



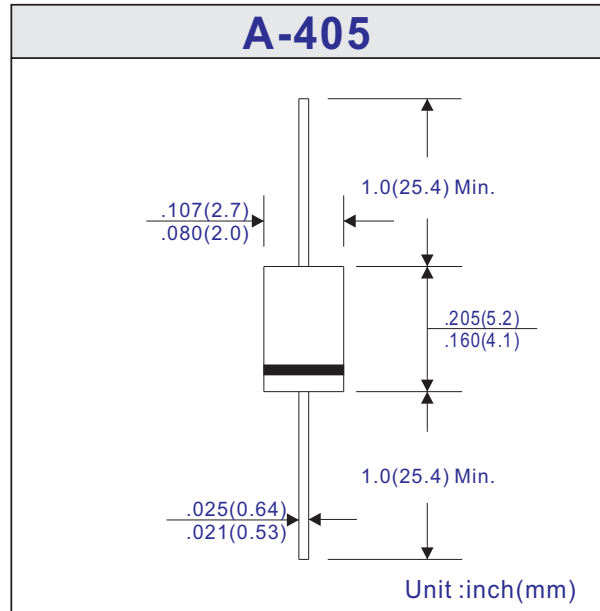
UF4001S thru UF4007S

1.0A Leaded Ultra Fast Recovery Rectifiers - 50V to 1000V



FEATURES
<ul style="list-style-type: none"> • Low cost • High surge current capability • Low forward drop down voltage • Low reverse leakage current • Open junction chip inside • Ultra fast recovery time for high efficiency • Lead-free parts for green partner, meet RoHS requirements

MECHANICAL DATA
<ul style="list-style-type: none"> • Case: A-405 molded plastic • Epoxy: UL94-V0 rated flame retardant • Terminals: Solderable per MIL-STD-750 Method 2026 • Polarity: Color band denotes cathode end • Mounting Position: Any • Weight: 0.008 ounces, 0.23 grams



MAXIMUM RATING AND ELECTRICAL CHARACTERISTICS										
Ratings at 25°C ambient temperature unless otherwise specified										
	UF-	Symbols	4001S	4002S	4003S	4004S	4005S	4006S	4007S	Units
Maximum Recurrent Peak Reverse Voltage		VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage		VRMS	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage		VDC	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current 0.375" (9.5mm) lead length at TA=55°C, See Figure 1		I(AV)	1.0							Amps
Peak Forward Surge Current 8.3mS single half sine-wave superimposed on rated load (JEDEC Method) TL=110°C		IFSM	30.0							Amps
Maximum Instantaneous Forward Voltage at 1.0A		VF	1.0		1.3		1.7			Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	TA= 25°C TA=100°C	IR	5.0 100.0							µA
Typical Reverse Recovery Time (Note 1)		Trr	50				75			nS
Typical Junction Capacitance (Note 2)		CJ	10							pF
Typical Thermal Resistance (Note 3)		RθJA	25							°C/W
Operating Junction Temperature Range		TJ	-55 ~ +125							°C
Storage Temperature Range		TSTG	-55 ~ +150							°C

Note 1. Measured with If=0.5A, Ir=1A, Irr=0.25A
 2. Measured at 1.0MHz and applied reverse voltage of 4.0Vdc
 3. Thermal resistance junction to ambient

