

**SUPER FAST  
GLASS PASSIVATED RECTIFIERS**

REVERSE VOLTAGE - **100 to 600** Volts  
FORWARD CURRENT - **1.0** Ampere

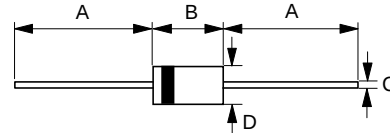
**FEATURES**

- Glass passivated chip
- Super fast switching time for high efficiency
- Low forward voltage drop and high current capability
- Low reverse leakage current
- Plastic material has UL flammability classification 94V-0

**MECHANICAL DATA**

- Case : JEDEC DO-41 molded plastic
- Polarity : Color band denotes cathode
- Weight : 0.012 ounces, 0.34 grams
- Mounting position : Any

**DO-41**



| DO-41                        |                    |                    |
|------------------------------|--------------------|--------------------|
| Dim.                         | Min.               | Max.               |
| A                            | 25.4               | -                  |
| B                            | 4.10               | 5.20               |
| C                            | 0.71 $\varnothing$ | 0.86 $\varnothing$ |
| D                            | 2.00 $\varnothing$ | 2.70 $\varnothing$ |
| All Dimensions in millimeter |                    |                    |

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified.  
Single phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%

| CHARACTERISTICS                                                                                               | SYMBOL            | SF10BG      | SF10DG | SF10FG | SF10GG | SF10HG | SF10JG | UNIT |
|---------------------------------------------------------------------------------------------------------------|-------------------|-------------|--------|--------|--------|--------|--------|------|
| Maximum Recurrent Peak Reverse Voltage                                                                        | V <sub>RRM</sub>  | 100         | 200    | 300    | 400    | 500    | 600    | V    |
| Maximum RMS Voltage                                                                                           | V <sub>RMS</sub>  | 70          | 140    | 210    | 280    | 350    | 420    | V    |
| Maximum DC Blocking Voltage                                                                                   | V <sub>DC</sub>   | 100         | 200    | 300    | 400    | 500    | 600    | V    |
| Maximum Average Forward Rectified Current<br>@T <sub>A</sub> =75°C                                            | I <sub>(AV)</sub> | 1.0         |        |        |        |        |        | A    |
| Peak Forward Surge Current<br>8.3ms single half sine-wave<br>super imposed on rated load (JEDEC Method)       | I <sub>FSM</sub>  | 30          |        |        |        |        |        | A    |
| Maximum forward Voltage at 1.0A DC                                                                            | V <sub>F</sub>    | 0.95        |        | 1.25   |        | 1.3    |        | V    |
| Maximum DC Reverse Current<br>at Rated DC Blocking Voltage<br>@T <sub>J</sub> =25°C<br>@T <sub>J</sub> =100°C | I <sub>R</sub>    | 5<br>100    |        |        |        |        |        | uA   |
| Typical Junction Capacitance (Note1)                                                                          | C <sub>J</sub>    | 30          |        |        |        | 25     |        | pF   |
| Typical Thermal Resistance (Note 2)                                                                           | R <sub>θJA</sub>  | 40          |        |        |        |        |        | °C/W |
| Maximum Reverse Recovery Time (Note 3)                                                                        | T <sub>RR</sub>   | 35          |        | 40     |        | 50     |        | ns   |
| Operating Temperature Range                                                                                   | T <sub>J</sub>    | -55 to +150 |        |        |        |        |        | °C   |
| Storage Temperature Range                                                                                     | T <sub>STG</sub>  | -55 to +150 |        |        |        |        |        | °C   |

NOTES : 1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.  
2.Thermal Resistance Junction to Ambient.  
3.Measured with  $I_F=0.5\text{A}$ ,  $I_R=1.0\text{A}$ ,  $I_{RR}=0.25\text{A}$ .

REV. 2, 01-Dec-2000, KDGC01

