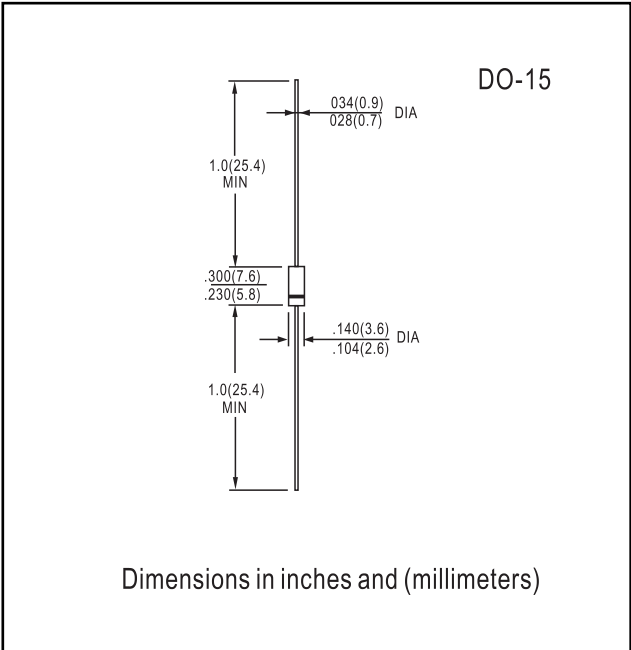




- FEATURES**
- Diffused Junction
 - Ultra-Fast Switching for High Efficiency
 - High Current Capability and Low Forward Voltage Drop
 - Surge Overload Rating to 60A Peak
 - Low Reverse Leakage Current
 - **Lead Free Finish, RoHS Compliant (Note 4)**



Mechanical Data

- Case: Molded Plastic
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020C
- Terminals: Finish – Bright Tin. Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Marking: Type Number
- Mounting Position: Any
- Weight: 0.4 grams (approximate)

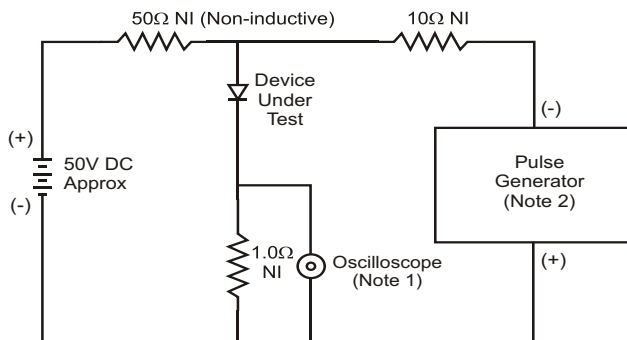
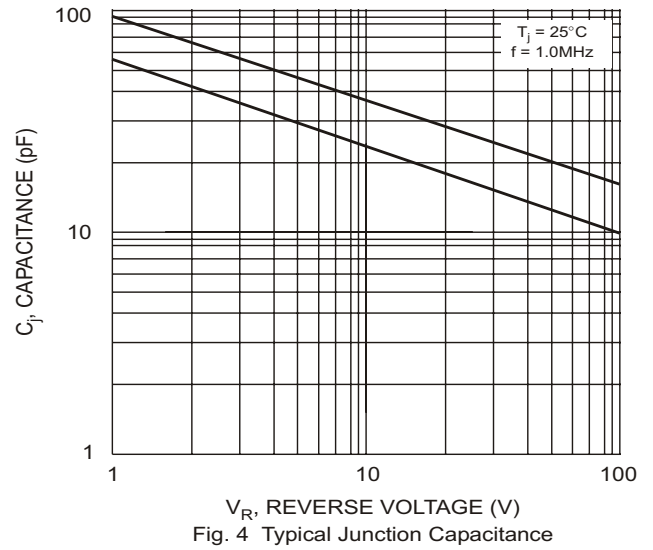
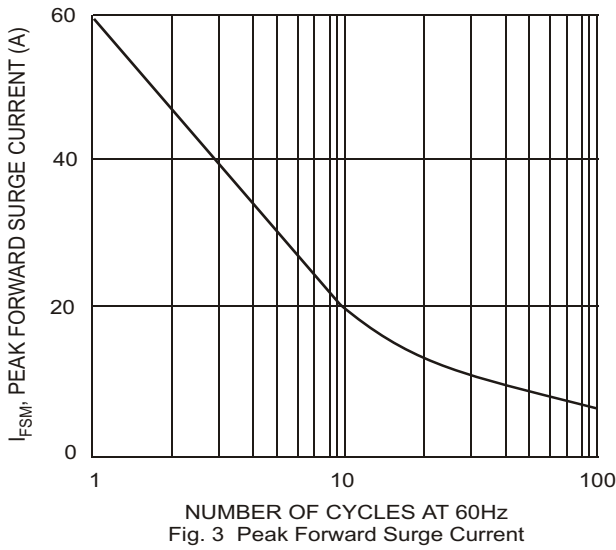
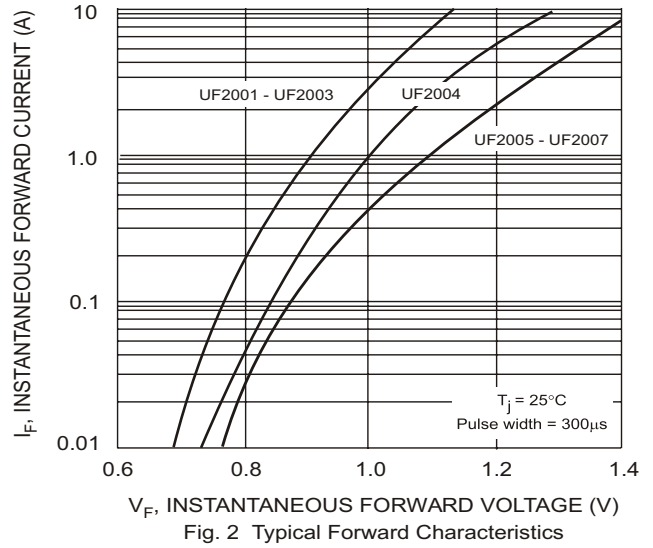
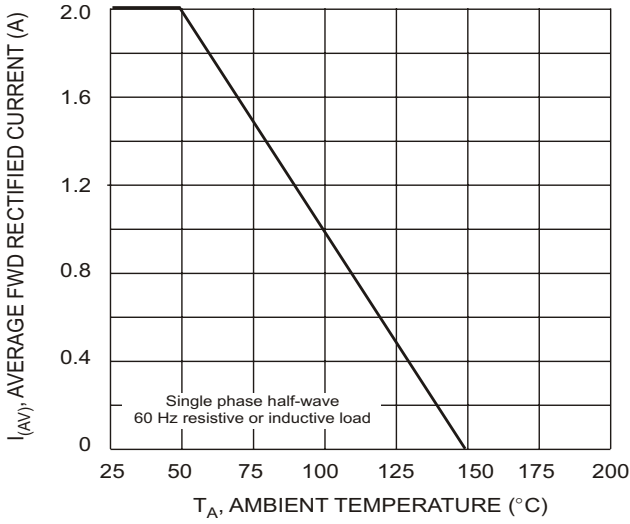
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

