

# RJU6054WDPQ-A0

600V - 30A - Dual Diode  
Ultra Fast Recovery Diode

R07DS1274EJ0100

Rev.1.00

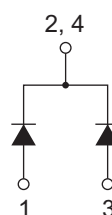
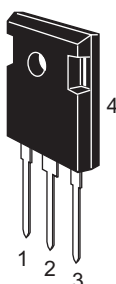
May 29, 2015

## Features

- Ultra fast reverse recovery time:  $t_{rr} = 25$  ns typ. (at  $I_F = 30$  A,  $di/dt = 100$  A/ $\mu$ s) Per Leg
- Low forward voltage:  $V_F = 2.5$  V typ. (at  $I_F = 30$  A) Per Leg
- Low reverse current:  $I_R = 50$   $\mu$ A max. (at  $V_R = 600$  V) Per Device

## Outline

RENESAS Package code: PRSS0003ZH-A  
(Package name: TO-247A)



1. Anode
2. Cathode
3. Anode
4. Cathode

## Absolute Maximum Ratings

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

Item	Symbol	Ratings	Unit
Maximum reverse voltage	$V_{RM}$	600	V
Continuous forward current	$T_C = 25^\circ\text{C}$	$I_F$ Note1	30/60
	$T_C = 100^\circ\text{C}$	$I_F$ Note1	15/30
Peak surge forward current	$I_{FSM}$ Note1	120/240	A
Junction to case thermal resistance	$\theta_{j-cd}$	1.1	$^\circ\text{C}/\text{W}$
Junction temperature	$T_j$	150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$

Notes: 1. Per leg/device

## Electrical Characteristics

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

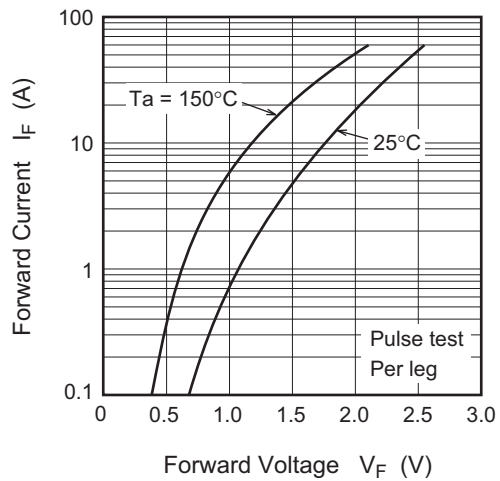
Item	Symbol	Min	Typ	Max	Unit	Test conditions
Forward voltage	$V_F$ Note2	—	2.5	3.0	V	$I_F = 30$ A
Reverse current	$I_R$ Note3	—	—	50	$\mu\text{A}$	$V_R = 600$ V
Reverse recovery time	$t_{rr}$ Note2	—	25	—	ns	$I_F = 30$ A, $di/dt = 100$ A/ $\mu$ s

Notes: 2. Per leg

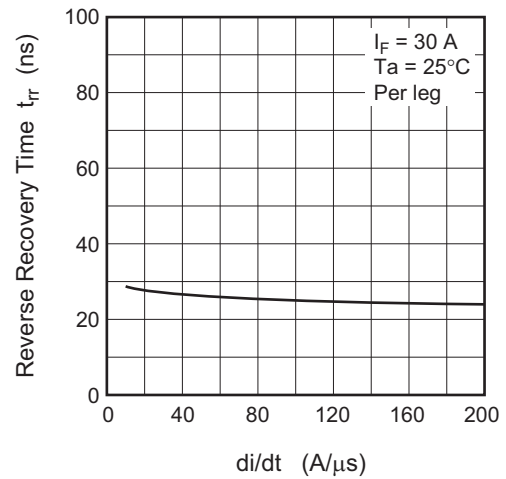
3. Per device

## Main Characteristics

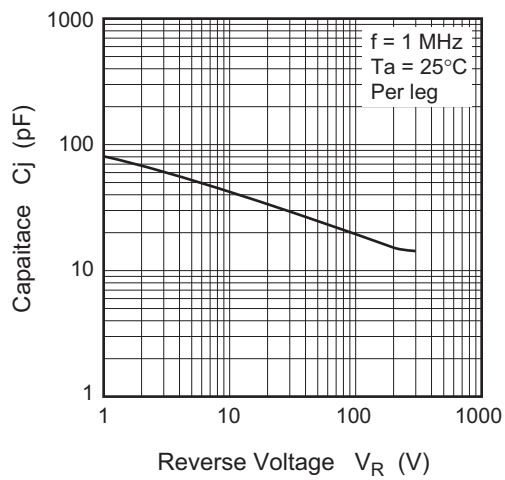
Forward Current vs. Forward Voltage (Typical)



