

RJU6052SDPD

Single Diode
Ultra Fast Recovery Diode

R07DS0379EJ0100

Rev.1.00

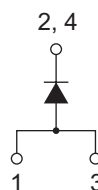
Apr 26, 2011

Features

- Ultra fast reverse recovery time: $t_{rr} = 25 \text{ ns typ.}$ (at $I_F = 10 \text{ A}$, $di/dt = -100 \text{ A}/\mu\text{s}$)
- Low forward voltage: $V_F = 2.5 \text{ V typ.}$ (at $I_F = 10 \text{ A}$)
- Low reverse current: $I_R = 1 \mu\text{A max.}$ (at $V_R = 600 \text{ V}$)

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
Continuous forward current	$T_c = 25^\circ\text{C}$	I_F	10
	$T_c = 100^\circ\text{C}$	I_F	5
Peak surge forward current	I_{FSM}	30	A
Junction to case thermal resistance	θ_{j-cd}	2.45	$^\circ\text{C}/\text{W}$
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

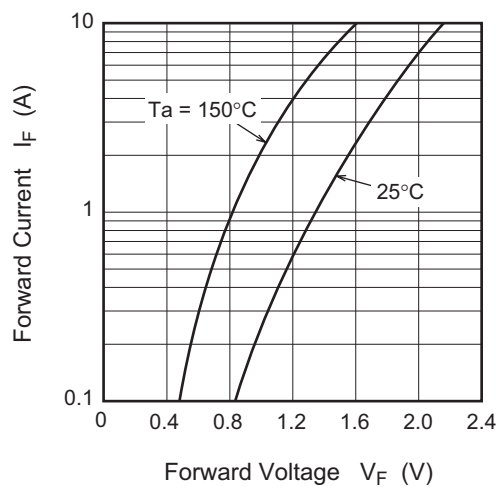
Electrical Characteristics

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

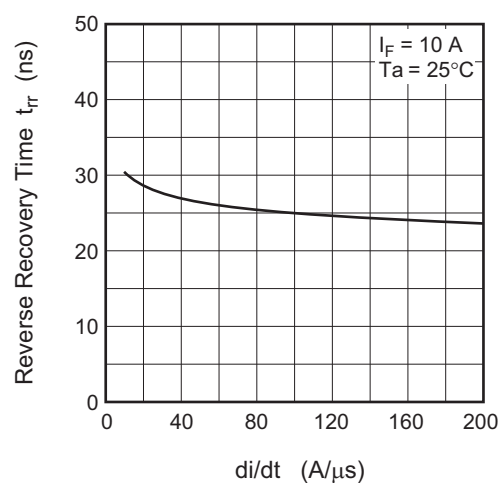
Item	Symbol	Min	Typ	Max	Unit	Test conditions
Forward Voltage	V_F	—	2.5	3.0	V	$I_F = 10 \text{ A}$
Reverse current	I_R	—	—	1	μA	$V_R = 600 \text{ V}$
Reverse Recovery Time	t_{rr}	—	25	—	ns	$I_F = 10 \text{ A}$, $di/dt = -100 \text{ A}/\mu\text{s}$

Main Characteristics

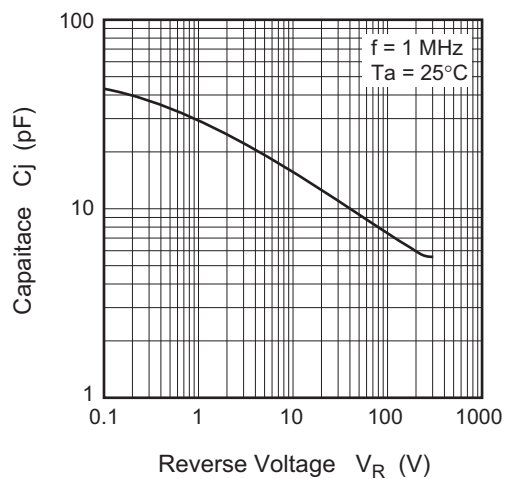
Forward Current vs. Forward Voltage (Typical)



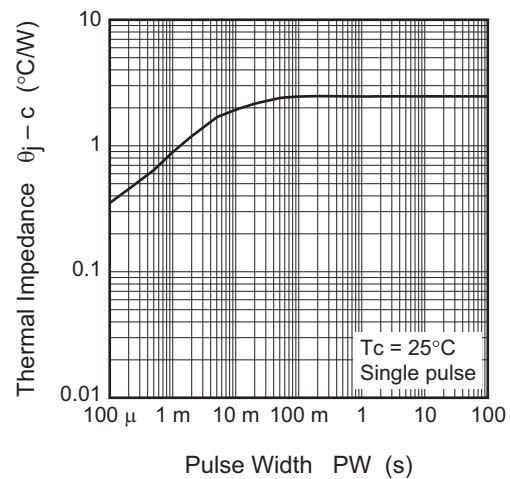
Reverse Recovery Time vs. di/dt



Capacitance vs. Reverse Voltage (Typical)



Thermal Impedance vs. Pulse Width



Package Dimension

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

The drawing shows the mechanical dimensions of the RJU6052SDPD package in millimeters. The top view shows a square body with a width of 6.5 ± 0.3 mm and a height of 5.5 ± 0.5 mm. The distance between the mounting pins is 2.29 ± 0.5 mm. The side view shows a maximum height of 1.2 mm for the mounting pins and a maximum width of 0.25 mm for the base. The bottom view shows a square body with a width of 5.1 mm and a height of 5.1 mm. The distance between the mounting pins is 2.29 ± 0.5 mm. The package is marked with a circled plus sign.

Ordering Information

Orderable Part Number	Quantity	Shipping Container
RJU6052SDPD-E0-J2	3000 pcs	Taping

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