

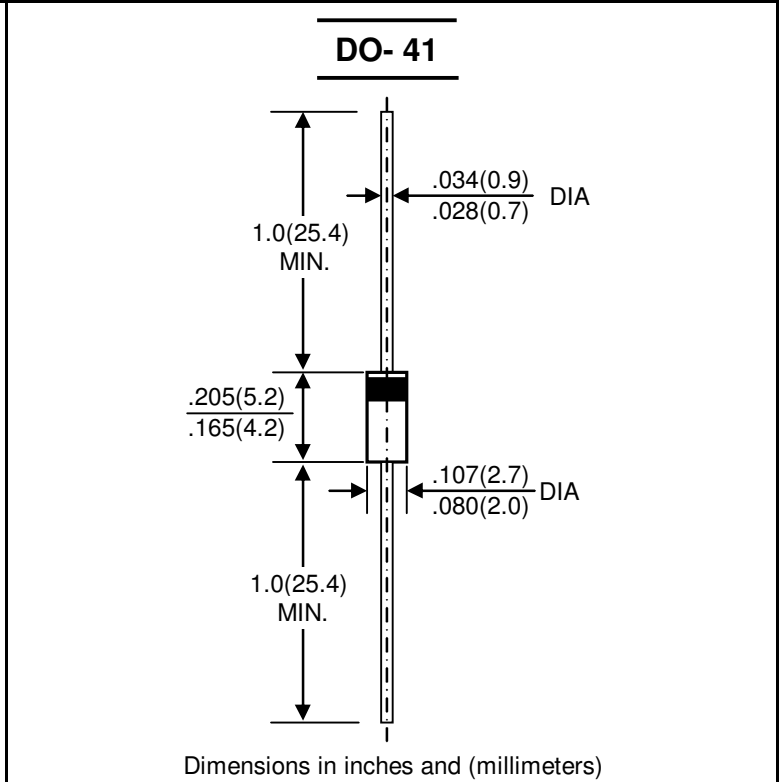
|                                 |   |
|---------------------------------|---|
| <b>FAST RECOVERY RECTIFIERS</b> | <b>REVERSE VOLTAGE - 50 to 600 Volts</b><br><b>FORWARD CURRENT - 1.0 Ampere</b> |
|---------------------------------|---|

**FEATURES**

- Fast switching for high efficiency
- Low cost
- Diffused junction
- Low reverse leakage current
- Low forward voltage drop
- Highcurrent capability
- The plastic material carries UL recognition 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



**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Rating 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            | 1N4933      | 1N4934 | 1N4935 | 1N4936 | 1N4937 | UNIT |
|--|-------------------|-------------|--------|--------|--------|--------|------|
| Maximum Recurrent Peak Reverse Voltage   | V <sub>RRM</sub>  | 50          | 100    | 200    | 400    | 600    | V    |
| Maximum RMS Voltage  | V <sub>RMS</sub>  | 35          | 70     | 140    | 280    | 420    | V    |
| Maximum DC Blocking Voltage  | V <sub>DC</sub>   | 50          | 100    | 200    | 400    | 600    | V    |
| Maximum Average Forward Rectified Current @T <sub>A</sub> =75 °C                                     | I <sub>(AV)</sub> | 1.0         |        |        |        |        | A    |
| Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method)     | I <sub>FSM</sub>  | 30          |        |        |        |        | A    |
| Peak Forward Voltage at 1.0A DC  | V <sub>F</sub>    | 1.3         |        |        |        |        | V    |
| Maximum DC Reverse Current @T <sub>J</sub> =25°C at Rated DC Blocking Voltage @T <sub>J</sub> =100°C | I <sub>R</sub>    | 5.0         |        |        |        |        | μA   |
| Maximum Reverse Recovery Time(Note 1)  | T <sub>rr</sub>   | 200         |        |        |        |        | nS   |
| Typical Junction Capacitance (Note2)   | C <sub>J</sub>    | 15          |        |        |        |        | pF   |
| Typical Thermal Resistance (Note3)   | R <sub>θJA</sub>  | 50          |        |        |        |        | °C/W |
| 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 with I<sub>F</sub>=1.0A,V<sub>R</sub>=30V,di/dt=50A/us.  
 2.Measured at 1.0 MHz and applied reverse voltage of 4.0V DC  
 3.Thermal resistance junction to ambient .

