



UF4001 THRU UF4007

ULTRA FAST RECTIFIER

VOLTAGE RANGE: 50 TO 1000 VOLTS

CURRENT: 1.0 AMPERES

FEATURES

- Low cost
- Diffused junction
- Low leakage
- Low forward voltage drop
- High current capability
- Easily cleaned with Freon, Alcohol, Isopropanol and similar solvents
- The plastic material carries U/L recognition 94V-O

MECHANICAL DATA

Case: JEDEC DO-41, molded plastic

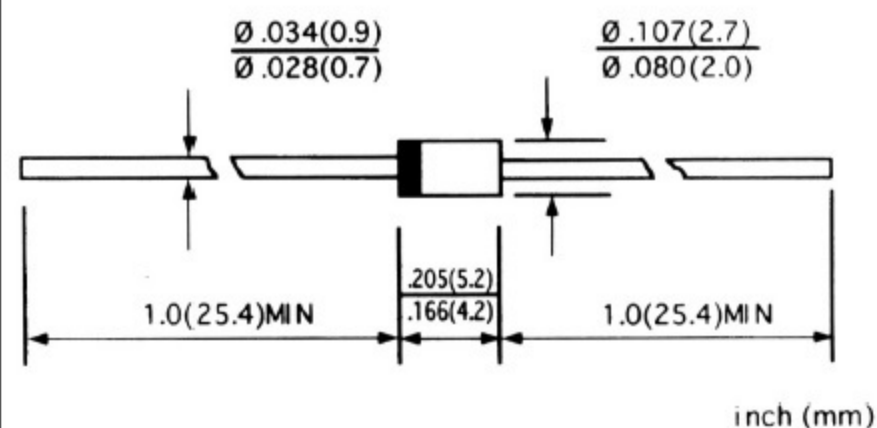
Terminals: Axial leads, solder able per MIL-STD-202, Method 208

Polarity: Color band denotes cathode

Weight: 0.012 ounce, 0.34 gram

Mounting position: Any

DO-41



MAXIMUM RATINGS AND ELECTRICAL 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%.

Parameters		UF 4001	UF 4002	UF 4003	UF 4004	UF 4005	UF 4006	UF 4007	UNITS
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 9.5mm Lead Length, @ T _A =75°C	I _(AV)	1.0							A
Peak Forward Surge Current @T _J =125°C 8.3ms Single half-sine-wave superimposed on rated load	I _{FSM}	30							A
Maximum Instantaneous Forward Voltage at 1.0A	V _F	1.0			1.7				V
Maximum Reverse Current @T _A =25°C at Rated DC Blocking Voltage @T _A =100°C	I _R	10			100				μA
Maximum Reverse Recovery Time (Note 1)	t _{rr}	50			75				ns
Typical Junction Capacitance (Note 2)	C _j	20			15				pF
Typical Thermal Resistance (Note 3)	R _{θJA}	50							°C/W
Operating Junction Temperature Range	T _j	-65---+150							°C
Storage Temperature Range	T _{STG}	-65---+150							°C

NOTE: 1.Measured with $I_F=0.5\text{A}$, $I_R=1\text{A}$, $I_{rr}=0.25\text{A}$

2.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

3.Thermal Resistance Junction to Ambient.

RATING AND CHARACTERISTIC CURVES