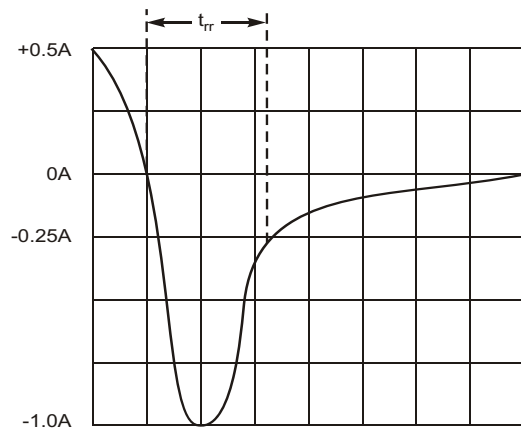
Characteristic	Symbol	UF 2001	UF 2002	UF 2003	UF 2004	UF 2005	UF 2006	UF 2007	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	V_{RWM}								
DC Blocking Voltage	V_R								
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1)	I_O	2.0							A
@ $T_A = 50^\circ C$									
Non-Repetitive Peak Forward Surge Current	I_{FSM}	60							A
8.3ms Single half sine-wave Superimposed on Rated Load (JEDEC Method)									
Forward Voltage	V_{FM}	1.0		1.3		1.7		V	
@ $I_F = 2.0A$									
Peak Reverse Current	I_{RM}	5.0							μA
@ $T_A = 25^\circ C$									
at Rated DC Blocking Voltage		100							
Reverse Recovery Time (Note 3)	t_{rr}	50				75			ns
Typical Junction Capacitance (Note 2)	C_j	50				30			pF
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	50							K/W
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +150							$^\circ C$

Notes: 1. Valid provided that leads are maintained at ambient temperature at a distance of 9.5mm from the case.
 2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
 3. Measured at $I_F = 0.5A, I_R = 1.0A, I_{rr} = 0.25A$. See figure 5.
 4. RoHS revision 13.2.2003. Glass and High Temperature Solder Exemptions Applied, see EU Directive Annex Notes 5 and 7.

RATINGS AND CHARACTERISTIC CURVES UF2001 THRU UF2007



- Notes:
1. Rise Time = 7.0ns max. Input Impedance = 1.0MΩ, 22pF.
 2. Rise Time = 10ns max. Input Impedance = 50Ω.



Set time base for 50/100 ns/cm

Fig. 5 Reverse Recovery Time Characteristic and Test Circuit