

UF4001 thru UF4007

ULTRA FAST RECTIFIERS

◆ Features

- » The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- » Ultra fast switching for high efficiency
- » Low reverse leakage
- » High forward surge current capability
- » High temperature soldering guaranteed:
250°C C/10 seconds, 0.375" (9.5mm) lead length,
5 lbs. (2.3kg) tension

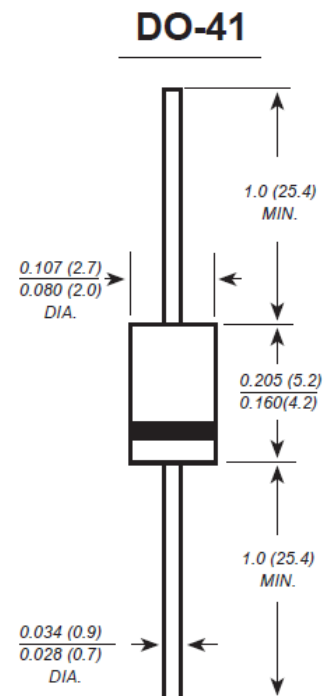


DO-41

◆ Mechanical Data

- » **Case:** JEDEC DO-41 molded plastic body
- » **Terminals:** Plated axial leads, solderable per MIL-STD-750, Method 2026
- » **Polarity:** Color band denotes cathode end
- » **Mounting Position:** Any
- » **Weight:** 0.33 grams
- » **Standard Package:** Ammopack

PRIMARY CHARACTERISTICS	
$I_{F(AV)}$	1.0 A
V_{RRM}	50 V to 1000 V
I_{FSM} (8.3 ms sine-wave)	30 A
V_F	1 V to 1.7 V
I_R	5.0 μ A
T_J max.	150 °C



Dimensions in inches and (millimeters)

◆ Electrical Characteristic

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

PARAMETER	SYMBOL	UF	UF	UF	UF	UF	UF	UF	UNITS
		4001	4002	4003	4004	4005	4006	4007	
Maximum repetitive 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	I(AV)	1.0							Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	30.0							Amps
Maximum instantaneous forward voltage at 1.0A	VF	1.0		1.3		1.7			Volts
Maximum DC reverse current TA=25°C at rated DC blocking voltage TA=100°C	IR	5.0 100.0							uA
Maximum reverse recovery time (NOTE 1)	Trr	50				75			ns
Typical junction capacitance (NOTE 1)	CJ	15.0							pF
Typical thermal resistance (NOTE 2)	RqJA	50.0							°C/W
Operating junction and storage temperature range	TJ,TSTG	-65 to +150							°C

Note: 1.Reverse recovery condition IF=0.5A,IR=1.0A,Irr=0.25A
2.Measured at 1MHz and applied reverse voltage of 4.0V D.C.
3.Thermal resistance from junction to ambient at 0.375" (9.5mm)lead length, P.C.B. mounted

◆ Rating And Characteristic Curves

