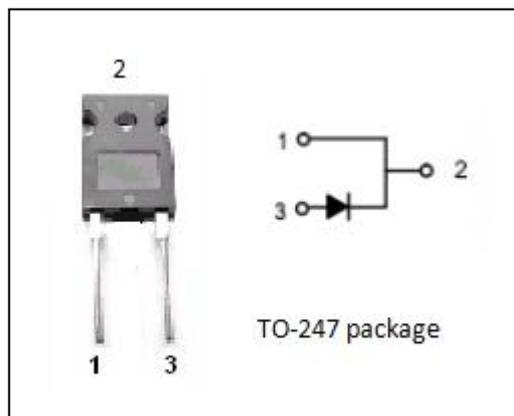


Ultrafast Rectifier
DPG60I300HA
FEATURES

- Guarding for over voltage protection
- Low Loss and Soft Recovery
- High Performance Fast Recovery Diode
- Single Diode
- Minimum Lot-to-Lot variations for robust device performance and reliable operation


APPLICATIONS

- These devices are ideally suited for HF welding, power converters and other applications where switching losses are not significant portion of the total losses.

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _R RM V _R WM V _R	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	300	V
I _{F(AV)}	Average Rectified Forward Current @T _c =130°C	60	A
I _{FSM}	Non-repetitive Peak Surge Current t=10ms;(50Hz);sine;TC=45°C;	550	A
T _J	Max.Junction Temperature	175	°C
T _{stg}	Storage Temperature Range	-55~175	°C

ELECTRICAL CHARACTERISTICS($T_a=25^{\circ}\text{C}$) (Pulse Test: Pulse Width=300 μ s, Duty Cycle \leq 2%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum Instantaneous Forward Voltage	$I_F=60\text{A}; T_j=25^{\circ}\text{C}$ $I_F=120\text{A}; T_j=25^{\circ}\text{C}$ $I_F=60\text{A}; T_j=175^{\circ}\text{C}$ $I_F=120\text{A}; T_j=175^{\circ}\text{C}$	1.40 1.72 1.10 1.45	V
I_R	Maximum Instantaneous Reverse Current	$V_R=V_R \text{ Rated}; T_j=25^{\circ}\text{C}$ $V_R=V_R \text{ Rated}; T_j=150^{\circ}\text{C}$	1 0.35	μ A mA
t_{rr}	Maximum Reverse Recovery Time	$I_F=60\text{A}; V_R=150\text{V};$ $di/dt=200\text{A}/\mu\text{s}$	35	ns

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