



**UF4001G
THRU
UF4007G**

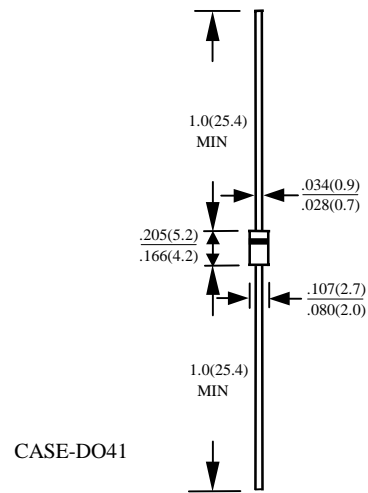
1A GLASS PASSIVATED ULTRA FAST RECOVERY RECTIFIER

FEATURES

- PLASTIC PACKAGE HAS UNDERWRITERS LABORATORY FLAMMABILITY CLASSIFICATION 94V-0
- GLASS PASSIVATED CHIP JUNCTION
- 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.(2.3KG) TENSION

MECHANICAL DATA

- CASE : MOLDED PLASTIC
- TERMINALS : AXIAL LEADS SOLDERABLE PER MIL-STD-202, METHOD 208
- POLARITY : COLOR BAND DENOTES CATHODE END
- MOUNTING POSITION : ANY
- WEIGHT : 0.34 GRAMS



CASE-DO41

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 | UF 4001G | UF 4002G | UF 4003G | UF 4004G | UF 4005G | UF 4006G | UF 4007G | 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 .375" (9.5mm) LEAD LENGTH AT TA=55°C | I_o | 1.0 | | | | | | | A |
| PEAK FORWARD SURGE CURRENT, 8.3ms SINGLE HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD | I_{FSM} | 30 | | | | | | | A |
| TYPICAL JUNCTION CAPACITANCE (NOTE 1) | C_j | 20 | | | 15 | | | PF | |
| TYPICAL THERMAL RESISTANCE (NOTE 2) | $R_{\theta jc}$ | 50 | | | | | | | °C/W |
| STORAGE TEMPERATURE RANGE | T_{STG} | - 55 TO + 150 | | | | | | | °C |
| OPERATING TEMPERATURE RANGE | T_{OP} | - 55 TO + 150 | | | | | | | °C |

ELECTRICAL CHARACTERISTICS (AT TA =25°C UNLESS OTHERWISE NOTED)

| CHARACTERISTICS | SYMBOL | UF 4001G | UF 4002G | UF 4003G | UF 4004G | UF 4005G | UF 4006G | UF 4007G | UNITS |
|--|----------|----------|----------|----------|----------|----------|----------|----------|-------|
| MAXIMUM FORWARD VOLTAGE AT I_o DC | V_F | 1.3 | | | 1.7 | | | V | |
| MAXIMUM DC REVERSE CURRENT AT TA=25°C | I_R | 1 | | | | | | | μA |
| MAXIMUM DC REVERSE CURRENT AT TA=100°C | I_R | 10 | | | | | | | μA |
| MAXIMUM REVERSE RECOVERY TIME (NOTE3) | 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 20x 20x 1(mm) COPPER PLATE AT LEAD LENGTH 5mm
3. REVERSE RECOVERY TEST CONDITIONS: $I_F=0.5A$, $I_R=1.0A$, $I_{RR}=0.25A$

