

# RJU6053WDPP-M0

600V – 20A - Dual Diode  
Ultra Fast Recovery Diode

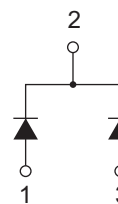
R07DS1273EJ0100  
Rev.1.00  
Jun 16, 2015

## Features

- Ultra fast reverse recovery time:  $t_{rr} = 25$  ns typ. (at  $I_F = 20$  A,  $di/dt = 100$  A/ $\mu$ s) Per Leg
- Low forward voltage:  $V_F = 2.5$  V typ. (at  $I_F = 20$  A) Per Leg
- Low reverse current:  $I_R = 1$   $\mu$ A max. (at  $V_R = 600$  V) Per Leg

## Outline

RENESAS Package code: PRSS0003AF-A  
(Package name: TO-220FL)



1. Anode
2. Cathode
3. Anode

## Absolute Maximum Ratings

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

Item	Symbol	Ratings	Unit	
Maximum reverse voltage	$V_{RM}$	600	V	
Continuous forward current	$I_F$ <sup>Note1</sup>	$T_C = 25^\circ\text{C}$	20/40	A
		$T_C = 100^\circ\text{C}$	10/20	A
Peak surge forward current	$I_{FSM}$ <sup>Note1</sup>	60/120	A	
Junction to case thermal resistance	$\theta_{j-cd}$ <sup>Note3</sup>	3.7	$^\circ\text{C}/\text{W}$	
Junction temperature	$T_j$	150	$^\circ\text{C}$	
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$	

Notes: 1. Per leg/device  
3. device

## Electrical Characteristics

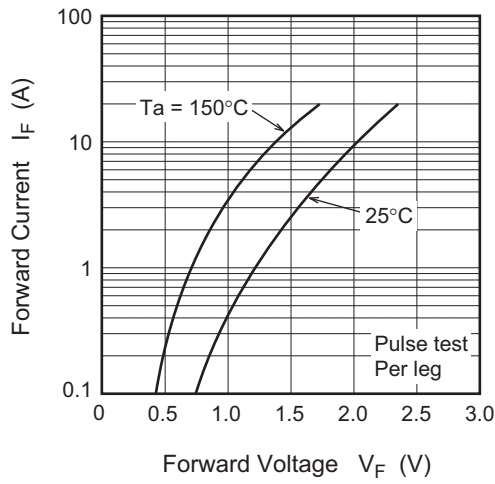
( $T_a = 25^\circ\text{C}$ )

Item	Symbol	Min	Typ	Max	Unit	Test conditions
Forward Voltage	$V_F$ <sup>Note2</sup>	—	2.5	3.0	V	$I_F = 20$ A
Reverse current	$I_R$ <sup>Note1</sup>	—	—	1/2	$\mu\text{A}$	$V_R = 600$ V
Reverse Recovery Time	$t_{rr}$ <sup>Note2</sup>	—	25	—	ns	$I_F = 20$ A, $di/dt = 100$ A/ $\mu$ s

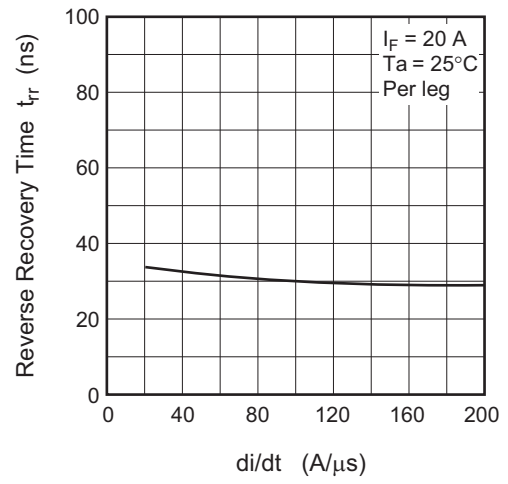
Notes: 1. Per leg/device  
2. Per leg

Main Characteristics

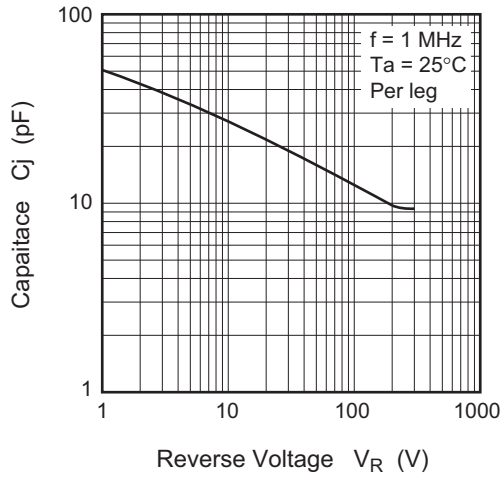
Forward Current vs. Forward Voltage (Typical)



