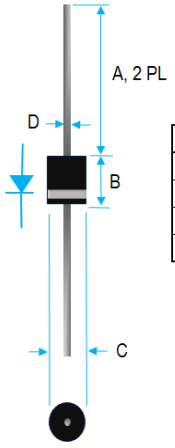
UF60-005 THRU UF60-10 SPECIFICATIONS

Rev. A

6A ULTRA FAST RECOVERY RECTIFIER



Dim.	Value In[mm] Min.	Max.
A	1.000[25.40]	---
B	0.340[8.64]	0.360[9.14]
C	0.340[8.64]	0.360[9.14]
D	0.048[1.22]	0.052[1.32]

PRODUCT FEATURES

1. FLAMMABILITY CLASSIFICATION: 94V-0
2. LOW LEAKAGE
3. LOW FORWARD VOLTAGE DROP
4. HIGH SURGE CURRENT CAPABILITY
5. ULTRA FAST SWITCHING
6. CASE: MOLDED PLASTIC, P600
7. POLARITY: INDICATED BY CATHODE BAND
8. WEIGHT: 2.1 GRAMS
9. LEADS: SOLDERABILITY PER MIL-STD-202 METHOD 208
10. PULLING TEST: 2.3 KG
11. RoHS

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS RATINGS AT 25°C AMBIENT TEMPERATURE UNLESS OTHERWISE SPECIFIED STORAGE AND OPERATING TEMPERATURE RANGE -55°C TO +150°C. SINGLE PHASE, HALF WAVE, 60 HZ, RESISTIVE OR INDUCTIVE LOAD. FOR CAPACITIVE LOAD, DERATE CURRENT BY 20%.

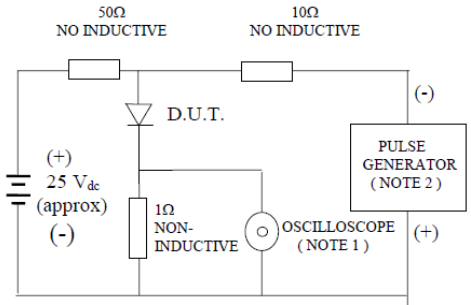
RATINGS	SYMBOL	VALUE	UNITS
MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT 0.375"(9.5mm) LEAD LENGTH @ TA=50°C	I_O	6	A
PEAK FWD SURGE CURRENT, 8.3ms HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	I_{FSM}	300	A
TYPICAL JUNCTION CAPACITANCE(NOTE1)	C_J	150	pF
TYPICAL THERMAL RESISTANCE (NOTE 2)	$R_{\theta ja}$	10	℃/W
MAXIMUM REVERSE CURRENT @ 25℃	I_R	25	uA
MAXIMUM REVERSE CURRENT @ 100 ℃	I_R	250	uA

1. C_j MEASURED @ 1 MHZ AND APPLIED REVERSE VOLTAGE OF 4.0 VOLTS
2. BOTH LEADS ATTACHED TO HEAT SINK 70x70x1T (mm) COPPER PLATE @ LEAD LENGTH 5mm
3. REVERSE RECOVERY TEST CONDITIONS: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A
4. MAXIMUM FORWARD VOLTAGE @ I_o DC

PART NUMBER	MAX RECURRENT PEAK REV VOLTAGE V_{RRM} (V)	MAX RMS VOLTAGE V_{RMS} (V)	MAX DC BLOCKING VOLTAGE V_{DC} (V)	MAX FWD VOLTAGE V_F (V)	MAX REVERSE RECOVERY TIME T_{RR} (nS)
UF60-005	50	35	50	1.3	50
UF60-01	100	70	100	1.3	50
UF60-02	200	140	200	1.3	50
UF60-04	400	280	400	1.4	50
UF60-06	600	420	600	1.7	75
UF60-08	800	560	800	2.0	75
UF60-10	1000	700	1000	2.0	75

