



Micro Commercial Components

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SF51G THRU SF58G

Features

- Low power loss, high efficiency
- Low Leakage
- Low Forward Voltage Drop
- High Current Capability
- Super fast switching speed

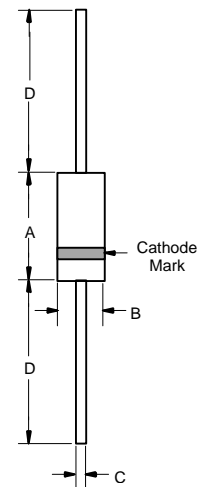
**5 Amp High
Efficiency Glass
Passivated Rectifier
50 to 600 Volts**

Maximum Ratings

- Operating Temperature: -65°C to +150°C
- Storage Temperature: -65°C to +150°C

| MCC Catalog Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|--------------------|----------------|--|---------------------|-----------------------------|
| SF51G | SF51G | 50V | 35V | 50V |
| SF52G | SF52G | 100V | 70V | 100V |
| SF54G | SF54G | 200V | 140V | 200V |
| SF55G | SF55G | 300V | 210V | 300V |
| SF56G | SF56G | 400V | 280V | 400V |
| SF58G | SF58G | 600V | 420V | 600V |

DO-201AD



Electrical Characteristics @ 25°C Unless Otherwise Specified

| | | | |
|--|-------------|-------------------------------------|---|
| Average Forward Current | $I_{F(AV)}$ | 5 A | $T_A = 55^\circ\text{C}$ |
| Peak Forward Surge Current | I_{FSM} | 150A | 8.3ms, half sine |
| Maximum Instantaneous Forward Voltage SF51G-55G SF56G SF58G | V_F | 0.95V 1.27V 1.75V | $I_{FM} = 5.0A;$ $T_A = 25^\circ\text{C}$ |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | I_R | 5 μA 50 μA | $T_A = 25^\circ\text{C}$ $T_A = 150^\circ\text{C}$ |
| Maximum Reverse Recovery Time | T_{rr} | 35.0nS | $I_F=0.5A, I_R=1.0A,$ $I_{rr}=0.25A$ |
| Typical Junction Capacitance SF51G-55G SF56G-58G | C_J | 50pF 30pF | Measured at 1.0MHz, $V_R=4.0V$ |

| DIM | DIMENSIONS | | | | NOTE |
|-----|------------|------|-------|------|------|
| | INCHES | | MM | | |
| A | .287 | .374 | 7.30 | 9.50 | |
| B | .189 | .208 | 4.80 | 5.30 | |
| C | .048 | .052 | 1.20 | 1.30 | |
| D | 1.000 | --- | 25.40 | --- | |

*Pulse Test: Pulse Width 300 μsec , Duty Cycle 1%