



**FRONTIER
ELECTRONICS CO., LTD.**

**FUF5400
THRU
FUF5408**

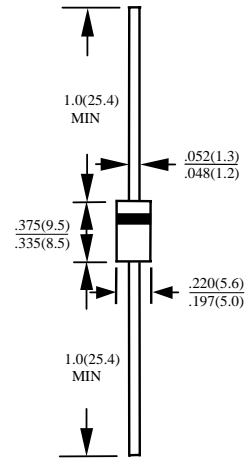
3A GLASS PASSIVATED ULTRA FAST RECOVERY RECTIFIER

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 .375" (9.5mm) LEAD LENGTHS FOR 10 SECONDS AT
5 LBS. (2.3 KG) TENSION.
- GLASS PASSIVATED JUNCTION

MECHANICAL DATA

- CASE : JEDEC DO-201AD, MOLDED PLASTIC
- TERMINALS : AXIAL LEADS SOLDERABLE PER MIL-STD-202,
METHOD 208
- POLARITY : COLOR BAND DENOTES CATHODE END
- MOUNTING POSITION : ANY
- WEIGHT : 1.2 GRAM



CASE : D0201AD
DIMENSIONS IN INCHES AND (MILLIMETERS)

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%

RATINGS	SYMBOL	FUF 5400	FUF 5401	FUF 5402	FUF 5403	FUF 5404	FUF 5406	FUF 5407	FUF 5408	UNITS	
MAXIMUM RECURRENT PEAK REVERSE VOLTAGE	V_{RRM}	50	100	200	300	400	600	800	1000	V	
MAXIMUM RMS VOLTAGE	V_{RMS}	35	70	140	210	280	420	560	700	V	
MAXIMUM DC BLOCKING VOLTAGE	V_{DC}	50	100	200	300	400	600	800	1000	V	
MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT .375" (9.5mm) LEAD LENGTH AT $T_A = -55^\circ\text{C}$	I_O	3.0								A	
PEAK FORWARD SURGE CURRENT, 8.3ms SINGLE HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	I_{FSM}	150								A	
TYPICAL JUNCTION CAPACITANCE (NOTE 1)	C_J	75					50				PF
TYPICAL THERMAL RESISTANCE (NOTE 2)	$R_{\theta jc}$	20								°C/W	
STORAGE TEMPERATURE RANGE	T_{STG}	- 55 TO + 150								°C	
OPERATING TEMPERATURE RANGE	T_{OP}	- 55 TO + 150								°C	

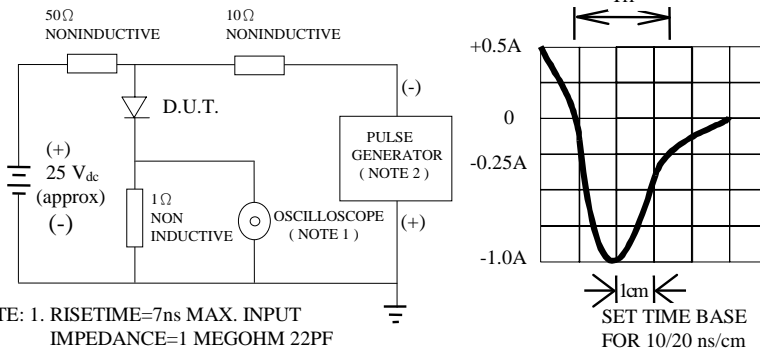
ELECTRICAL CHARACTERISTICS ($A_T T_A = 25^\circ\text{C}$ UNLESS OTHERWISE NOTED)

CHARACTERISTICS	SYMBOL	FUF 5400	FUF 5401	FUF 5402	FUF 5403	FUF 5404	FUF 5406	FUF 5407	FUF 5408	UNITS	
MAXIMUM FORWARD VOLTAGE AT I_O DC	V_F	1.3					1.7				V
MAXIMUM DC REVERSE CURRENT AT $T_A = 25^\circ\text{C}$	I_R	5								μA	
MAXIMUM DC REVERSE CURRENT AT $T_A = 100^\circ\text{C}$	I_R	50								μA	
MAXIMUM REVERSE RECOVERY TIME (NOTE 3)	T_{RR}	50					75				nS

