

# RJU60C2SDPD

Single Diode  
Fast Recovery Diode

R07DS0373EJ0100

Rev.1.00

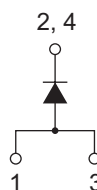
Apr 26, 2011

## Features

- Fast reverse recovery time:  $t_{rr} = 70$  ns typ. (at  $I_F = 5$  A,  $di/dt = 100$  A/ $\mu$ s)
- Low forward voltage:  $V_F = 1.4$  V typ. (at  $I_F = 15$  A)
- Low reverse current:  $I_R = 1$   $\mu$ 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   | $I_o$                     | 5           | A                  |
| Continuous forward current          | $T_c = 25^\circ\text{C}$  | $I_F$       | 15                 |
|                                     | $T_c = 100^\circ\text{C}$ | $I_F$       | 8                  |
| Peak surge forward current          | $I_{FSM}$                 | 60          | A                  |
| Junction to case thermal resistance | $\theta_{j-cd}$           | 4.0         | $^\circ\text{C/W}$ |
| Junction temperature                | $T_j$                     | 150         | $^\circ\text{C}$   |
| Storage temperature                 | $T_{stg}$                 | -55 to +150 | $^\circ\text{C}$   |

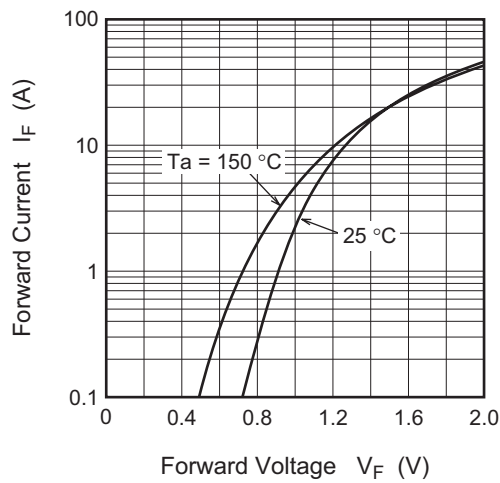
## Electrical Characteristics

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

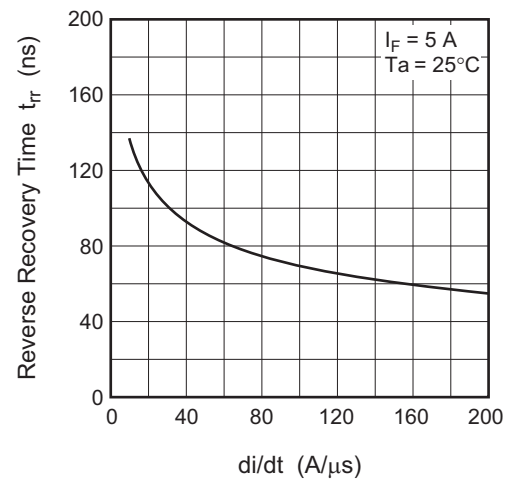
| Item                  | Symbol   | Min | Typ | Max | Unit          | Test conditions                       |
|-----------------------|----------|-----|-----|-----|---------------|---------------------------------------|
| Forward Voltage       | $V_F$    | —   | 1.4 | 2.0 | V             | $I_F = 15$ A                          |
| Reverse current       | $I_R$    | —   | —   | 1   | $\mu\text{A}$ | $V_R = 600$ V                         |
| Reverse Recovery Time | $t_{rr}$ | —   | 70  | —   | ns            | $I_F = 5$ A, $di/dt = 100$ A/ $\mu$ s |

## Main Characteristics

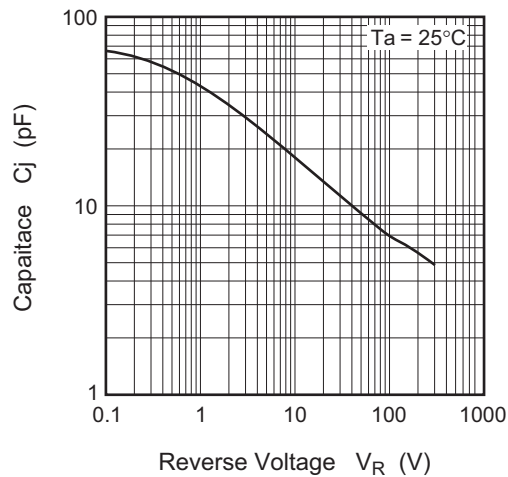
Forward Current vs. Forward Voltage (Typical)



