MOSPEC

UFF08A60

Switchmode
Full Plastic Single Ultra-fast Power Rectifiers

Designed for use in switching power supplies. inverters and as free wheeling diodes. These state-of-the-art devices have the following features:

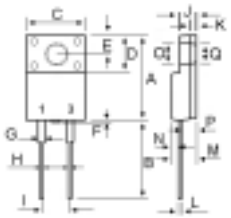
- ✳Low T_{RR}
- ✳High Surge Capacity
- ✳Low Power Loss, High efficiency
- ✳175℃ Operating Junction Temperature
- ✳Low Forward Voltage , High Frequency
- ✳High-Switching Speed 21(typ.) Nanosecond Recovery Time
- ✳Plastic Material used Carries Underwriters Laboratory

✳*In compliance with EU RoHs 2002/95/EC directives*

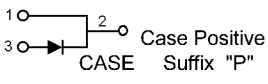
ULTRA FAST RECTIFIERS

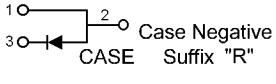
8 AMPERES
600 VOLTS

ITO-220AC



DIM	MILLIMETERS	
	MIN	MAX
A	15.05	15.15
B	13.35	13.45
C	10.00	10.10
D	6.55	6.65
E	2.65	2.75
F		1.00
G	1.15	1.25
H	0.55	0.65
I	4.80	5.20
J	3.00	3.20
K	1.10	1.20
L	0.55	0.65
M	4.40	4.60
N	1.15	1.25
O	3.35	3.45
P	2.65	2.75
Q	3.15	3.25





MAXIMUM RATINGS

Characteristic	Symbol	UFF08A60	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	600	V
RMS Reverse Voltage	$V_{R(RMS)}$	420	V
Average Rectifier Forward Current	$I_{F(AV)}$	8.0	A
Peak Repetitive Forward Current (Rate V_R, Square Wave, 20kHz,T_C=125℃)	I_{FM}	8.0	A
Non-Repetitive Peak Surge Current (Surge applied at rate load conditions half-wave, single phase, 60Hz)	I_{FSM}	150	A
Operating and Storage Junction Temperature Range	T_J , T_{stg}	-65 to +175	℃

THERMAL RESISTANCES

Typical Thermal Resistance junction to case	$R_{\theta jc}$	4.2	℃/w

ELECTRIAL CHARACTERISTICS

Characteristic	Symbol	Min	Type	Max.	Unit
Maximum Instantaneous Forward Voltage (I_F =8 Amp T_C = 25℃)	V_F	--	1.85	2.2	V
Maximum Instantaneous Reverse Current (Rated DC Voltage, T_C = 25℃) (Rated DC Voltage, T_C = 100℃)	I_R	-- --	-- --	25 5	uA mA
Reverse Recovery Time (I_F = 0.5 A, I_R =1.0 , I_{rr} =0.25 A)	T_{rr}	--	18	25	ns

