UF5400 THRU UF5408

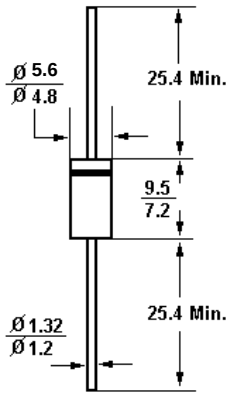
Ultra Fast Rectifiers

Reverse Voltage - 50 to 1000 V
Forward Current - 3 A

Features

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

DO-201AD



Dimnsions in mm

Mechanical Data

- **Case:** Molded plastic body, JEDEC DO-201AD
- **Terminals:** Plated Axial leads, solderable per MIL-STD-750, method 2026
- **Polarity:** Color band denotes cathode end.
- **Mounting Position:** Any

Absolute Maximum Ratings and Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	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	V
Maximum RMS Voltage	V_{RMS}	35	70	140	210	280	350	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	300	400	500	600	800	1000	V
Maximum Average Forward Rectified Current 0.375" (9.5mm) Lead Length at Ta = 55 °C	$I_{F(AV)}$	3									A
Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	125									A
Maximum Forward Voltage at 3 A	V_F	1			1.3		1.7				V
Maximum Reverse Current T_A = 25 °C at Rated Reverse Voltage T_A = 100 °C	I_R	10 150									µA
Maximum Reverse Recovery Time [1]	t_{rr}	50					75				ns
Typical Junction Capacitance [2]	C_j	75									pF
Operating Junction Temperature Range	T_j	- 55 to + 150									°C
Storage Temperature Range	T_{stg}	- 55 to + 150									°C

[1] Reverse recovery condition I_F = 0.5 A, I_R = 1 A, I_{rr} = 0.25 A.

[2] Measured at 1 MHz and applied reverse voltage of 4 V D.C.

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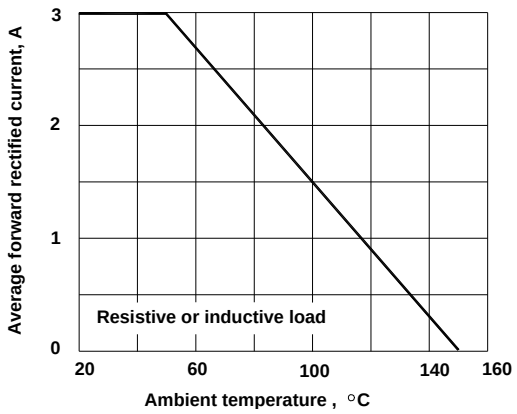
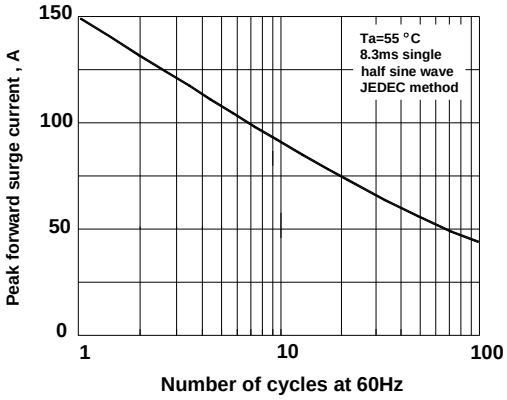
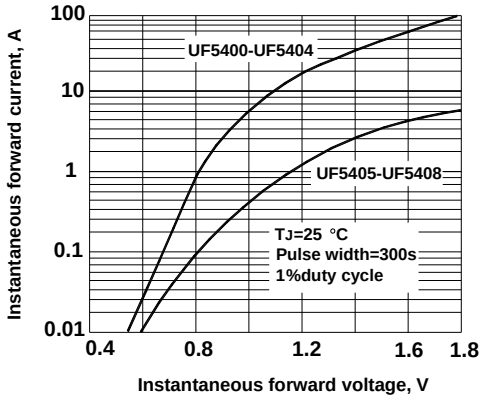
Maximum forward current derating curve



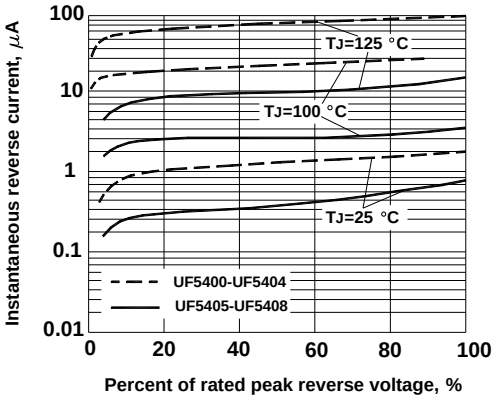
Maximum non-repetitive peak forward surge current



Typical instantaneous forward characteristics



Typical reverse leakage characteristics



Typical junction capacitance