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3A GLASS PASSIVATED ULTRA FAST RECOVERY RECTIFIER

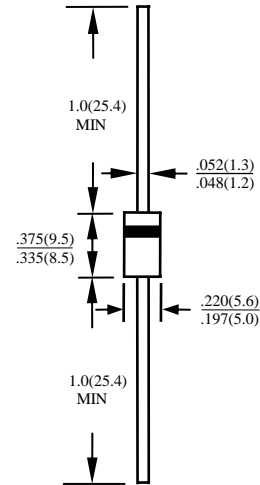
FUF5400 THRU FUF5408

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, 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: 1.2 GRAM



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 0.375"(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 |

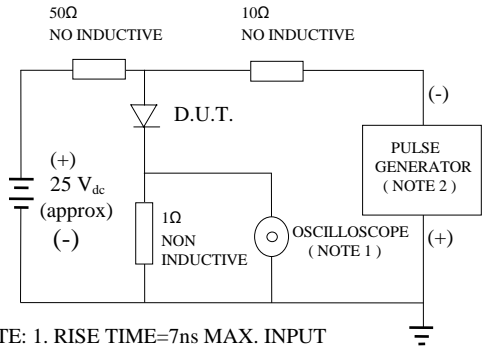
ELECTRICAL CHARACTERISTICS ($A_T T_A = 25^\circ\text{C}$ UNLESS OTHERWISE NOTED)

| 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 HEAT SINK 20x20x1t(mm) COPPER PLATE AT LEAD LENGTH 5mm
 3. REVERSE RECOVERY TEST CONDITIONS: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{RR}=0.25\text{A}$

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 MOhms 22PF
 2. RISE TIME =10ns MAX. SOURCE IMPEDANCE=50 OHMS

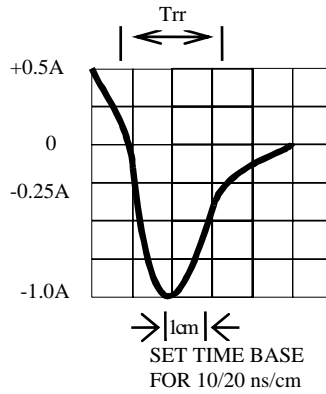


FIG. 2 -TYPICAL FORWARD CURRENT DERATING CURVE

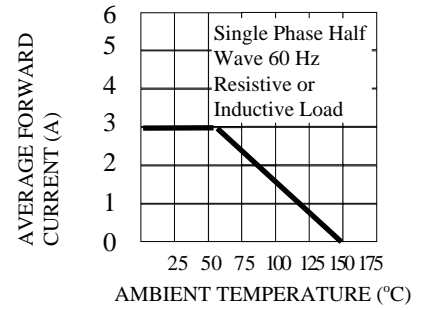


FIG. 3 -TYPICAL REVERSE CHARACTERISTICS

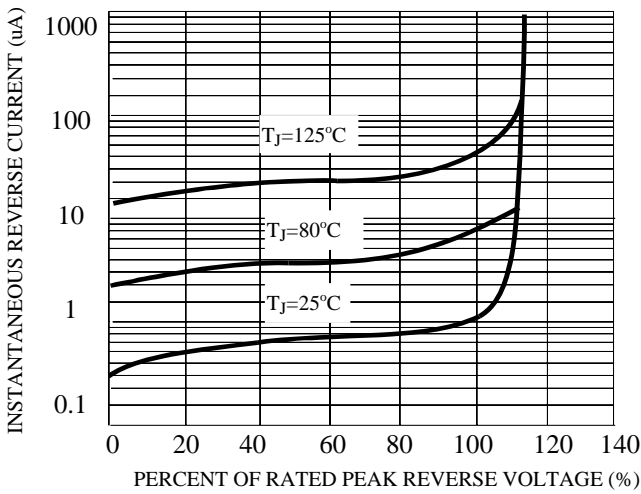


FIG. 4 -TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

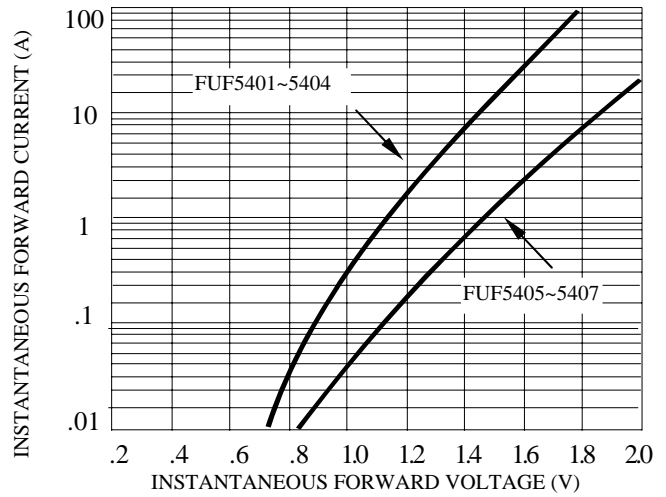


FIG. 5 -MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

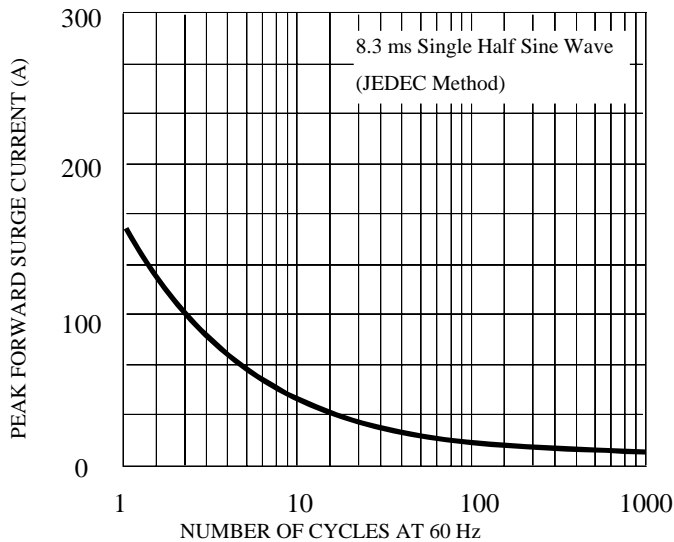


FIG. 6 -TYPICAL JUNCTION CAPACITANCE

