

1 AMP ULTRA FAST SWITCHING RECTIFIER

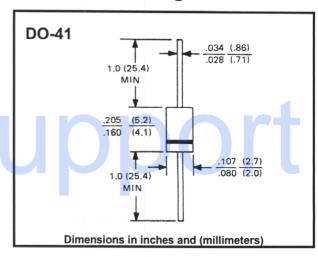
FEATURES

- Rating to 1000V PRV
- Low cost
- Ultrafast recovery time
- Low leakage
- Low forward voltage drop
- High current capability
- Easily cleaned with freon, alcohol, chlorothene and similar solvents
- UL recognized 94V-O plastic material

Mechanical Data

- Case: JEDEC DO-41 molded plastic
- Terminals: Axial leads, solderable per MIL-STD-202, Method 208
- Polarity: Color band denotes cathode
- Weight: 0.012 ounce, 0.3 grams

Outline Drawing



Maximum Ratings & 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%

		UF1001	UF1002	UF1003	UF1004	UF1005	UF1006	UF1007	Units
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current	1,,,,,	1.0							
.375 (9.5mm) Lead Lengths @ T _A = 55° C	l (AV)	1.0							A
Peak Forward Surge Current									
8.3 ms Single Half-Sine-Wave	FSM				30				Α
Superimposed On Rated Load									
Maximum Forward Voltage At 1.0A DC	VF		1.0		1.3		1.7		V
Maximum DC Reverse Current @ T _A = 25°C	l _R	1000	120 m		5				
At Rated DC Blocking Voltage @ T _A = 100°C	'R	100							μΑ
Maximum Reverse Recovery Time @ T _J = 25°C	trr	50			75				
(Note 1)	чт	50					75		nS
Typical Junction Capacitance (Note 2) T _A = 25° C	CJ		2	.0			10		pF
Typical Thermal Resistance	RthJA	25					°C/W		
Operating Temperature Range	TJ	-65 to +150						°C	
Storage Temperature Range	Tstg	-65 to +175						°C	

Notes:

- 1. Measured at IF = 0.5A, IR = 1A, Irr = 0.25A
- 2. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC