MOSPEC

UA60D60

Switch mode
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

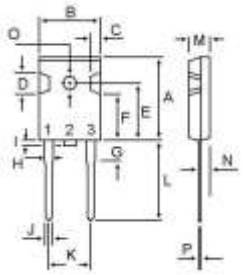
Features

- ＊High Surge Capacity
- ＊Low Power Loss, High efficiency
- ＊175℃ Operating Junction Temperature
- ＊Low Stored Charge Majority Carrier Conduction
- ＊Low Forward Voltage , High Current Capability
- ＊High-Switching Speed 50 Nanosecond recovery Time
- ＊Plastic Material used Carries Underwriters Laboratory Flammability Classification 94V-O
- ＊Pb free
- ＊In compliance with EU RoHs directives

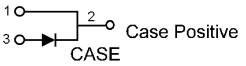
ULTRA FAST RECTIFIERS

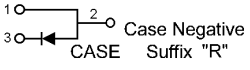
60 AMPERES
600 VOLTS

TO-3PA



DIM	MILLIMETERS	
	MIN	MAX
A	20.80	21.80
B	15.38	16.20
C	1.90	2.70
D	5.10	6.10
E	14.50	15.50
F	11.20	13.20
G	3.75	4.35
H	1.90	2.30
I	---	1.25
J	1.00	1.40
K	10.52	11.32
L	19.50	20.50
M	4.68	5.36
N	2.30	2.60
O	3.45	3.85
P	0.48	0.72





MAXIMUM RATINGS

Characteristic	Symbol	UA60D60	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	$I_{F(AV)}$	60	A
Peak Repetitive Forward Current (Rate V_R, Square Wave, 20kHz)	I_{FM}	60	A
Non-Repetitive Peak Surge Current (Surge applied at rate load conditions half-ware, single phase, 60Hz)	I_{FSM}	600	A
Operating and Storage Junction Temperature Range	T_J , T_{stg}	-55 to +175	℃

ELECTRICAL CHARACTERISTICS

Characteristic	Symbol	Min.	Typ.	Max.	Unit
Maximum Instantaneous Forward Voltage (I_F =60 Amp T_C = 25℃) (I_F =60 Amp T_C =125℃)	V_F	--- ---	1.25 1.15	1.45	V
Maximum Instantaneous Reverse Current (Rated DC Voltage, T_C = 25℃)	I_R			10	uA
Reverse Recovery Time (I_F = 0.5 A, I_R =1.0 A , I_{rr} =0.25 A) (I_F = 1.0 A, V_R =30 V , di/dt =-200A/us)	T_{rr}	---	75 50	85	ns