RJU6053TDPP-EJ

Single Diode
Ultra Fast Recovery Diode

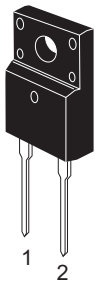
R07DS0383EJ0100
Rev.1.00
Apr 26, 2011

Features

- Ultra fast reverse recovery time: t_{rr} = 25 ns typ. (at I_F = 20 A, di/dt = 100 A/μs)
- Low forward voltage: V_F = 2.5 V typ. (at I_F = 20 A)
- Low reverse current: I_R = 1 μA max. (at V_R = 600 V)

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	Tc = 25°C	I_F	20	A
	Tc = 100°C	I_F	10	A
Peak surge forward current		I_{FSM}	60	A
Junction to case thermal resistance		θj-cd	2.5	°C/W
Junction temperature		Tj	150	°C
Storage temperature		Tstg	–55 to +150	°C

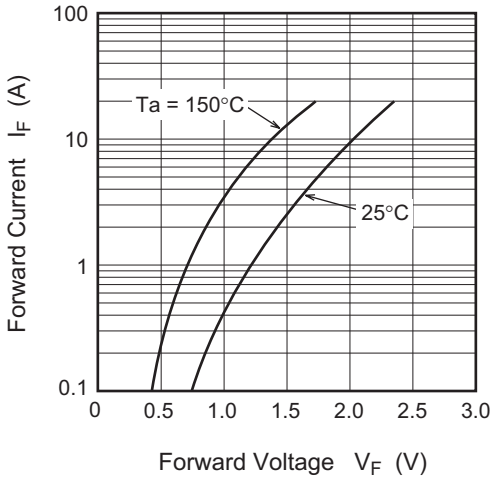
Electrical Characteristics

(Ta = 25°C)

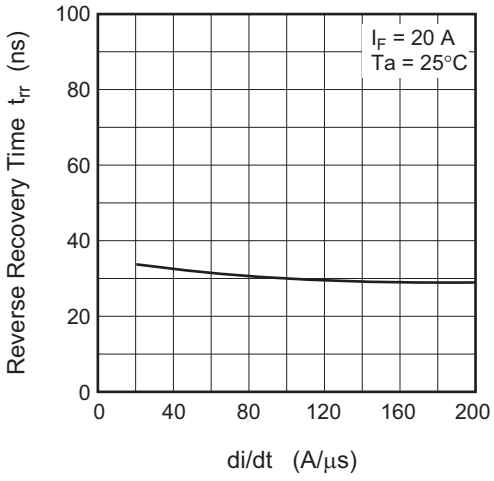
Item	Symbol	Min	Typ	Max	Unit	Test conditions
Forward Voltage	V_F	—	2.5	3.0	V	I_F = 20 A
Reverse current	I_R	—	—	1	μA	V_R = 600 V
Reverse Recovery Time	t_{rr}	—	25	—	ns	I_F = 20 A, di/dt = 100 A/μs

Main Characteristics

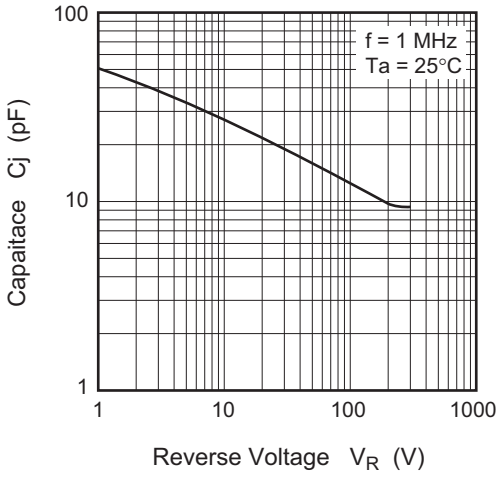
Forward Current vs. Forward Voltage (Typical)



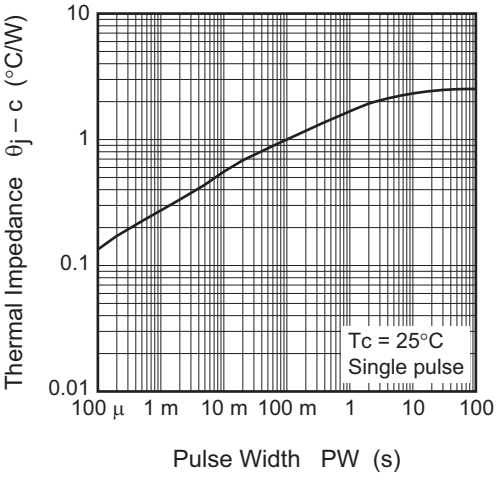
Reverse Recovery Time vs. di/dt (Typical)



Capacitance vs. Reverse Voltage (Typical)



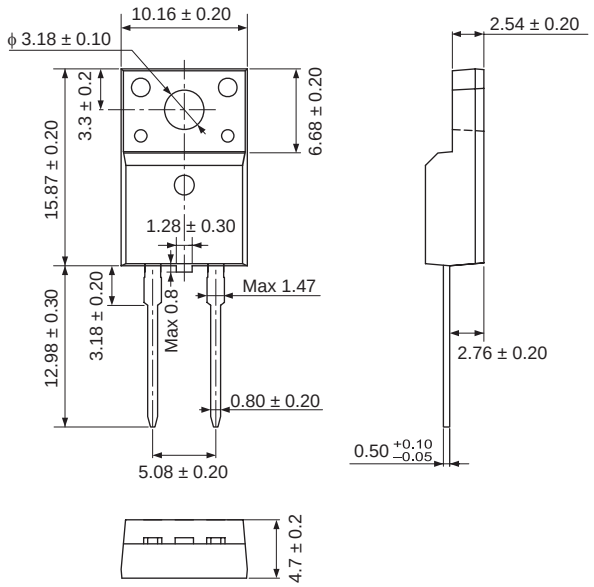
Thermal Impedance vs. Pulse Width



Package Dimensions

Package Name	JEITA Package Code	RENESAS Code	Previous Code	MASS[Typ.]
TO-220FP-2L	—	PRSS0002ZA-A	—	1.7g

Unit: mm



Ordering Information

Orderable Part Number	Quantity	Shipping Container
RJU6053TDPP-EJ-T2	600 pcs	Box (Tube)

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