

150A, 600V Hyperfast Diode

The RHRU15060 is a hyperfast diode with soft recovery characteristics ($t_{rr} < 60\text{ns}$). It has half the recovery time of ultrafast diodes and is of silicon nitride passivated ion-implanted epitaxial planar construction.

This device is intended for use as a freewheeling/clamping diode and rectifier in a variety of switching power supplies and other power switching applications. Its low stored charge and hyperfast soft recovery minimize ringing and electrical noise in many power switching circuits, thus reducing power loss in the switching transistors.

Formerly developmental type TA49071.

Ordering Information

PART NUMBER	PACKAGE	BRAND
RHRU15060	TO-218	RHRU15060

NOTE: When ordering, use the entire part number.

Symbol



Features

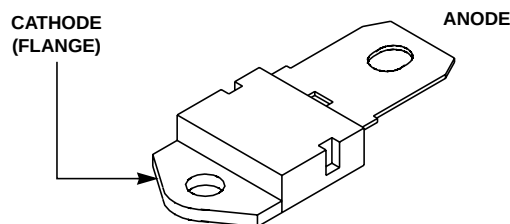
- Hyperfast with Soft Recovery <60ns
- Operating Temperature 175°C
- Reverse Voltage 600V
- Avalanche Energy Rated
- Planar Construction

Applications

- Switching Power Supplies
- Power Switching Circuits
- General Purpose

Packaging

JEDEC STYLE TO-218



Absolute Maximum Ratings $T_C = 25^\circ\text{C}$

	RHRU15060	UNITS
Peak Repetitive Reverse Voltage V_{RRM}	600	V
Working Peak Reverse Voltage V_{RWM}	600	V
DC Blocking Voltage V_R	600	V
Average Rectified Forward Current $I_F(AV)$ ($T_C = 72^\circ\text{C}$)	150	A
Repetitive Peak Surge Current I_{FRM} (Square Wave, 20kHz)	300	A
Nonrepetitive Peak Surge Current I_{FSM} (Halfwave, 1 Phase, 60Hz)	1500	A
Maximum Power Dissipation P_D	375	W
Avalanche Energy (See Figures 7 and 8) E_{AVL}	50	mJ
Operating and Storage Temperature T_{STG}, T_J	-65 to 175	°C