

Pb Free Plating Product

UF5400 thru UF5408



3.0 AMP.ULTRA FAST RECOVERY RECTIFIERS

Features

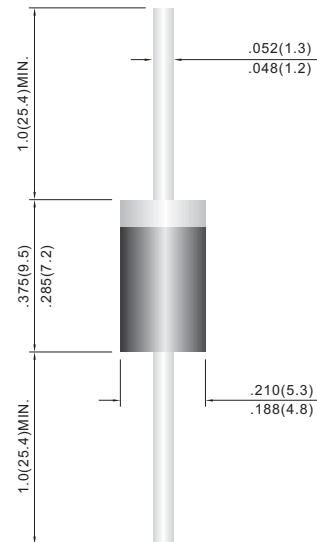
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Glass passivated chip junction
- Low cost
- Ultrafast recovery time for high efficiency
- High current capability, low forward voltage
- High surge capability
- Low leakage
- High temperature soldering guaranteed:
250°C/10 sec, 0.375"(9.5mm) lead length,
5lbs. (2.3kg) tension

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

Unit: inch(mm)

**Absolute Maximum Ratings and Characteristics**

Ratings at 25°C unless otherwise specified.

	Symbols	UF 5400	UF 5401	UF 5402	UF 5403	UF 5404	UF 5405	UF 5406	UF 5407	UF 5408	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 _(AV)	3.0									A
Peak forward surge current 8.3mS single half sine-wave superimposed on rated load (JEDEC method)at Ta = 55 °C	I _{FSM}	150									A
Maximum instantaneous forward voltage at 3 A (Note 1)	V _F	1.0			1.3		1.7			V	
Maximum reverse current Ta = 25 °C at rated reverse voltage Ta = 100 °C	I _R	10									μA
		75			200						
Maximum reverse recovery time At IF = 0.5A, IR = 1.0A, Irr = 0.25A, TJ = 25 °C	t _{rr}	50			75			ns			
Typical junction capacitance at 4.0V, 1MHz	C _{tot}	45			36			pF			
Typical thermal resistance (Note 2)	R _{θJA}	20									°C/W
	R _{θJL}	8.5									
Operating junction temperature range	T _J	-55 to +150									°C
storage temperature range	T _S	-55 to +150									°C

Notes:(1) Pulse test: 300 μs pulse width, 1% duty cycle

(2) Thermal resistance from junction to lead and from junction to ambient with 0.375" (9.5mm) lead length, both leads attached to heatsink.

