

Ultra-fast Rectifier

RHRP1560

FEATURES

- Super fast switching for high efficiency.
- Low reverse leakage.
- High forward surge current capability.
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

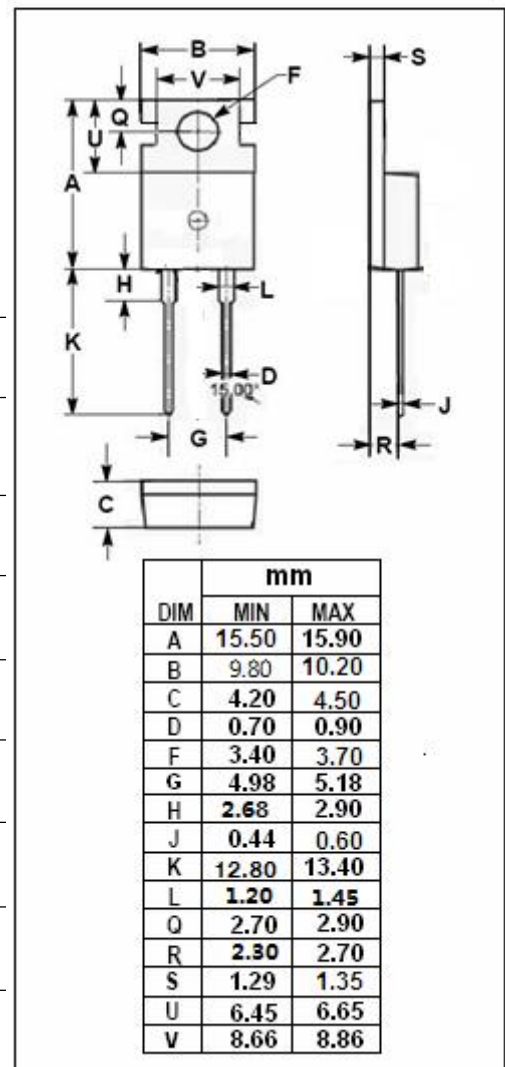
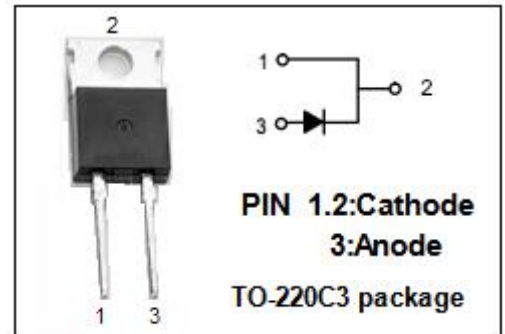
- Switching power supply
- Rectifier in switch mode supplies

ABSOLUTE MAXIMUM RATINGS($T_a=25^{\circ}\text{C}$)

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	15	A
I _{FSM}	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 60Hz)	200	A
T _J	Junction Temperature	-40~175	°C
T _{stg}	Storage Temperature Range	-40~175	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	1.5	°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	$I_F = 15\text{A}; T_j = 25^{\circ}\text{C}$ $I_F = 15\text{A}; T_j = 150^{\circ}\text{C}$	2.1 1.7	V
I_R^*	Maximum Instantaneous Reverse Current	$V_R = V_{RWM}; T_j = 25^{\circ}\text{C}$ $V_R = V_{RWM}; T_j = 150^{\circ}\text{C}$	100 500	μA
t_{rr}	Maximum Reverse Recovery Time	$I_F = 1\text{A};$	35	ns

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