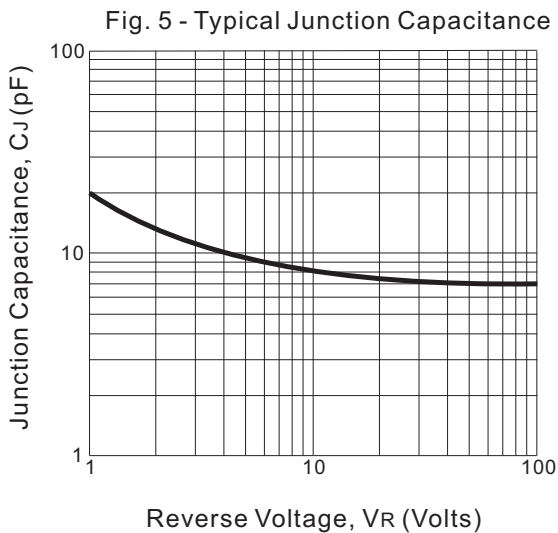
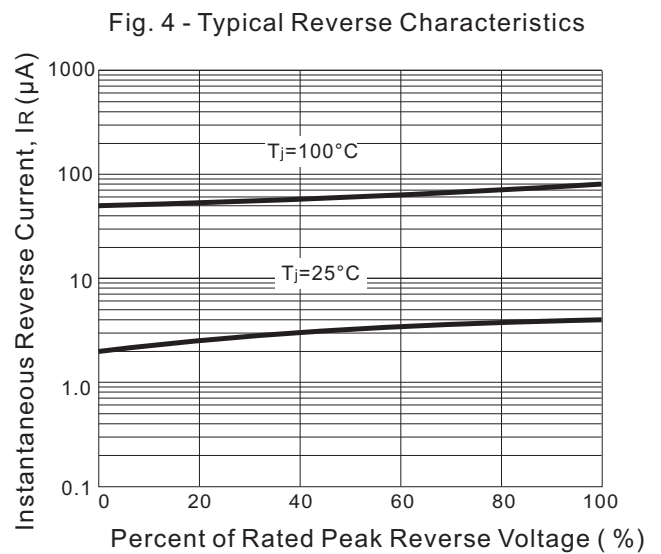
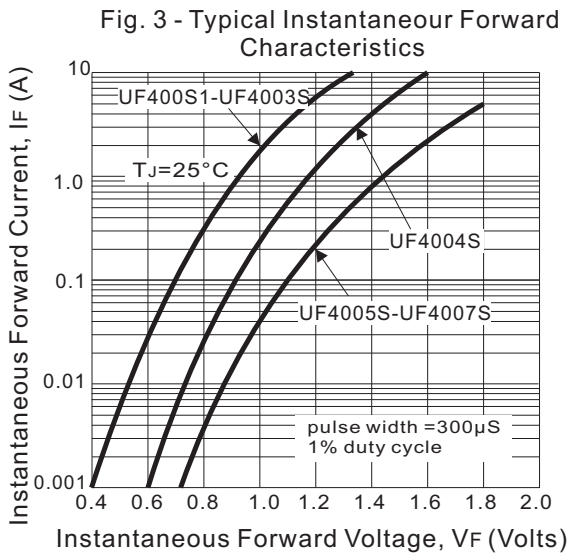
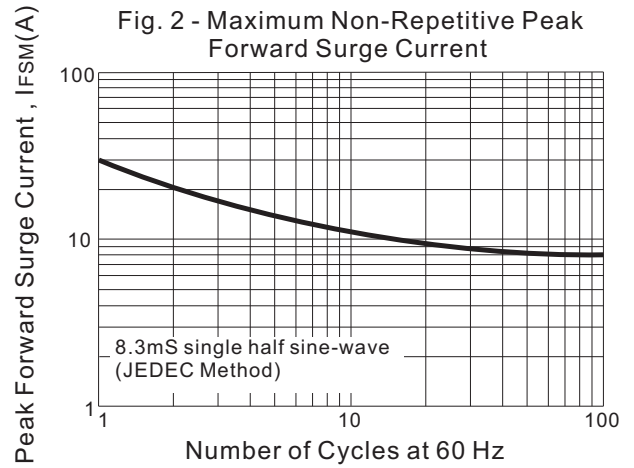
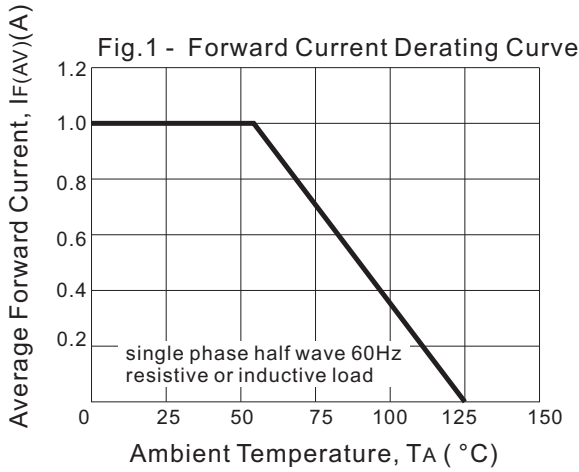
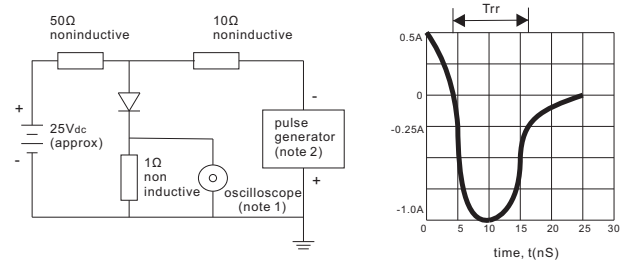


Fig. 6 - Test Circuit Diagram and Reverse Recovery Time Characteristic



Note: 1. rise time=7nS Max. input impedance=1M Ω , 22pF
 2. rise time=10nS Max. source impedance=80 Ω