

**TAYCHIPST**

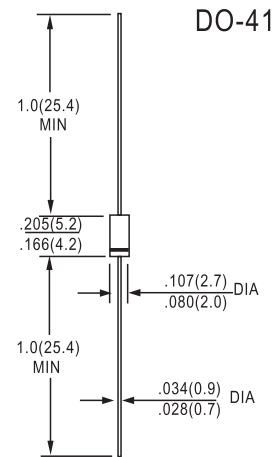
Glass Passivated Ultrafast Recovery Rectifier

FUF4001 THRU FUF4007**50V-1000V 1.0A****FEATURES**

- PLASTIC PACKAGE HAS UNDERWRITERS LABORATORY FLAMMABILITY CLASSIFICATION 94V-0
- ULTRA FAST RECOVERY TIMES FOR HIGH EFFICIENCY
- LOW FORWARD VOLTAGE, HIGH CURRENT CAPABILITY
- LOW LEAKAGE
- HIGH SURGE CAPABILITY
- HIGH TEMPERATURE SOLDERING GUARANTEED:
260°C 0.375" (9.5mm) LEAD LENGTHS FOR 10 SECONDS AT
5 LBS.(2.3KG)TENSION

Mechanical Data

- CASE: MOLDED PLASTIC, DO41, DIMENSIONS IN INCHES AND (MILLIMETERS)
- TERMINALS: AXIAL LEADS SOLDERABLE PER MIL-STD-202, METHOD 208
- POLARITY: COLOR BAND DENOTES CATHODE END
- MOUNTING POSITION: ANY
- WEIGHT: 0.34 GRAMS



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**Maximum Ratings**

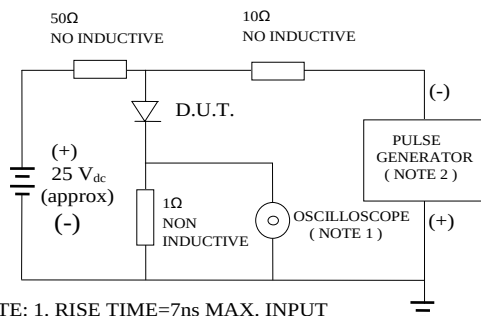
		FUF 4001	FUF 4002	FUF 4003	FUF 4004	FUF 4005	FUF 4006	FUF 4007
V _{RRM}	Peak Recurrent reverse voltage (V)	50	100	200	400	600	800	1000
V _{RMS}	Maximum RMS voltage	35	70	140	280	420	560	700
V _{DC}	Maximum DC blocking voltage	50	100	200	400	600	800	1000
I _{F(AV)}	Forward current at Tamb = 55 °C	1 A						
I _{FRM}	Recurrent peak forward surge current	10 A						
I _{FSM}	8.3 ms. peak forward surge current (Jedec Method)	30 A						
t _{tr}	Max. reverse recovery time from I _F = 0.5 A ; I _R = 1 A ; I _{RR} = 0.25 A	50 ns				75 ns		
C _j	Typical Junction Capacitance at 1 MHz and reverse voltage of 4V _{DC}	15 pF						
T _j	Operating temperature range	− 65 to + 150 °C						
T _{stg}	Storage temperature range	− 65 to + 150 °C						
E _{RSM}	Maximum non repetitive peak reverse avalanche energy. I _R = 0.5A ; T _I = 25 °C	20 mJ						

Electrical Characteristics at $T_{amb} = 25^{\circ}C$

V_F	Max. forward voltage drop at $I_F = 1 A$	1.3 V	1.7 V
I_R	Max. reverse current at V_{RRM} at $25^{\circ}C$	5 μA	
R_{thj-a}	Max. thermal resistance (l = 10 mm.)	50 $^{\circ}C/W$	