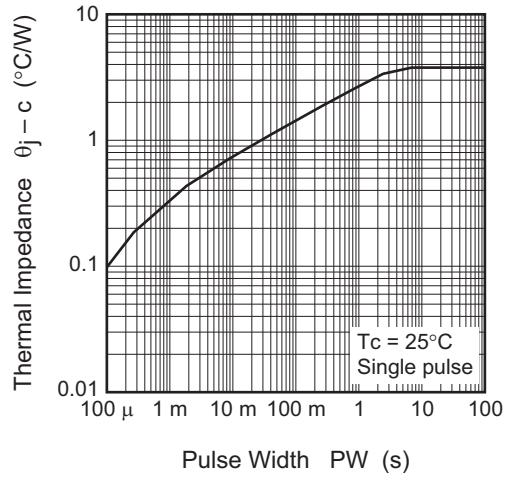
Reverse Recovery Time vs. di/dt (Typical)



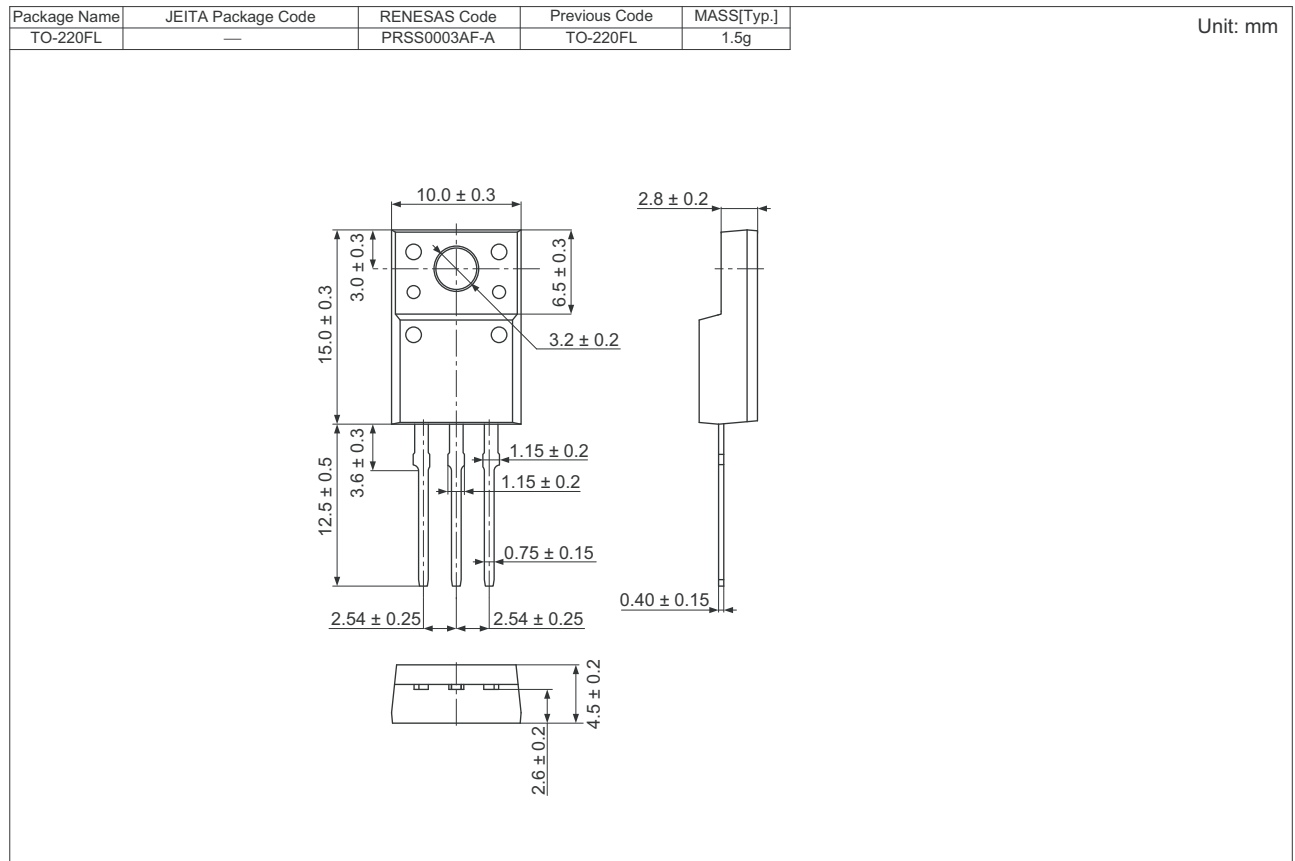
Capacitance vs. Reverse Voltage (Typical)



Thermal Impedance vs. Pulse Width



### Package Dimensions



### Ordering Information

Orderable Part Number	Quantity	Shipping Container
RJU6053WDPP-M0#T2	600 pcs	Box (Tube)

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