

## Ultrafast Rectifier

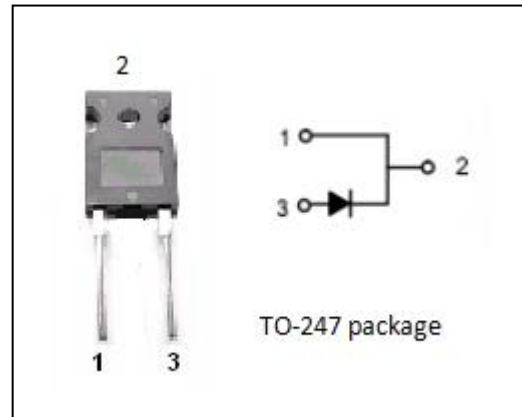
## HFA15PB60

## FEATURES

- Guarding for over voltage protection
- Very Low IRRM
- Specified at Operating Conditions
- 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( $T_a=25^\circ\text{C}$ )

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 @ $T_c=100^\circ\text{C}$	15	A
$I_{FSM}$	Single pulse forward current Maximum repetitive forward current	150 60	A
$T_J$	Max.Junction Temperature	-55~150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature Range	-55~150	$^\circ\text{C}$

**ELECTRICAL CHARACTERISTICS**( $T_a=25^{\circ}\text{C}$ )

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
$V_F$	Maximum Instantaneous Forward Voltage	$I_F=15\text{A}; T_j=25^{\circ}\text{C}$ $I_F=15\text{A}; T_j=125^{\circ}\text{C}$ $I_F=30\text{A}; T_j=25^{\circ}\text{C}$	1.7 1.6 2.0	V
$I_R$	Maximum Instantaneous Reverse Current	$V_R=V_R \text{ Rated}; T_j=25^{\circ}\text{C}$ $V_R=0.8 \cdot V_R \text{ Rated}; T_j=125^{\circ}\text{C}$	10 1	$\mu\text{A}$ mA
$t_{rr}$	Maximum Reverse Recovery Time	$I_F=15\text{A}; V_R=30\text{V}; dI_F/dt=200\text{A}/\mu\text{s};$	60	ns

**NOTICE:**

ISC reserves the rights to make changes of the content herein the datasheet at any time without notification. The information contained herein is presented only as a guide for the applications of our products.

ISC products are intended for usage in general electronic equipment. The products are not designed for use in equipment which require specialized quality and/or reliability, or in equipment which could have applications in hazardous environments, aerospace industry, or medical field. Please contact us if you intend our products to be used in these special applications.

ISC makes no warranty or guarantee regarding the suitability of its products for any particular purpose, nor does ISC assume any liability arising from the application or use of any products, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages.