10<br>8   | 150<br>150   | 1.125<br>2.000     |
| SP75F<br>SP100F    | 7500<br>10000  | 0.5<br>0.5   | 0.33<br>0.33 | 1.0<br>1.0  | 25<br>25 | 16.0<br>16.0                         | 1.0<br>1.0 | 40<br>40  | 8<br>8  | 150<br>150   | 2.750<br>3.500     |
| SP125F<br>SP150F   | 12500<br>15000   | 0.5<br>0.5   | 0.33<br>0.33 | 1.0<br>1.0  | 25<br>25 | 24.0<br>24.0                         | 1.0<br>1.0 | 40<br>40  | 8<br>8  | 150<br>150   | 4.250<br>4.250     |
| SP200F<br>SP250F   | 20000<br>25000   | 0.5<br>0.5   | 0.33<br>0.33 | 1.0<br>1.0  | 25<br>25 | 32.0<br>40.0                         | 1.0<br>1.0 | 40<br>40  | 8<br>8  | 150<br>150   | 4.250<br>4.250     |
| FP25F<br>FP50F     | 2500<br>5000   | 2.2<br>2.2   | 1.30<br>1.30 | 2.0<br>2.0  | 50<br>50 | 6.0<br>13.0                          | 3.0<br>3.0 | 120<br>120  | 20<br>20  | 150<br>150   | 1.500<br>2.500     |
| FP75F<br>FP100F    | 7500<br>10000  | 2.2<br>2.2   | 1.30<br>1.30 | 2.0<br>2.0  | 50<br>50 | 18.0<br>24.0                         | 3.0<br>3.0 | 120<br>120  | 20<br>20  | 150<br>150   | 3.500<br>4.500     |
| FP125F<br>FP150F   | 12500<br>15000   | 2.2<br>2.2   | 1.30<br>1.30 | 2.0<br>2.0  | 50<br>50 | 30.0<br>36.0                         | 3.0<br>3.0 | 120<br>120  | 20<br>20  | 150<br>150   | 5.500<br>6.500     |
| FP175F<br>FP200F   | 17500<br>20000   | 2.2<br>2.2   | 1.30<br>1.30 | 2.0<br>2.0  | 50<br>50 | 42.0<br>48.0                         | 3.0<br>3.0 | 120<br>120  | 20<br>20  | 150<br>150   | 6.500<br>6.500     |
| FP175UF<br>FP200UF | 17500<br>20000   | 2.2<br>2.2   | 1.30<br>1.30 | 2.0<br>2.0  | 50<br>50 | 42.0<br>48.0                         | 3.0<br>3.0 | 120<br>120  | 20<br>20  | 100<br>100   | 6.500<br>6.500     |
| FP250UF            | 25000  | 2.2  | 1.30         | 2.0   | 100      | 75.0                                 | 2.0        | 120   | 20  | 100  | 7.900              |

(1) T<sub>rr</sub> Testing: I<sub>f</sub>=0.5mA, I<sub>r</sub>=1.0A, I<sub>r</sub>=0.25A, Op. Temp. = 55°C to +150°C, Stg. Temp. = -55°C to +150°C



| Part      | A                          | B                          |
|-----------|----------------------------|----------------------------|
| SP(XXXXX) | .500 ±.020<br>(12.70 ±.51) | .250 ±.020<br>(6.35 ±.51)  |
| FP(XXXXX) | .690 ±.020<br>(17.53 ±.51) | .380 ±.020<br>(9.65 ±.51)  |
| FP250UF   | .700 ±.020<br>(17.78 ±.51) | .400 ±.020<br>(10.16 ±.51) |