RATING AND CHARACTERISTIC CURVES

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

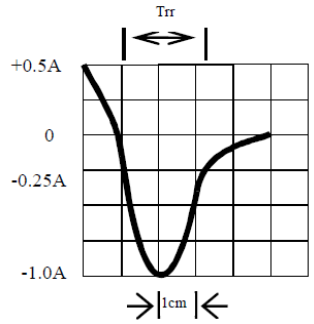


FIG. 2 -TYPICAL FORWARD CURRENT DERATING CURVE

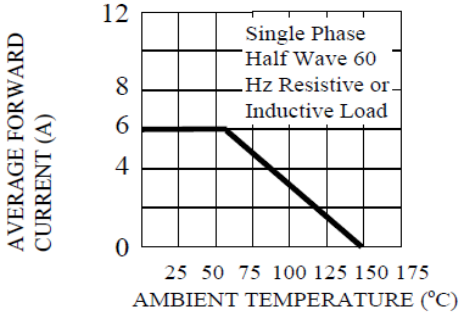


FIG. 3 -TYPICAL REVERSE CHARACTERISTICS

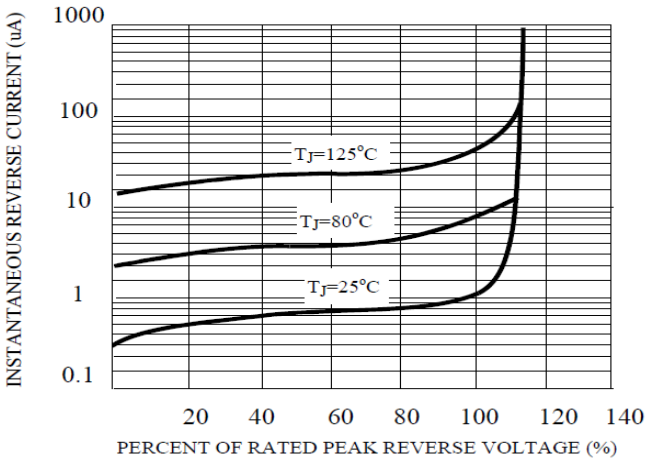


FIG. 4 -TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

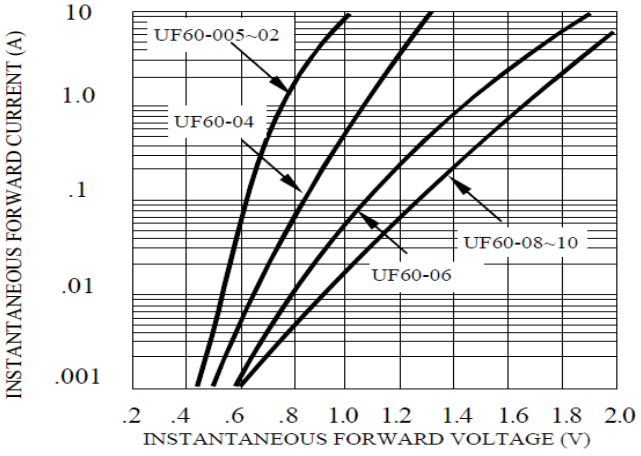


FIG. 5 -MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

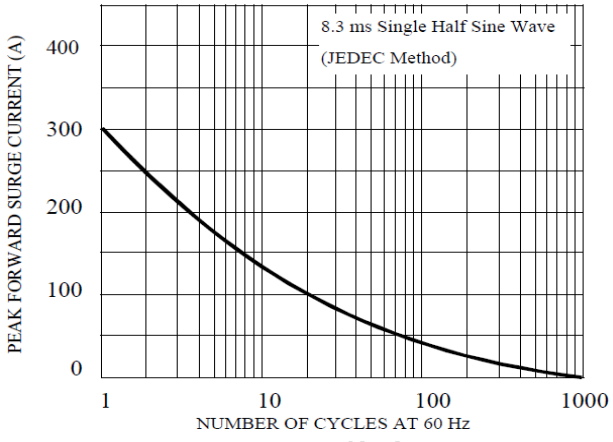


FIG. 6 -TYPICAL JUNCTION CAPACITANCE