

Ultrafast Rectifier

HFA15TB60

FEATURES

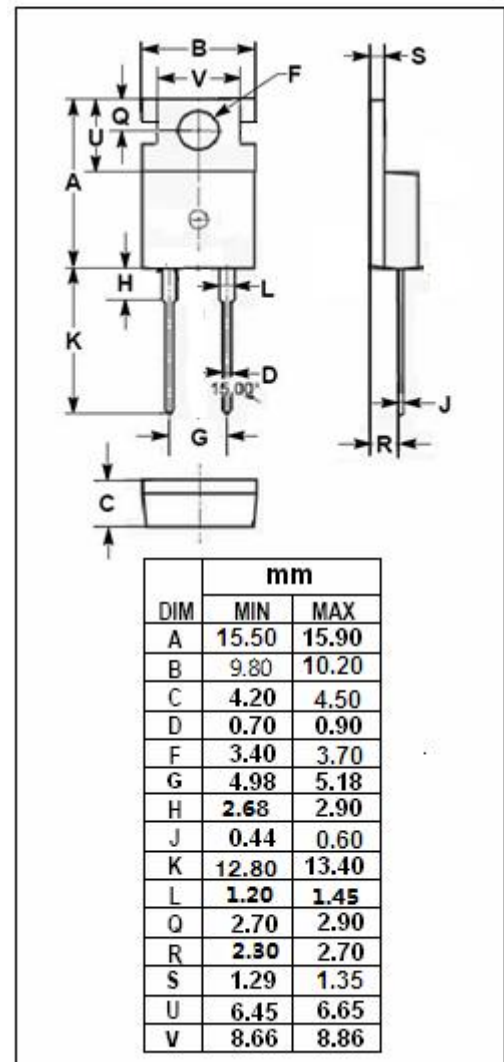
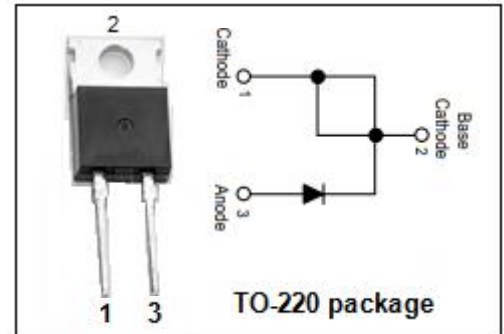
- Ultrafast Recovery
- Ultrasoft Recovery
- Very Low I_{RRM}
- Specified at Operating Conditions
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Reduced Power Loss in Diode and Switching
- Rectifier in switch mode supplies

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

SYMBOL	PARAMETER	VALUE	UNIT
V_R	Cathode-to-Anode Voltage	600	V
$I_{F(AV)}$	Average Rectified Forward Current($T_C=100^\circ\text{C}$)	15	A
I_{FSM}	Single Pulse Forward Current	150	A
P_D	Maximum power dissipation	74	W
T_J	Junction Temperature	-55~150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



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THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	1.7	°C/W

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

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_{FM}	Maximum Forward Voltage	$I_F=15\text{A}; T_j=25^{\circ}\text{C}$ $I_F=30\text{A}; T_j=25^{\circ}\text{C}$ $I_F=15\text{A}; T_j=125^{\circ}\text{C}$	1.7 2.0 1.6	V
I_{RM}	Maximum Reverse Leakage Current	$V_R=V_{R\text{ Rated}}; T_j=25^{\circ}\text{C}$ $V_R=0.8V_{R\text{ Rated}}; T_j=125^{\circ}\text{C}$	10 1000	μA

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