

UF5400 THRU UF5408

Ultra Fast Rectifiers

Reverse Voltage - 50 to 1000 V

Forward Current - 3 A

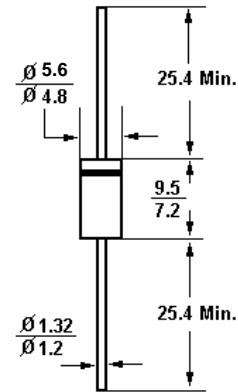
Features

- 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

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

DO-201AD



Dimensions in mm

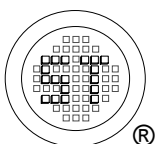
Absolute Maximum Ratings and Characteristics

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 $T_A = 55^\circ\text{C}$	$I_{F(AV)}$	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 $T_A = 25^\circ\text{C}$ at Rated Reverse Voltage $T_A = 100^\circ\text{C}$	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									$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150									$^\circ\text{C}$

¹⁾ Reverse recovery condition $I_F = 0.5\text{ A}$, $I_R = 1\text{ A}$, $I_{rr} = 0.25\text{ A}$.

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

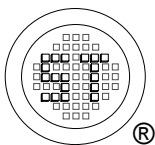
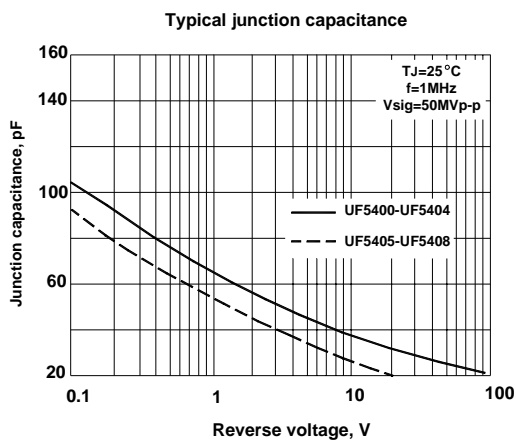
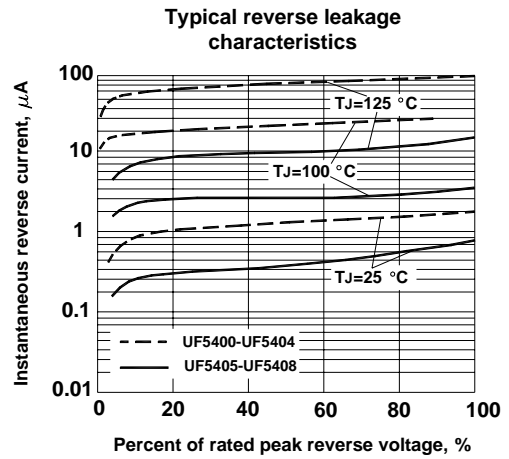
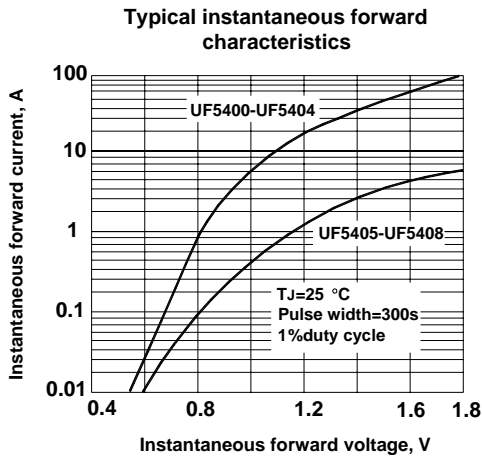
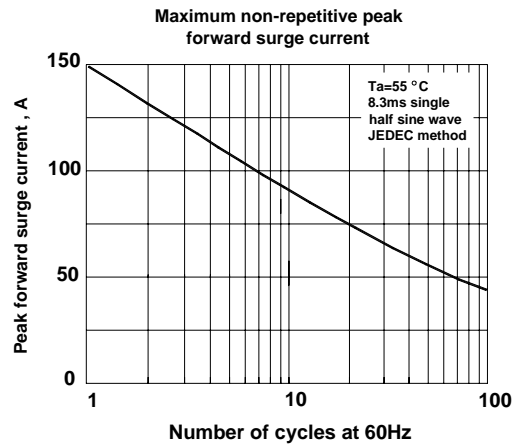
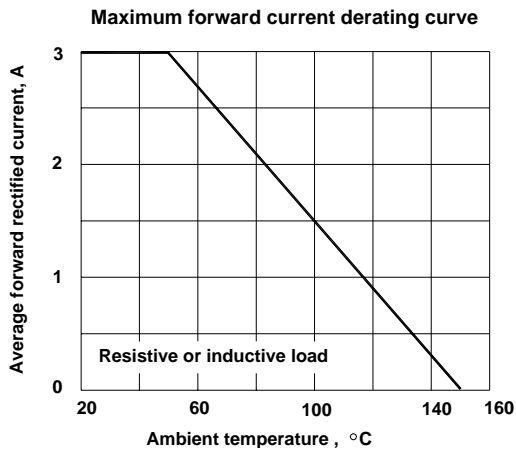


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