UFF08A60

FIG-1 TYPICAL FORWARD CHARACTERISITICS

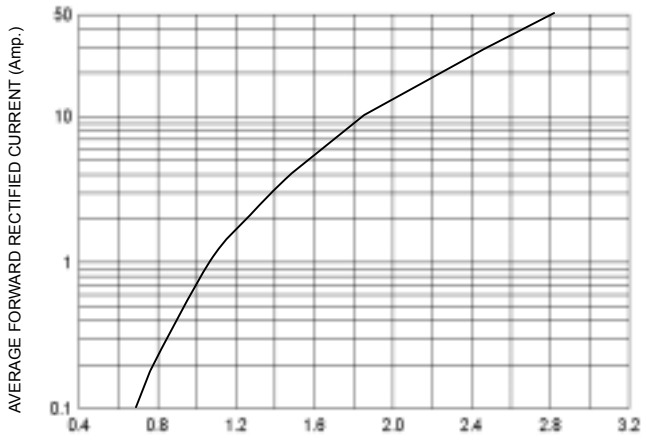


FIG-2 FORWARD CURRENT DERATING CURVE

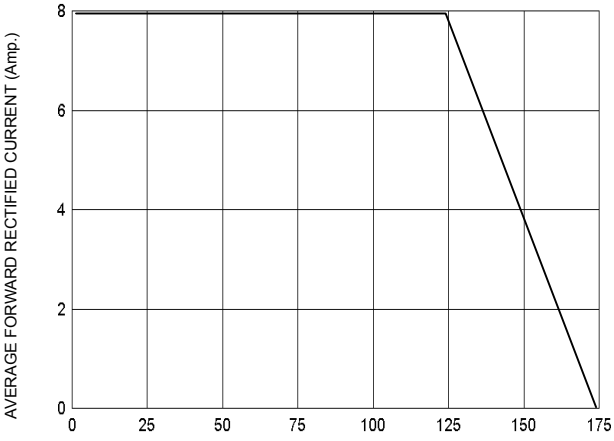


FIG-3 TYPICAL REVERSE CHARACTERISTICS

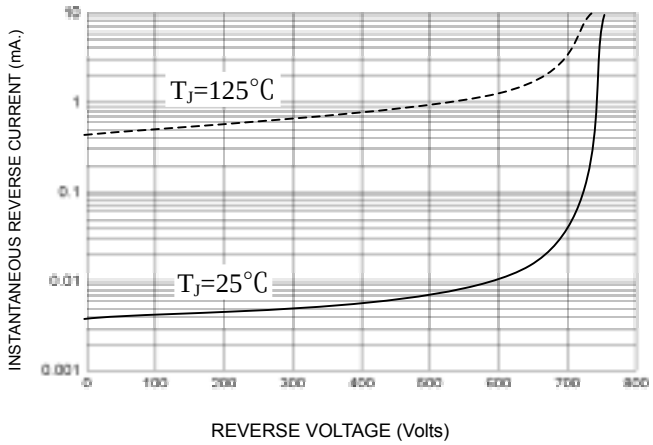
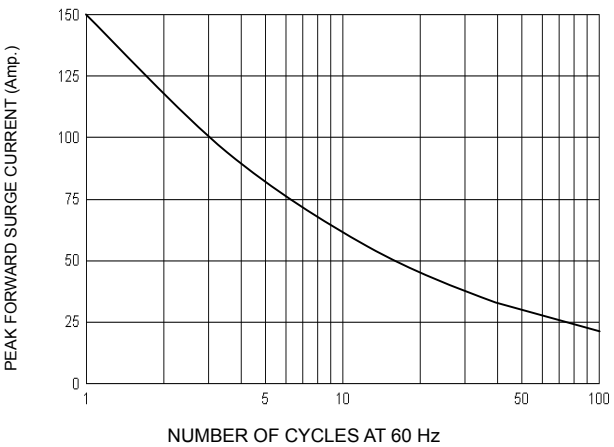
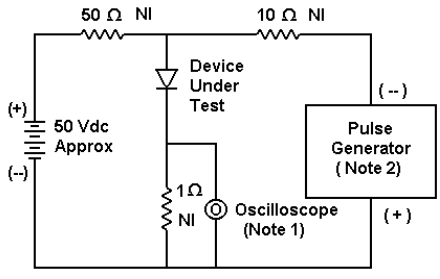
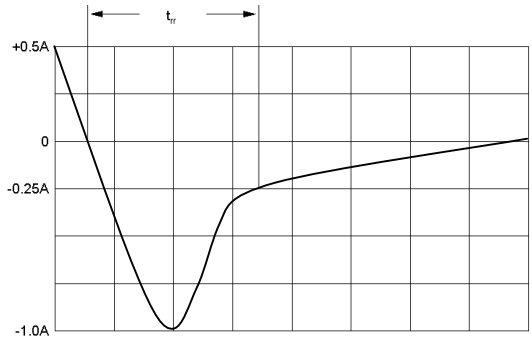


FIG-4PEAK FORWARD SURGE CURRENT





Notes:
1. Rise Time = 7 ns max. Input Impedance =1 M Ω , 22 pF
2. Rise Time = 10 ns max. Input Impedance = 50 Ω



Set time base for 10/20 ns/cm

FIG-6 Reverse Recovery Time Characteristic and Test Circuit Diagram

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