

Fast Recovery Rectifier
FFH60UP60S
FEATURES

- Guarding for over voltage protection
- Dual rectifier construction, positive center tap
- Metal of silicon rectifier, majority carrier conduction
- Low forward voltage, high efficiency
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

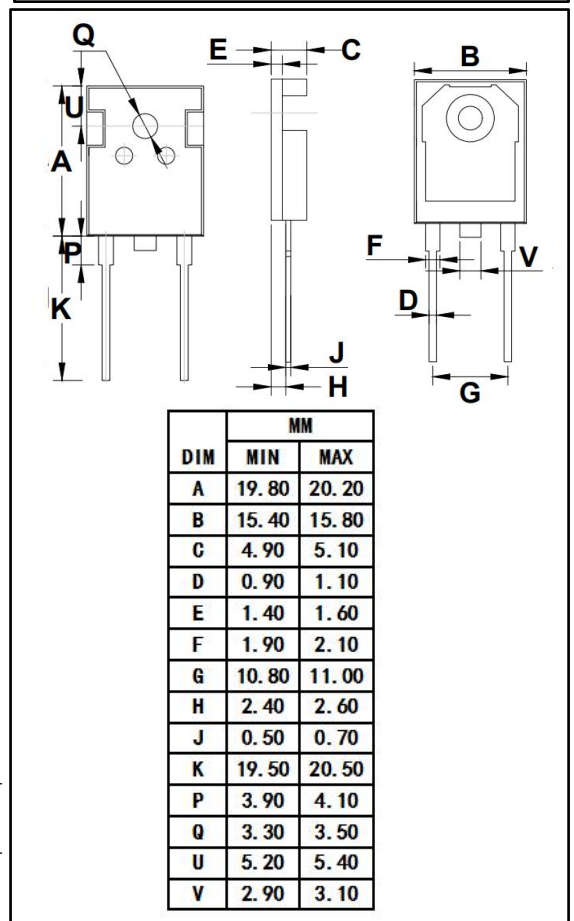
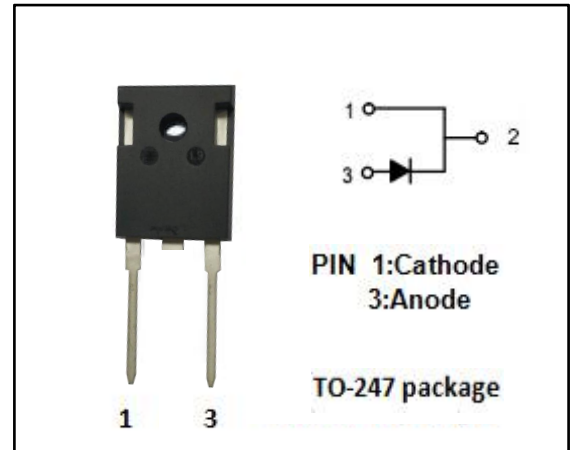
- Uninterruptible power supplies
- Rectifier in switch mode power supplies
- Ultrasonic cleaners and welders

ABSOLUTE MAXIMUM RATINGS (T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{RRM} V _{RWM} V _R	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	600	V
I _{F(AV)}	Average Rectified Forward Current	60	A
I _{FSM}	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 60Hz)	300	A
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature Range	-65~150	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	0.4	°C/W



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

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum Instantaneous Forward Voltage	$I_F=60\text{A}; T_j=25^\circ\text{C}$	1.7	V
		$I_F=60\text{A}; T_j=125^\circ\text{C}$	1.5	V
I_R	Maximum Instantaneous Reverse Current	$V_R=V_{RWM}; T_j=25^\circ\text{C}$	100	μA
		$V_R=V_{RWM}; T_j=125^\circ\text{C}$	500	μA
t_{rr}	Maximum Reverse Recovery Time [Ⓜ]	$I_F=1.0\text{A}; T_j=25^\circ\text{C}$	80	ns

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