

RJU4351TDPP-EJ

Single Diode
Ultra Fast Recovery Diode

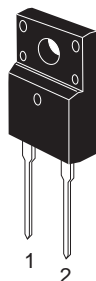
R07DS0634EJ0100
Rev.1.00
Jan 05, 2012

Features

- Ultra fast reverse recovery time: $t_{rr} = 25$ ns typ. (at $I_F = 10$ A, $di/dt = 100$ A/ μ s)
- Low forward voltage: $V_F = 1.6$ V typ. (at $I_F = 10$ A)
- Low reverse current: $I_R = 1$ μ A max. (at $V_R = 430$ V)
- Isolated package: TO-220FP (2pin)

Outline

RENESAS Package code: PRSS0002ZA-A
(Package name: TO-220FP-2L)



1. Cathode
2. Anode

Absolute Maximum Ratings

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

Item	Symbol	Ratings	Unit
Maximum reverse voltage	V_{RM}	430	V
Continuous forward current	$T_C = 25^\circ\text{C}$	$I_F = 10$	A
	$T_C = 100^\circ\text{C}$	$I_F = 5$	A
Peak surge forward current	I_{FSM}	50	A
Junction to case thermal resistance	θ_{j-cd}	8.33	$^\circ\text{C}/\text{W}$
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

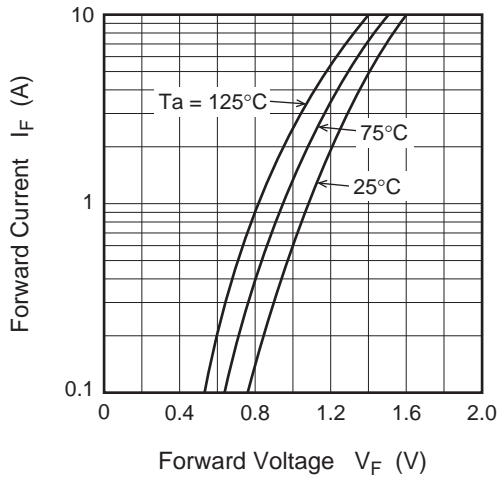
Electrical Characteristics

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

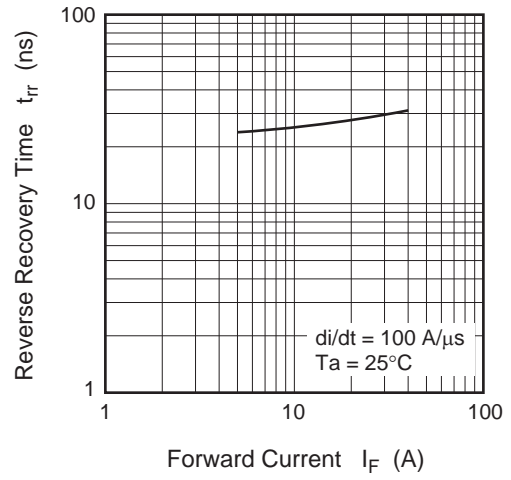
Item	Symbol	Min	Typ	Max	Unit	Test conditions
Forward voltage	V_F	—	1.6	1.9	V	$I_F = 10$ A
Reverse current	I_R	—	—	1	μ A	$V_R = 430$ V
Reverse recovery time	t_{rr}	—	25	—	ns	$I_F = 10$ A, $di/dt = 100$ A/ μ s

Main Characteristics

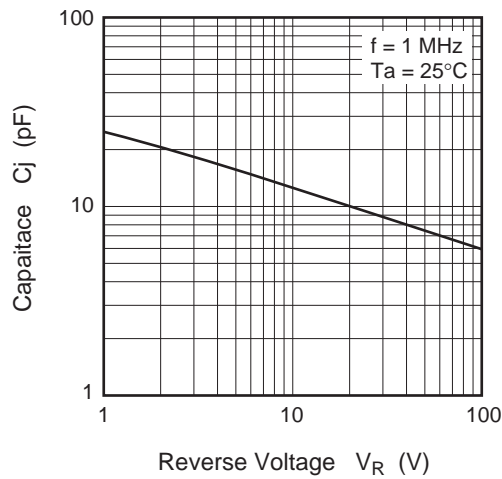
Forward Current vs. Forward Voltage (Typical)



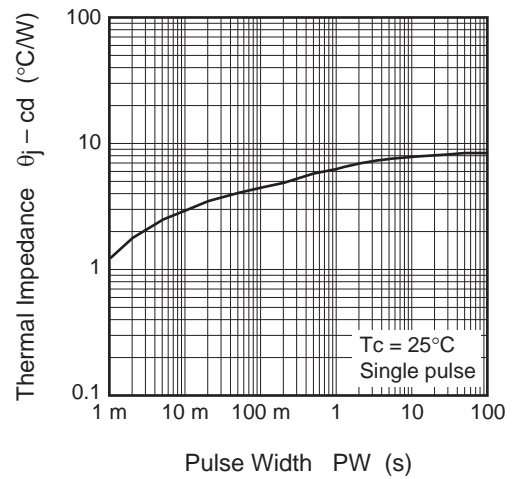
Reverse Recovery Time vs. Forward Current (Typical)



Capacitance vs. Reverse Voltage (Typical)



Thermal Impedance vs. Pulse Width



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