- NOTE : 1. MEASURED AT 1 MHZ AND APPLIED REVERSE VOLTAGE OF 4.0 VOLTS
2. BOTH LEADS ATTACHED TO HEATSINK 20x20x1t(mm) COPPER PLATE AT LEAD LENTH 5mm
3. REVERSE RECOVERY TEST CONDITIONS: $I_F = 0.5A$, $I_R = 1.0A$, $I_{RR} = 0.25A$

RATINGS AND CHARACTERISTIC CURVE FUF5400 THRU FUF5408

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



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

FIG. 2 -TYPICAL FORWARD CURRENT DERATING CURVE

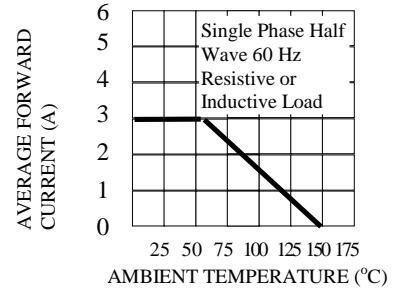


FIG. 3 -TYPICAL REVERSE CHARACTERISTICS

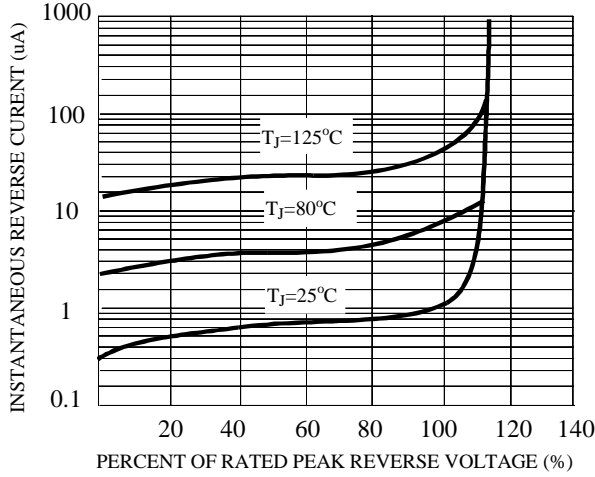


FIG. 4 -TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

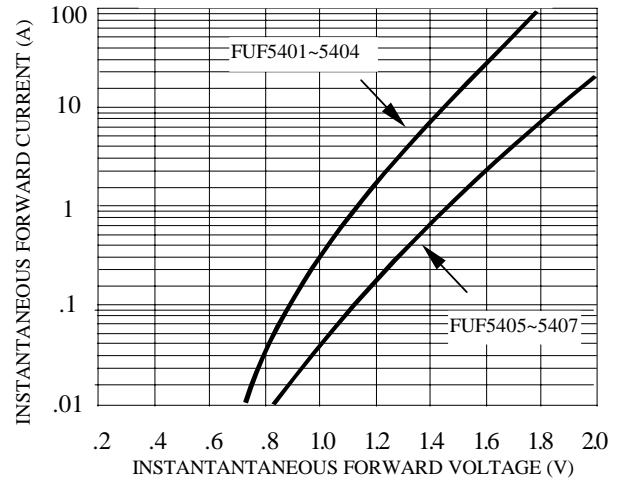


FIG. 5 -MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

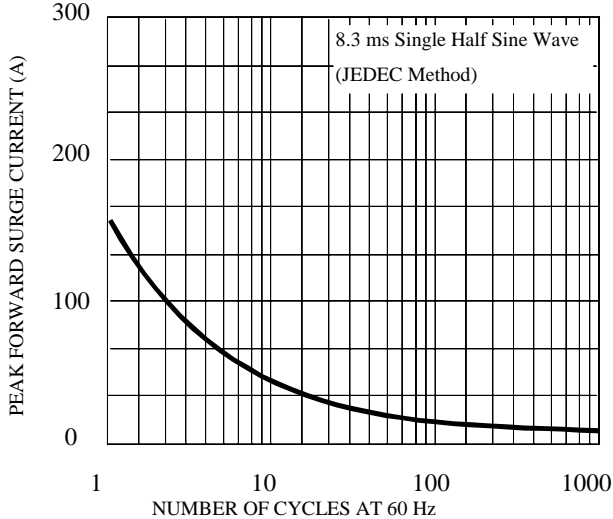


FIG. 6 -TYPICAL JUNCTION CAPACITANCE

