



UF5400 THRU UF5408

Ultra Fast Rectifiers

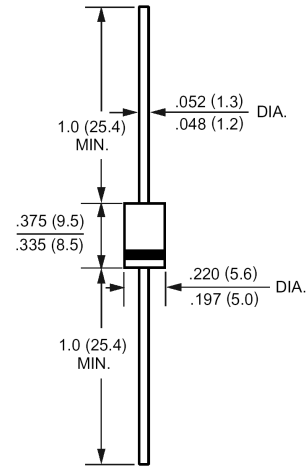
FEATURES

- Plastic package has Underwriters Laboratories Flammability Classification 94V-0
- Low cost
- Ultrafast recovery time for high efficiency
- Low forward voltage, high current capability
- Low leakage
- High surge capability

MECHANICAL DATA

Case: Molded plastic, DO-201AD
 Terminals: Plated axial leads, solderable per MIL-STD-202, method 208 guaranteed
 Polarity: Color band denotes cathode end
 Mounting position: Any
 Weight: 0.04ounce, 1.1gram

DO-201AD(DO-27)



Dimensions in inches and (millimeters)

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%.

	Symbols	UF5400	UF5401	UF5402	UF5403	UF5404	UF5405	UF5406	UF5407	UF5408	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	300	400	500	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	210	280	350	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	300	400	500	600	800	1000	Volts
Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length at $T_A=55$	$I_{(AV)}$	3.0									Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	150									Amp
Maximum Forward Voltage at 3.0A DC and 25	V_F	1.0					1.7				Volts
Maximum Reverse Current at $T_A=25$ at Rated DC Blocking Voltage $T_A=100$	I_R	10.0					1000				uAmp
Typical Junction Capacitance (Note 1)	C_J	45					36				pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	20									/W
Maximum Reverse Recovery Time (Note 3)	T_{RR}	50					75				nS
Operating and Storage Temperature Range	T_J, T_{stg}	-55 to +125									

NOTES:

- 1- Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
- 2- Thermal Resistance from Junction to Ambient 0.375"(9.5mm) lead length P.C.B. Mounted with 0.8x0.8" (20x20mm) copper pads.
- 3- Reverse Recovery Test Conditions : $I_F=.5A$, $I_R=1A$, $I_{RR}=.25A$.





RATINGS AND CHARACTERISTIC CURVES

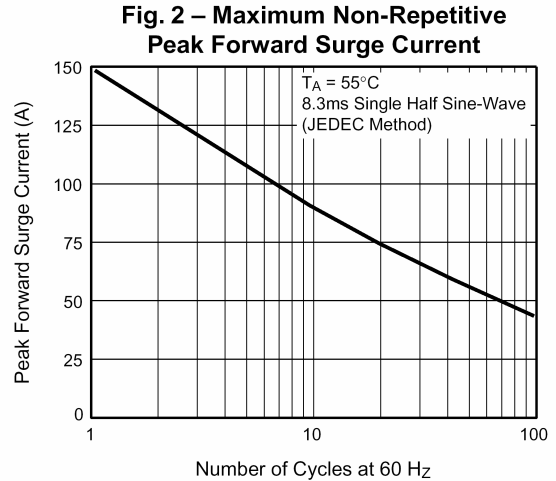
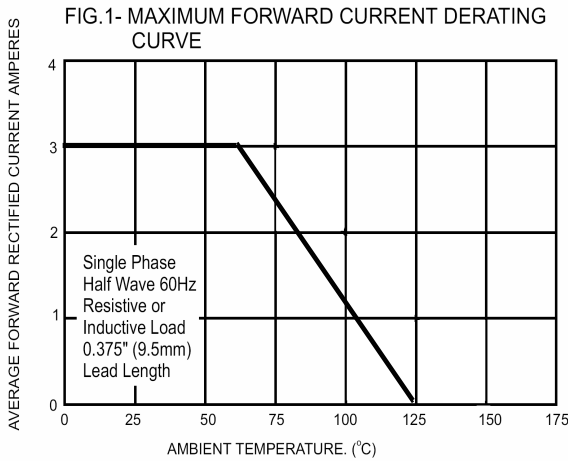


Fig. 3 – Typical Instantaneous Forward Characteristics

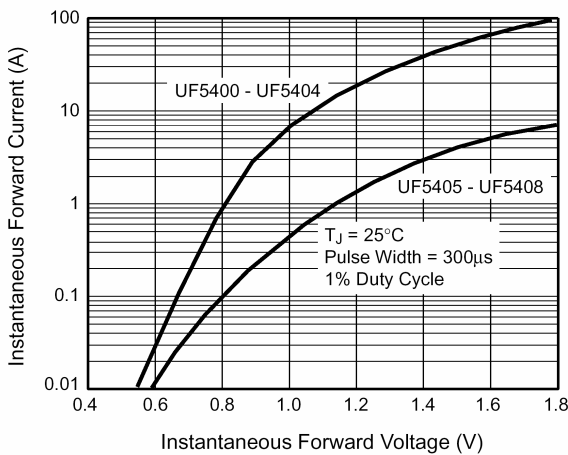


Fig. 4 – Typical Reverse Leakage Characteristics

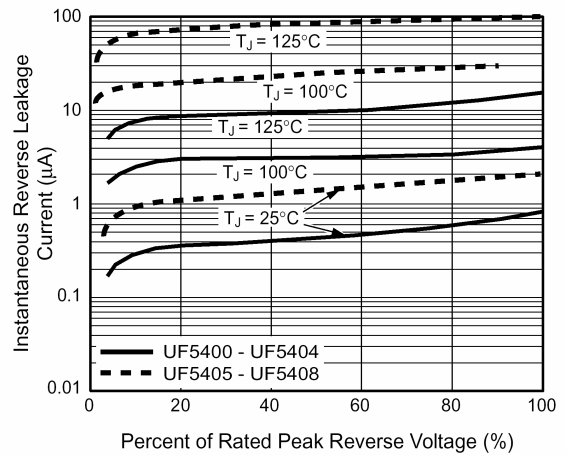


Fig. 5 – Typical Junction Capacitance