TESTING AND CHARACTERISTIC CURVE UF4001G THRU UF4007G

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

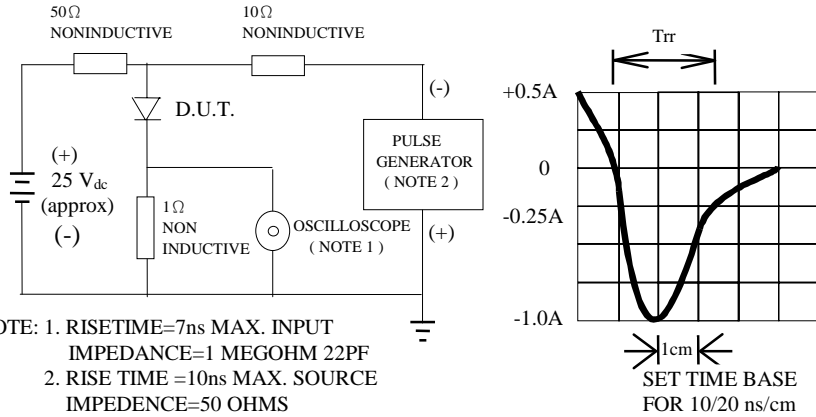


FIG. 2-TYPICAL FORWARD CURRENT DERATING CURVE

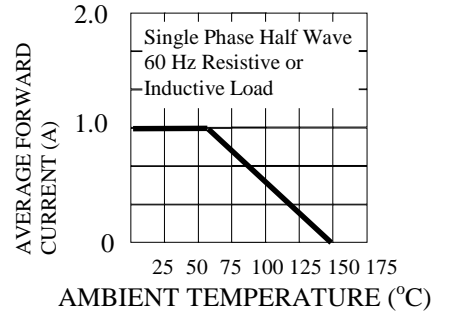


FIG. 3-TYPICAL REVERSE CHARACTERISTICS

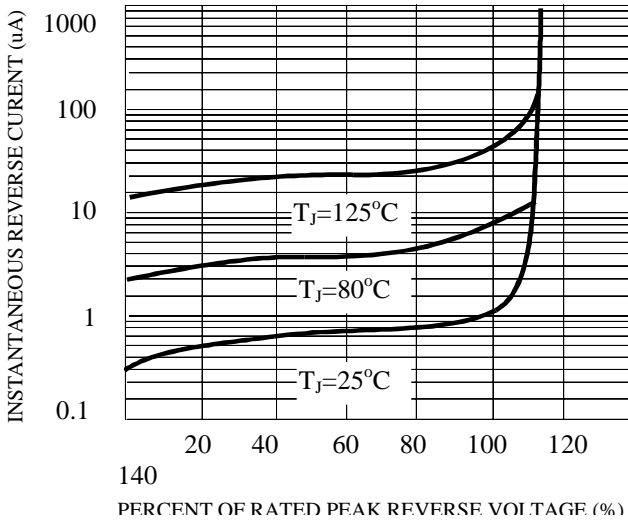


FIG. 4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

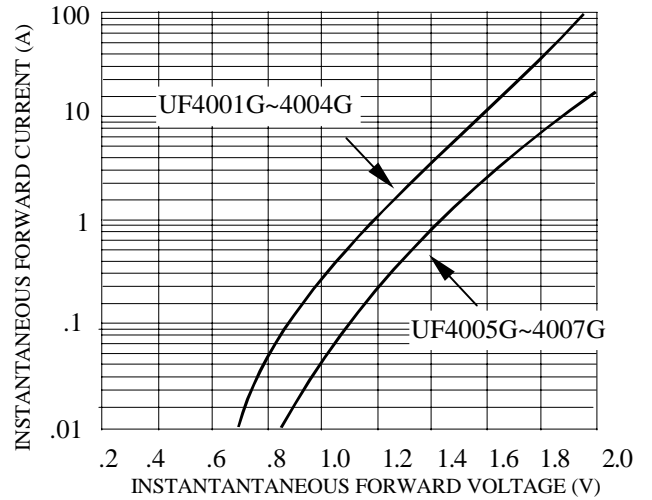


FIG. 5-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

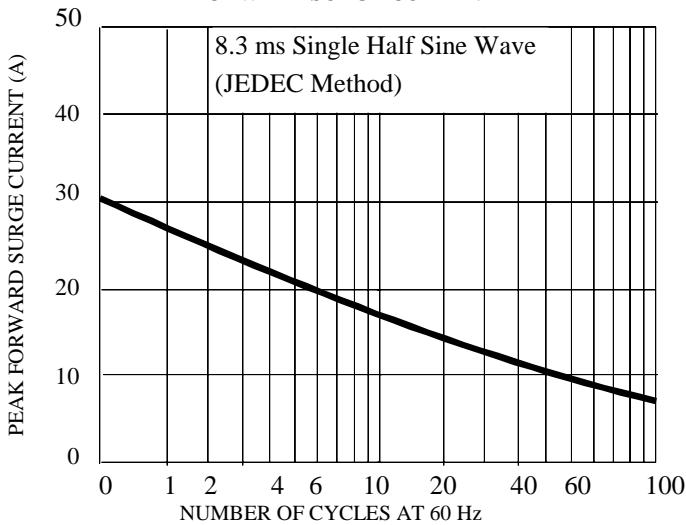


FIG. 6-TYPICAL JUNCTION CAPACITANCE

