

RJU60C3SDPD

600V - 30A - Single Diode
Fast Recovery Diode

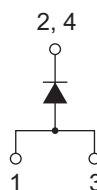
R07DS0375EJ0200
Rev.2.00
Nov 07, 2012

Features

- Fast reverse recovery time: $t_{rr} = 90$ ns typ. (at $I_F = 10$ A, $di/dt = 100$ A/ μ s)
- Low forward voltage: $V_F = 1.4$ V typ. (at $I_F = 30$ A)
- Low reverse current: $I_R = 1$ μ A max. (at $V_R = 600$ V)

Outline

RENESAS Package code: PRSS0004ZJ-A
(Package name : TO-252)



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
Average rectified forward current		I_o	10	A
Continuous forward current	Tc = 25°C	I_F	30	A
	Tc = 100°C	I_F	15	A
Peak surge forward current		I_{FSM}	80	A
Junction to case thermal resistance		θ_j -cd	3.0	°C/W
Junction temperature		T_j	150	°C
Storage temperature		T_{stg}	−55 to +150	°C

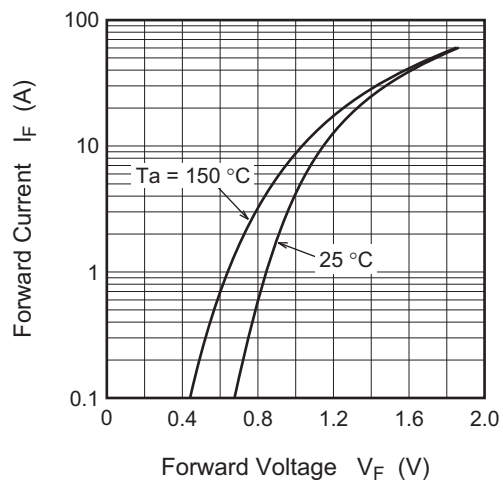
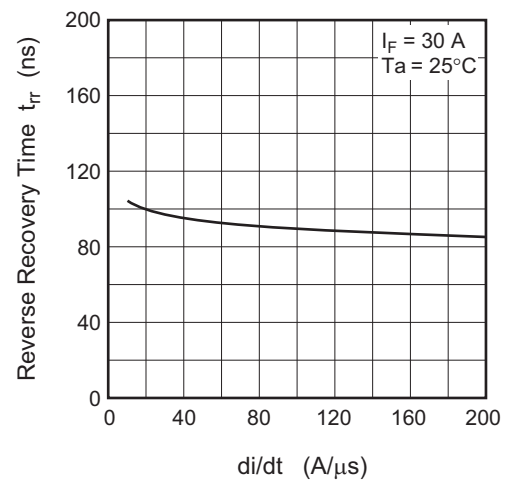
Electrical Characteristics

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

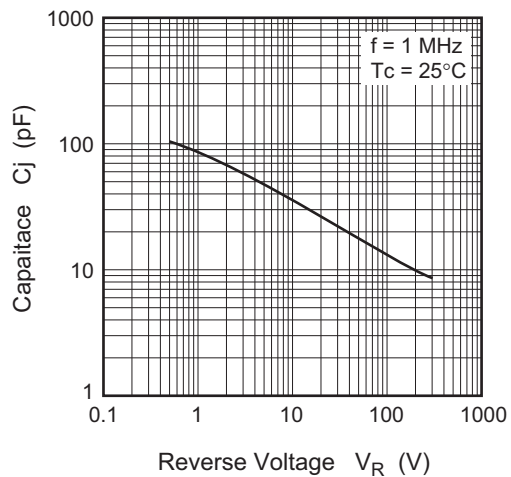
Item	Symbol	Min	Typ	Max	Unit	Test conditions
Forward Voltage	V_F	—	1.4	2.1	V	$I_F = 30$ A
Reverse current	I_R	—	—	1	μ A	$V_R = 600$ V
Reverse Recovery Time	t_{rr}	—	90	—	ns	$I_F = 10$ A, $di/dt = 100$ A/ μ s

Main Characteristics

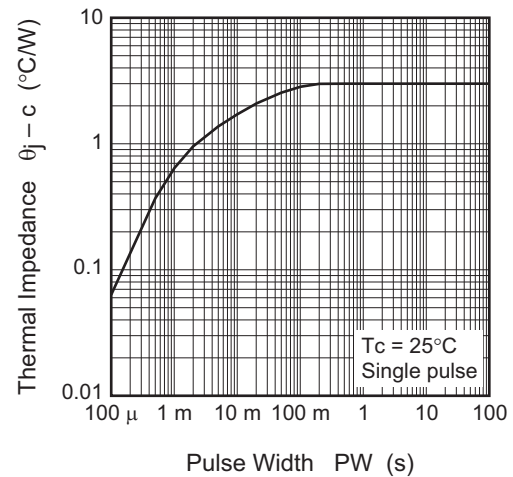
Forward Current vs. Forward Voltage (Typical)

Reverse Recovery Time vs. di/dt (Typical)

Capacitance vs. Reverse Voltage (Typical)



Thermal Impedance vs. Pulse Width



Package Dimensions

Package Name	JEITA Package Code	RENESAS Code	Previous Code	MASS[Typ.]	Unit: mm
TO-252	—	PRSS0004ZJ-A	—	0.319g	

Technical drawing of the RJU60C3SDPD package showing top, side, and bottom views with dimensions in mm:

- Top View:**
 - Overall width: 6.5 ± 0.3
 - Inner width: (5.6 ± 0.5)
 - Pin pitch: 2.29 ± 0.5
 - Pin width: 0.8 ± 0.1
 - Pin spacing: 0.29 ± 0.5
 - Pin height: 1.2 Max
- Side View:**
 - Overall height: 1.5 ± 0.5
 - Base height: 5.5 ± 0.5
 - Pin height: 2.5 ± 0.5
 - Pin width: 0.25 Max
 - Pin spacing: 0.55 ± 0.1
- Bottom View:**
 - Overall width: 5.1
 - Pin width: 0.55 ± 0.1

Ordering Information

Orderable Part Number	Quantity	Shipping Container
RJU60C3SDPD-E0#J2	3000 pcs	Taping

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