

# RJS6005TDPP-EJ

600V - 15A - Diode  
SiC Schottky Barrier Diode

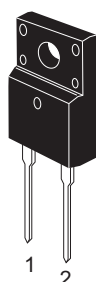
R07DS0900EJ0300  
Rev.3.00  
Jan 23, 2014

## Features

- New semiconductor material: Silicon Carbide Diode
- No reverse recovery / No forward recovery

## Outline

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



1. Cathode
2. Anode

## Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Ratings	Unit
Maximum reverse voltage	$V_{RM}$	600	V
Continuous forward current	$I_F$	15	A
Peak surge forward current	$I_{FSM}$	90	A
Junction temperature	$T_j$	150	°C
Storage temperature	$T_{stg}$	-55 to +150	°C

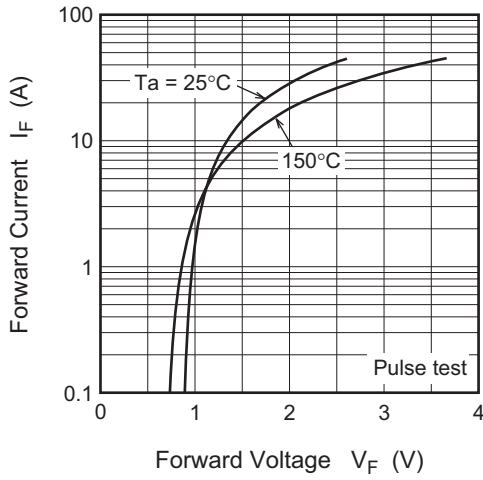
## Electrical Characteristics

(Ta = 25°C)

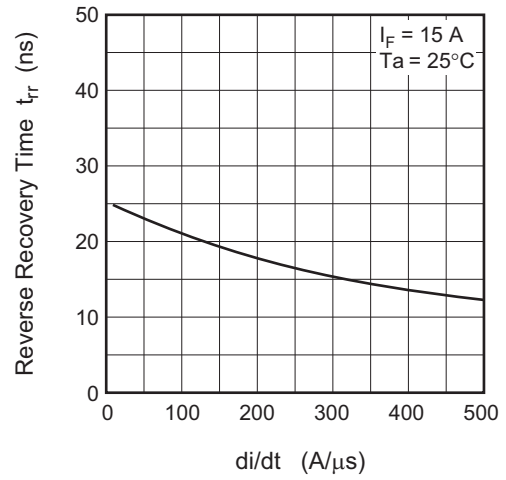
Item	Symbol	Min	Typ	Max	Unit	Test conditions
Forward voltage	$V_F$	—	1.5	1.8	V	$I_F = 15\text{ A}$
Reverse current	$I_R$	—	—	10	$\mu\text{A}$	$V_R = 600\text{ V}$
Reverse recovery time	$t_{rr}$	—	15	—	ns	$I_F = 15\text{ A}$ , $di/dt = 300\text{ A}/\mu\text{s}$

Main characteristics

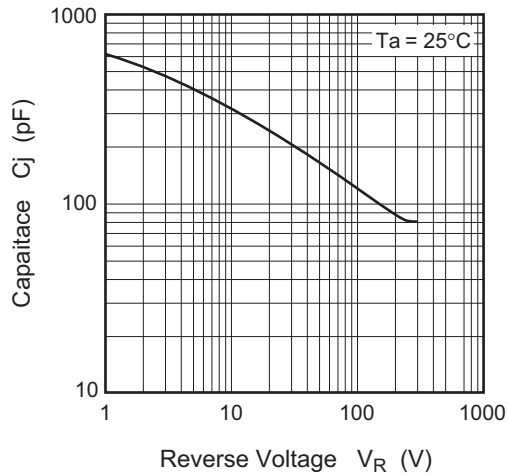
Forward Current vs. Forward Voltage (Typical)



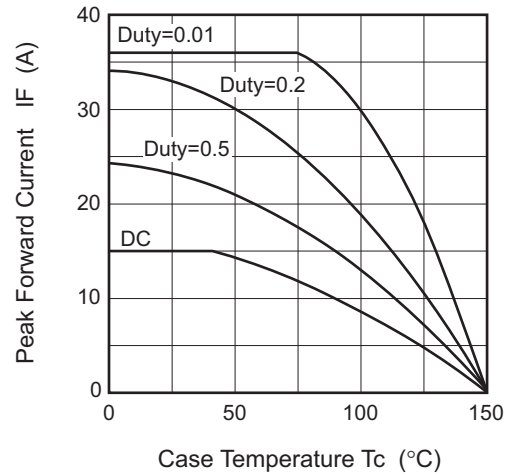
Reverse Recovery Time vs. di/dt (Typical)



Capacitance vs. Reverse Voltage (Typical)



$I_F$  vs.  $T_c$  Characteristics (Typical)





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