



UF10-005R THRU UF10-10R

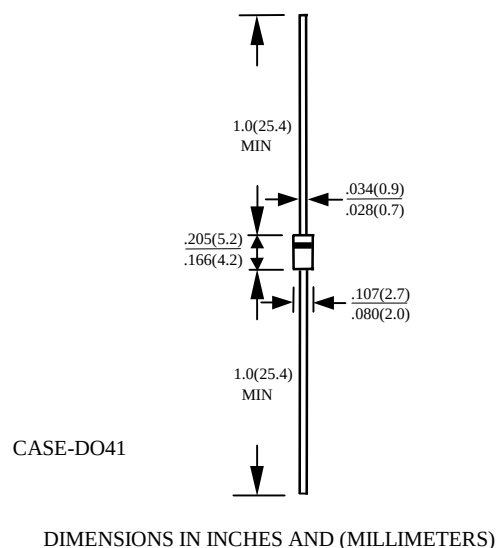
1A ULTRA FAST RECOVERY RECTIFIER

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.(2.3KG) TENSION
- BEVEL ROUND CHIP, AVALANCHE OPERATION

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



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	-005R	-01R	-02R	-04R	-06R	-08R	-10R	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 FORWARDSURGE 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 _{θja}	50							°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	-005R	-01R	-02R	-04R	-06R	-08R	-10R	UNITS
MAXIMUM FORWARD VOLTAGE AT I_O DC	V_F	1.05			1.2	1.4	1.5	1.7	V
MAXIMUM DC REVERSE CURRENT AT $T_A=25^\circ\text{C}$	I_R	10							μA
MAXIMUM DC REVERSE CURRENT AT $T_A=100^\circ\text{C}$	I_R	100							μA
MAXIMUM REVERSE RECOVERY TIME (NOTE 3)	T_{RR}	50			80				nS

NOTE:

1. MEASURED AT 1 MHZ AND APPLIED REVERSE VOLTAGE OF 4.0 VOLTS
2. BOTH LEADS ATTACHED TO HEATSINK 20x 20x 1t(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 UF10-005R THRU UF10-10R

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

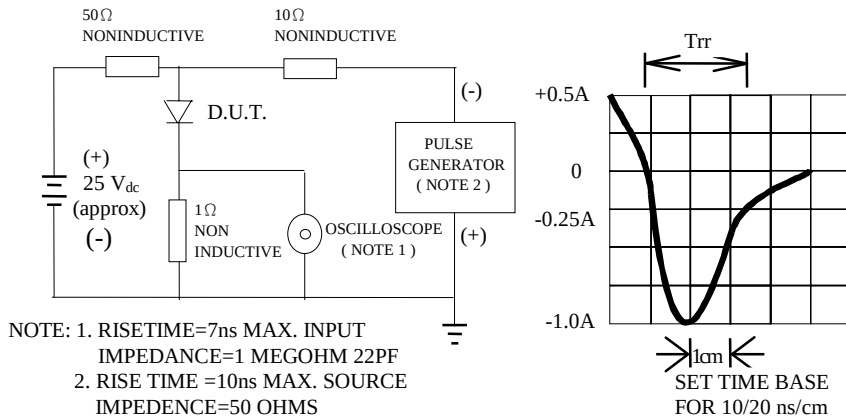


FIG. 2-TYPICAL FORWARD CURRENT DERATING CURVE

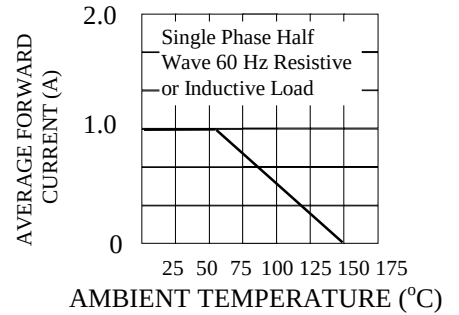


FIG. 3-TYPICAL REVERSE CHARACTERISTICS

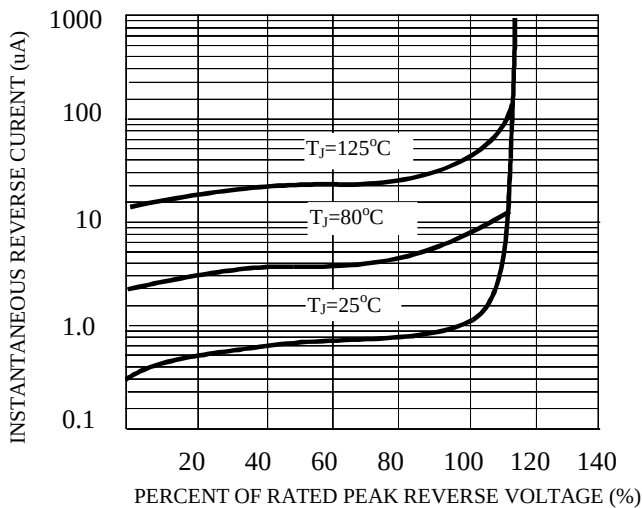


FIG. 4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

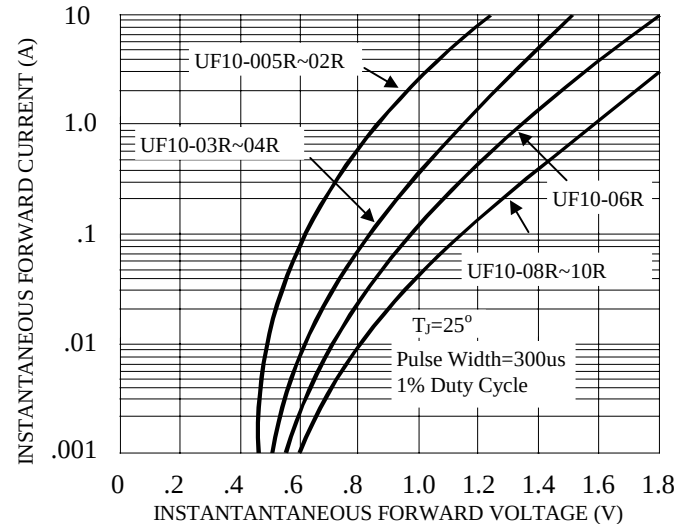


FIG. 5-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

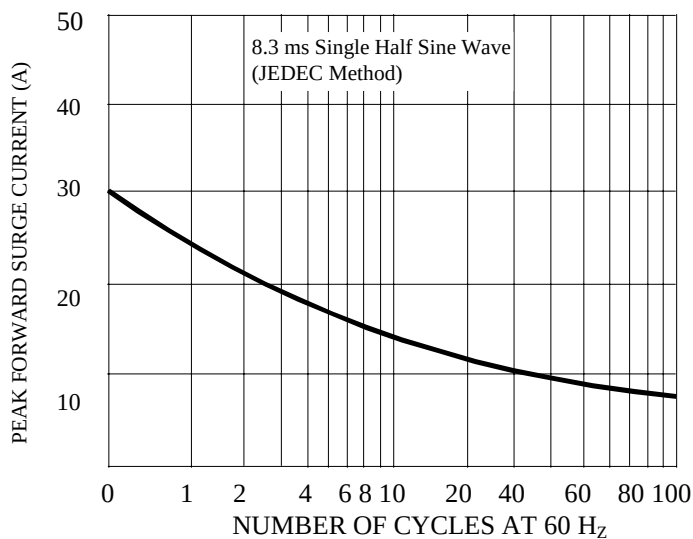


FIG. 6-TYPICAL JUNCTION CAPACITANCE