RATINGS AND CHARACTERISTIC CURVES FUF4001 THRU FUF4007

FIG. 1-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



NOTE: 1. RISE TIME=7ns MAX. INPUT IMPEDANCE=1 MOhms 22PF
2. RISE TIME =10ns MAX. SOURCE IMPEDANCE=50 OHMS

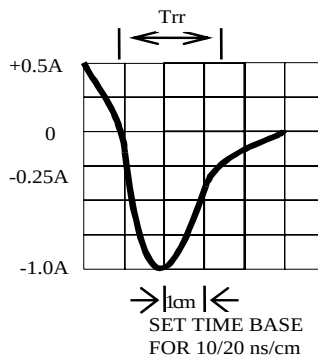


FIG. 2-TYPICAL FORWARD CURRENT DERATING CURVE

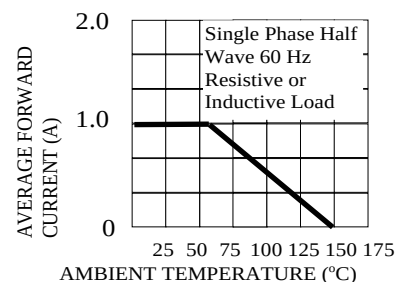


FIG. 3-TYPICAL REVERSE CHARACTERISTICS

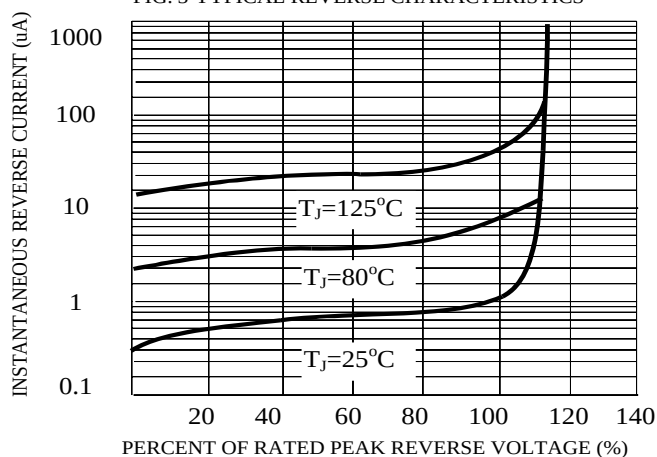


FIG. 4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

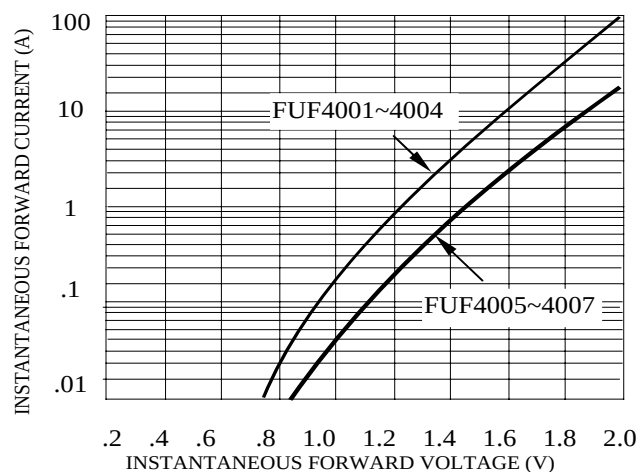


FIG. 5-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

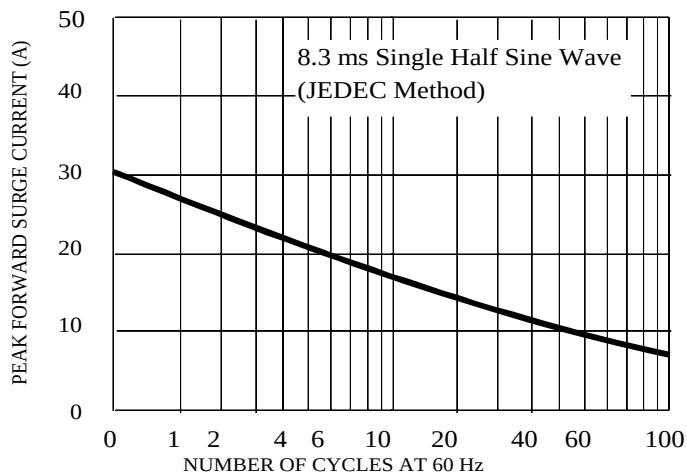


FIG. 6-TYPICAL JUNCTION CAPACITANCE