FIG. 1 – FORWARD CURRENT DERATING CURVE

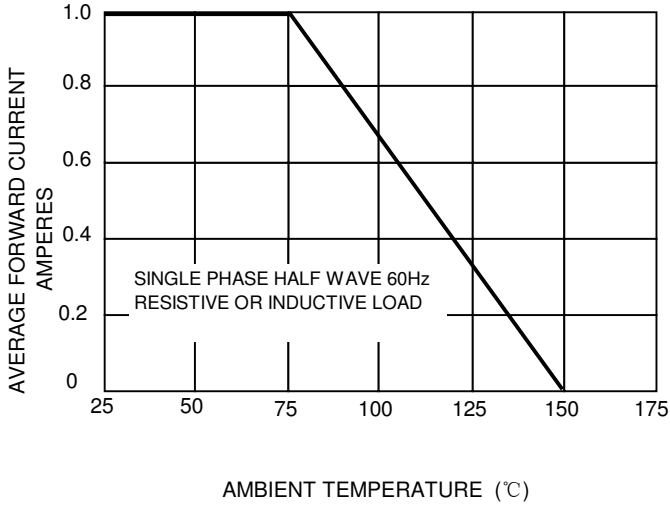


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

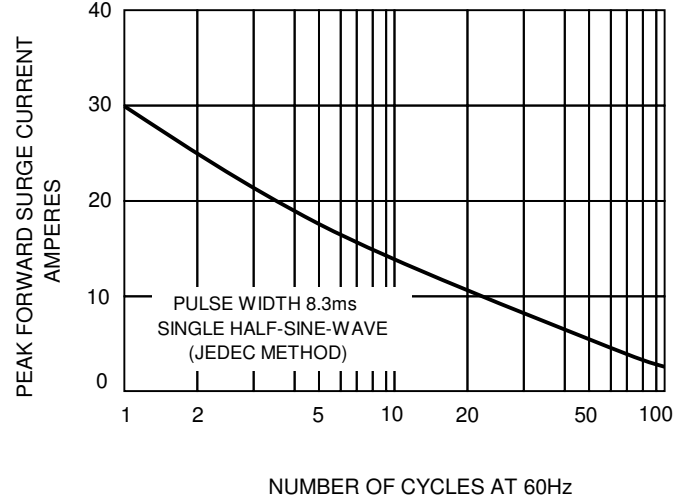


FIG.3 – TYPICAL JUNCTION CAPACITANCE

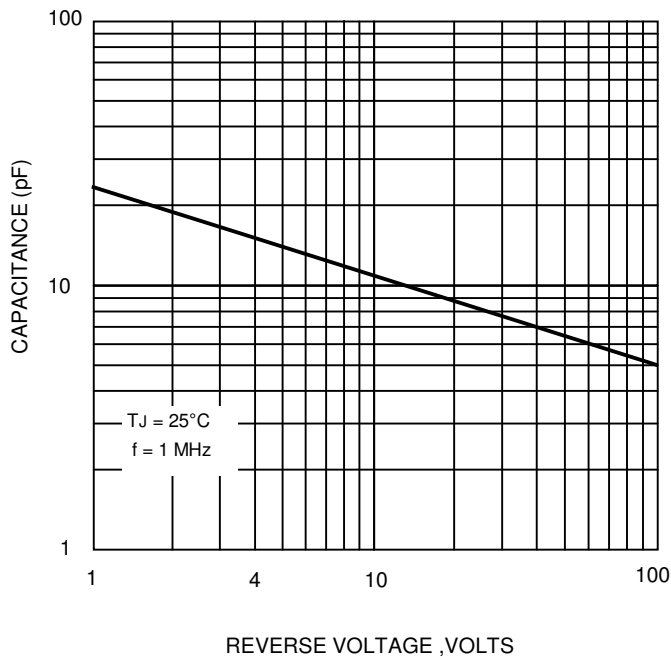


FIG.4-TYPICAL FORWARD CHARACTERISTICS

