

ULTRA FAST RECTIFIERS

REVERSE VOLTAGE - 50 to 1000 Volts
FORWARD CURRENT - 1.0 Ampere

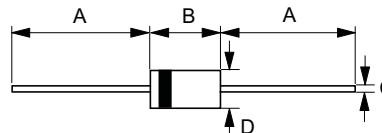
FEATURES

- Diffused junction
- Ultra fast switching for high efficiency
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- Easily cleaned with Freon, Alcohol, Chloroethene and similar solvents
- Plastic material has UL flammability classification 94V-0

MECHANICAL DATA

- Case : JEDEC DO-41 molded plastic
- Polarity : Color band denotes cathode
- Weight : 0.012 ounces, 0.34 grams
- Mounting position : Any

DO-41



DO-41		
Dim.	Min.	Max.
A	25.4	-
B	4.20	5.20
C	0.70 ϕ	0.90 ϕ
D	2.00 ϕ	2.70 ϕ
All Dimensions in millimeter		

MAXIMUM RATINGS AND ELECTRICAL 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%

CHARACTERISTICS	SYMBOL	UF1001	UF1002	UF1003	UF1004	UF1005	UF1006	UF1007	UNIT	
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V	
Maximum RMS Voltage	V _{RMS}	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 @T _A =55°C	I(AV)	1.0							A	
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load (JEDEC Method)	I _{FSM}	30							A	
Maximum forward Voltage at 1.0A DC	V _F	1.0		1.3		1.7			V	
Maximum DC Reverse Current @T _J =25°C at Rated DC Blocking Voltage @T _J =100°C	I _R	5				100				uA
Maximum Reverse Recovery Time (Note 1)	T _{RR}	50				75				ns
Typical Junction Capacitance (Note 2)	C _J	20				10				pF
Typical Thermal Resistance (Note 3)	R _{θJA}	40							°C/W	
Storage / Operating Temperature Range	T _{STG} , T _J	-55 to +150							°C	

NOTES : 1. Test condition of T_{RR}: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A.
2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
3. Thermal Resistance Junction to Ambient.

RATING AND CHARACTERISTIC CURVES

