# SSF4AG THRU SSF4KG

# ULTRAFAST EFFICIENT GLASS PASSIVATED RECTIFIER

VOLTAGE: 50 TO 800V CURRENT: 4.0A

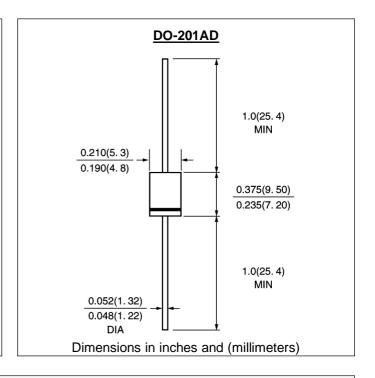


## **FEATURE**

Low power loss High surge capability Ultra-fast recovery time for high efficiency Glass passivated chip junction High temperature soldering guaranteed 250°C/10sec/0.375"lead length at 5 lbs tension

#### **MECHANICAL DATA**

Terminal:Plated axial leads solderable per
MIL-STD 202E, method 208C
Case:Molded with UL-94 Class V-0 recognized Flame
Retardant Epoxy
Polarity:color band denotes cathode
Mounting position:any



# MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half -wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

|   | SYMBOL  | SSF<br>4AG    | SSF<br>4BG | SSF<br>4DG | SSF<br>4GG | SSF<br>4JG | SSF<br>4KG | units    |
|---|---------|---------------|------------|------------|------------|------------|------------|----------|
| Maximum Recurrent Peak Reverse Voltage  | Vrrm    | 50            | 100        | 200        | 400        | 600        | 800        | V        |
| Maximum RMS Voltage   | Vrms    | 35            | 70         | 140        | 280        | 420        | 560        | V        |
| Maximum DC blocking Voltage   | Vdc     | 50            | 100        | 200        | 400        | 600        | 800        | V        |
| Maximum Average Forward Rectified<br>Current 3/8"lead length at Ta =55°C          | If(av)  | 4.0           |            |            |            |            |            | А        |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load | Ifsm    | 125.0         |            |            |            |            |            | А        |
| Maximum Forward Voltage at Forward current 4A Peak                                | Vf      | 1.00          |            | 1.25       | 1.70       |            | V          |          |
| Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =125°C        | lr      | 10.0<br>100.0 |            |            |            |            |            | μA<br>μA |
| Maximum Reverse Recovery Time (Note 1)  | Trr     | 30 39         |            |            | 35         | nS         |            |          |
| Typical Junction Capacitance (Note 2)   | Cj      | 65            |            |            |            |            |            | pF       |
| Storage and Operating Junction Temperature  | Tstg,Tj | -55 to +150   |            |            |            |            |            | °C       |

## Note:

- 1. Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A
- 2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc

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#### RATINGS AND CHARACTERISTIC CURVES SSF4AG THRU SSF4KG

FIG.1- FORWARD CURRENT DERATING CURVE

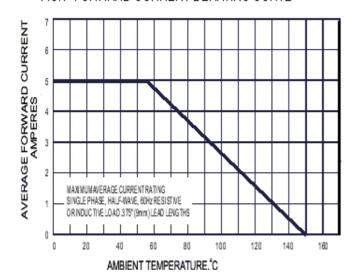
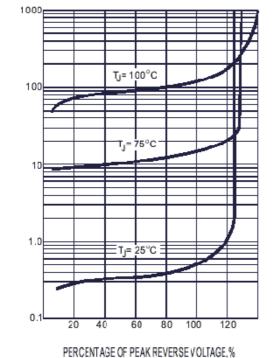


FIG.3- TYPICAL REVERSE LEKAGE CHARACTERISTICS



IR - REVERSE LEAKAGE CURRENT. MICROAMPERES

FIG.5- TYPICAL JUNCTION CAPACITANCE

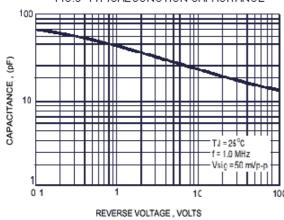


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

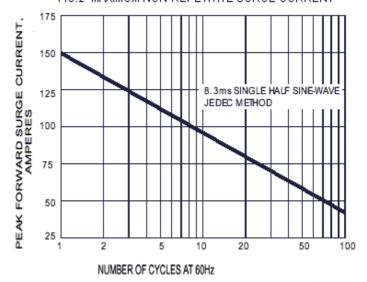


FIG.4- TYPICAL FORWARD CHARACTERISTICS

