

RJU60C3SDPD

Single Diode
Fast Recovery Diode

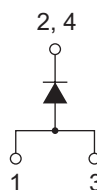
R07DS0375EJ0100
Rev.1.00
Apr 26, 2011

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	$T_c = 25^\circ\text{C}$	I_F	30	A
	$T_c = 100^\circ\text{C}$	I_F	15	A
Peak surge forward current	I_{FSM}	80	A	
Junction to case thermal resistance	θ_{j-cd}	3.0	$^\circ\text{C}/\text{W}$	
Junction temperature	T_j	150	$^\circ\text{C}$	
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$	

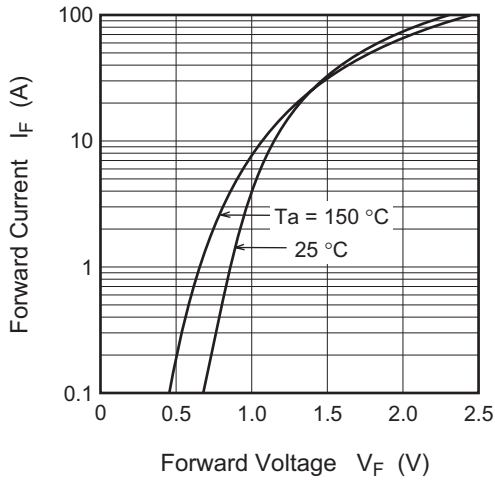
Electrical Characteristics

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

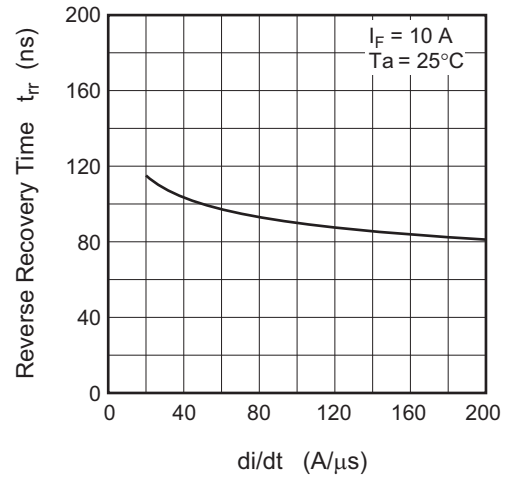
Item	Symbol	Min	Typ	Max	Unit	Test conditions
Forward Voltage	V_F	—	1.4	2.1	V	$I_F = 30$ A
Reverse current	I_R	—	—	1	μA	$V_R = 600$ V
Reverse Recovery Time	t_{rr}	—	90	—	ns	$I_F = 10$ A, $di/dt = 100$ A/ μ s

Main Characteristics

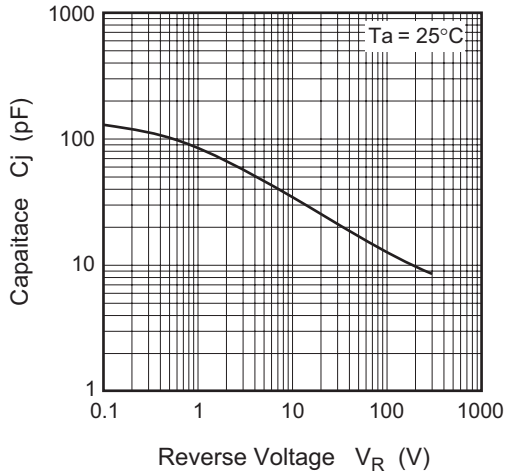
Forward Current vs. Forward Voltage (Typical)



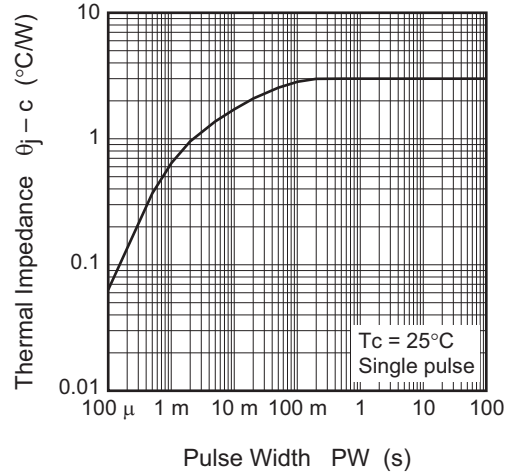
Reverse Recovery Time vs. di/dt (Typical)



Capacitance vs. Reverse Voltage (Typical)



Thermal Impedance vs. Pulse Width



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