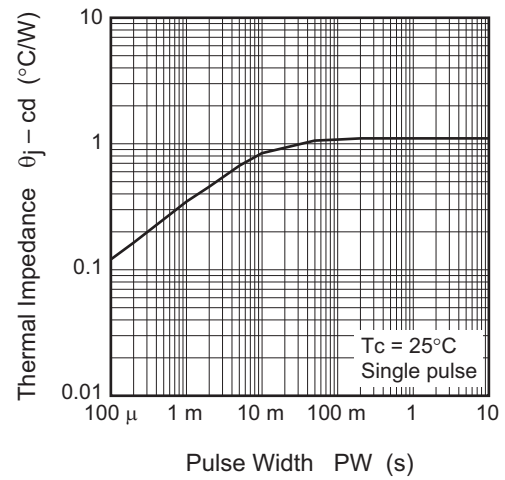
Reverse Recovery Time vs.  $di/dt$



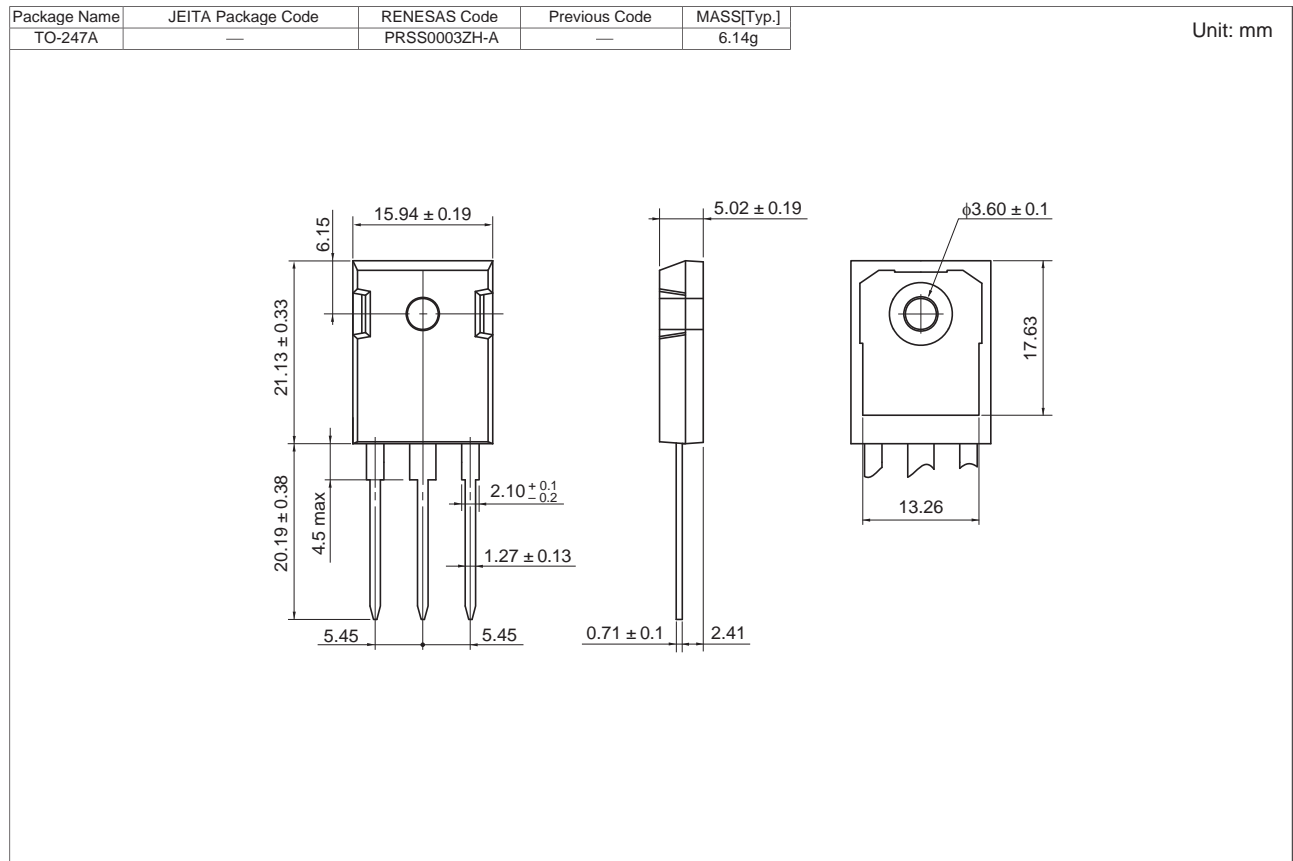
Capacitance vs. Reverse Voltage (Typical)



Thermal Impedance vs. Pulse Width



## Package Dimensions



## Ordering Information

Orderable Part No.	Quantity	Shipping Container
RJU6054WDPQ-A0#T2	240 pcs	BOX(Tube)

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