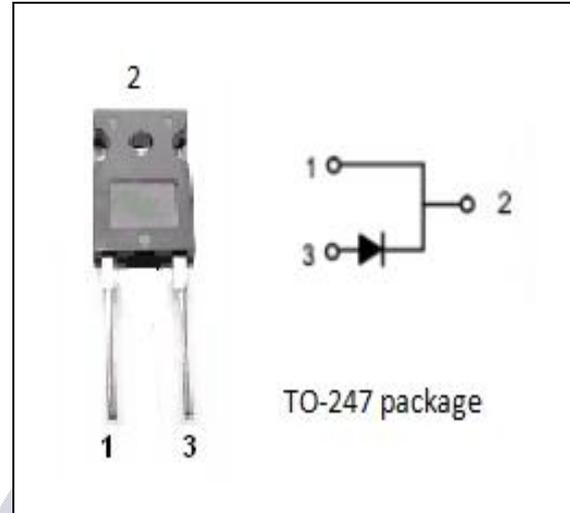


**Ultra fast Rectifier**
**RHRG75120**
**FEATURES**

- With TO-247 packaging
- High performance fast recovery diode
- Low loss and soft recovery
- Low forward voltage drop
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Switching power supply
- Power switching circuits
- General purpose


**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	1200	V
$I_{F(AV)}$	Average Rectified Forward Current @ $T_c=42^{\circ}\text{C}$	150	A
$I_{FSM}$	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase)	60HZ 500	A
$P_D$	Total Dissipation @ $T_c=25^{\circ}\text{C}$	190	W
$T_J$	Junction Temperature	-65~175	$^{\circ}\text{C}$
$T_{stg}$	Storage Temperature Range	-65~175	$^{\circ}\text{C}$

## Ultra fast Rectifier

## RHRG75120

## THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	0.8	$^{\circ}C/W$

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

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
$V_F$	Maximum Instantaneous Forward Voltage	$I_F=75A ; T_j=25^{\circ}C$ $I_F=75A ; T_j=150^{\circ}C$	3.2 2.6	V
$I_R$	Maximum Instantaneous Reverse Current	$V_R=V_{RWM}; T_j=25^{\circ}C$ $V_R=V_{RWM}; T_j=150^{\circ}C$	0.25 2	mA
$t_{rr}$	Maximum Reverse Recovery Time	$I_F = 1A; diF/dt = -100A/\mu s; V_R = 30V$	85	ns

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