

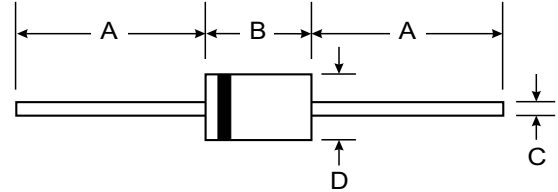
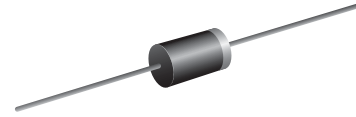
**VOLTAGE RANGE: 50 - 1000V**  
**CURRENT: 5.0 A**

### Features

- Diffused Junction
- Ultra-Fast Switching for High Efficiency
- High Current Capability and Low Forward Voltage Drop
- Surge Overload Rating to 150A Peak
- Low Reverse Leakage Current
- Plastic Material: UL Flammability Classification Rating 94V-0

### Mechanical Data

- Case: DO-201AD, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 1.2 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



DO-201AD		
Dim	Min	Max
A	25.40	—
B	7.20	9.50
C	1.20	1.30
D	4.80	5.30
All Dimensions in mm		

### Maximum Ratings and Electrical Characteristics @ T<sub>A</sub> = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	UF5001	UF5002	UF5003	UF5004	UF5005	UF5006	UF5007	UF5008	Unit
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	300	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	210	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	300	400	600	800	1000	V
Maximum Average Forward Rectified Current @ T <sub>A</sub> = 55 °C	I <sub>(AV)</sub>	5.0								A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	200								A
Peak Forward Voltage at 5.0A DC	V <sub>F</sub>	1.0		1.3		1.7			V	
Maximum DC Reverse Current at Rated DC Blocking Voltage @ T <sub>J</sub> = 25°C @ T <sub>J</sub> = 100°C	I <sub>R</sub>	5.0				100				uA
Maximum Reverse Recovery Time (Note1)	T <sub>RR</sub>	50				75				nS
Typical Junction Capacitance (Note2)	C <sub>J</sub>	75				50				pF
Typical Thermal Resistance (Note3)	R <sub>JA</sub>	20								°C/W
Operating Temperature Range	T <sub>J</sub>	-50 to +125								°C
Storage Temperature Range	T <sub>STG</sub>	-50 to +150								°C

NOTES: 1. Measured with I<sub>F</sub> = 0.5A, I<sub>R</sub> = 1A, I<sub>RR</sub> = 0.25A

2. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC

3. Thermal resistance junction to ambient

FIG. 1 – TYPICAL FORWARD CURRENT DERATING CURVE

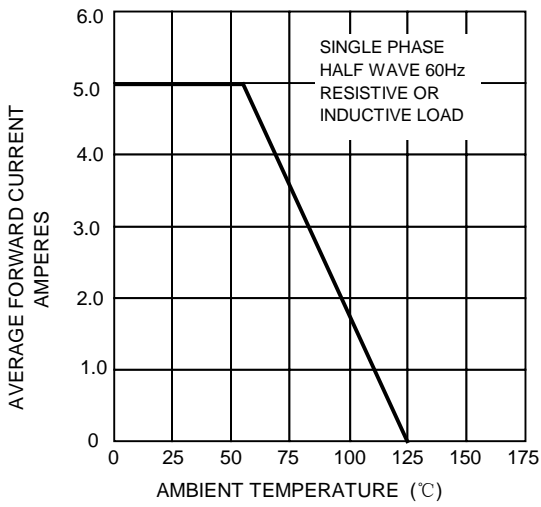


FIG. 2 – TYPICAL REVERSE CHARACTERISTICS

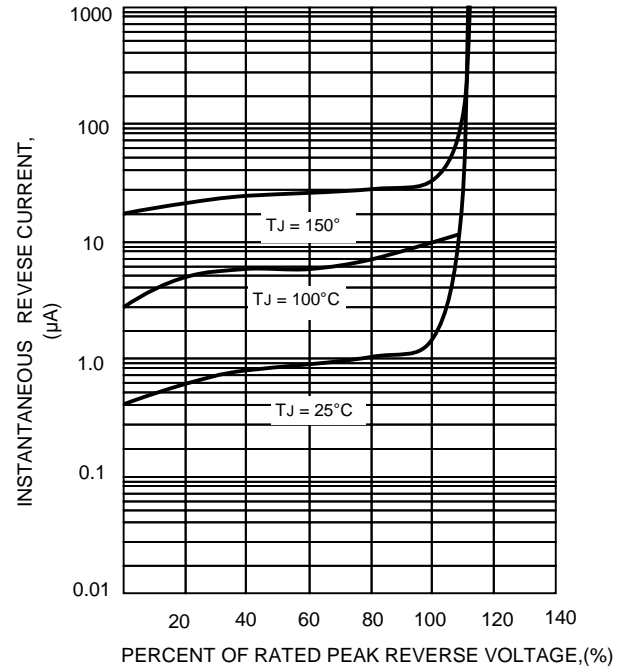


FIG. 4 – MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

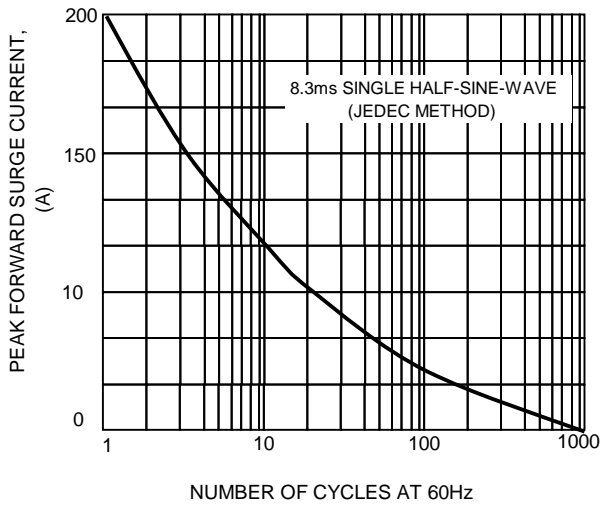


FIG. 3 – TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

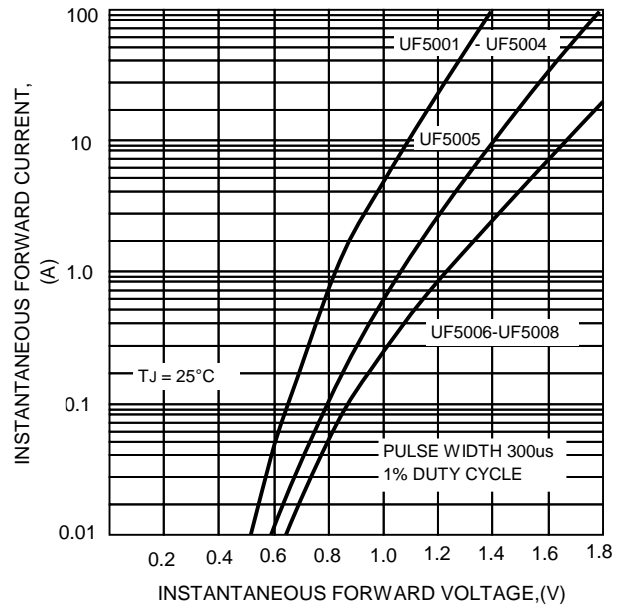


FIG. 5 – TYPICAL JUNCTION CAPACITANCE