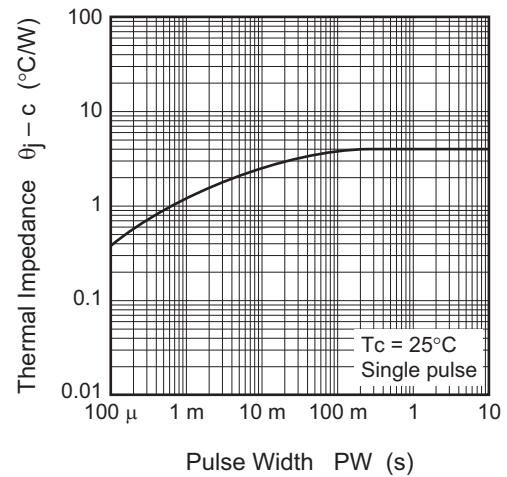
Reverse Recovery Time vs.  $di/dt$  (Typical)



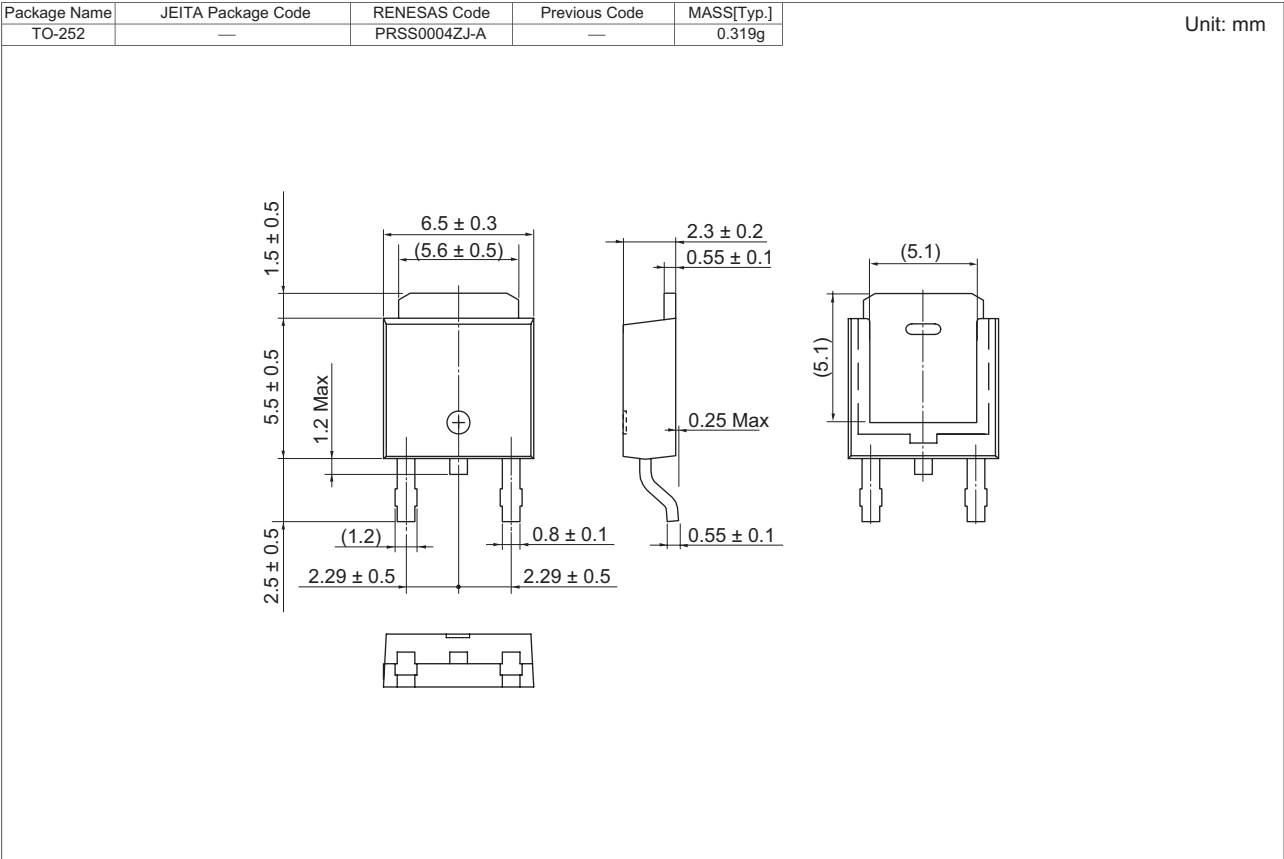
Capacitance vs. Reverse Voltage (Typical)



Thermal Impedance vs. Pulse Width



Package Dimensions



Ordering Information

| Orderable Part Number | Quantity | Shipping Container |
|-----------------------|----------|--------------------|
| RJU60C2SDPD-E0-J2     | 3000 pcs | Taping             |

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