RJU6053WDPP-M0

600V – 20A - Dual Diode
Ultra Fast Recovery Diode

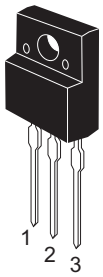
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Rev.1.00
Jun 16, 2015

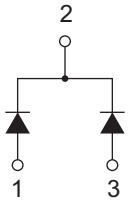
Features

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

Outline

RENESAS Package code: PRSS0003AF-A
(Package name: TO-220FL)





1. Anode
2. Cathode
3. 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 Note1	20/40	A
	Tc = 100°C		10/20	A
Peak surge forward current		I_{FSM} Note1	60/120	A
Junction to case thermal resistance		θj-cd Note3	3.7	°C/W
Junction temperature		Tj	150	°C
Storage temperature		Tstg	–55 to +150	°C

Notes: 1. Per leg/device
3. device

Electrical Characteristics

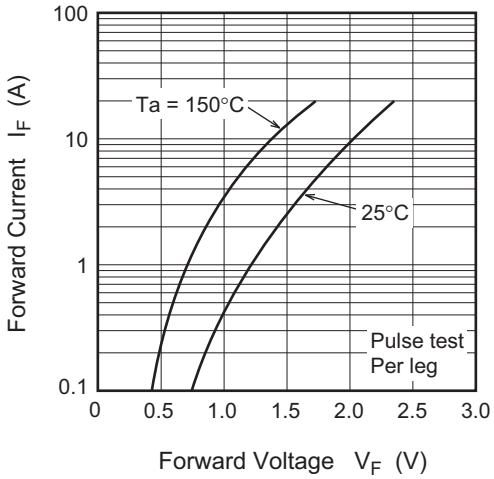
(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test conditions
Forward Voltage	V_F Note2	—	2.5	3.0	V	I_F = 20 A
Reverse current	I_R Note1	—	—	1/2	µA	V_R = 600 V
Reverse Recovery Time	t_{rr} Note2	—	25	—	ns	I_F = 20 A, di/dt = 100 A/µs

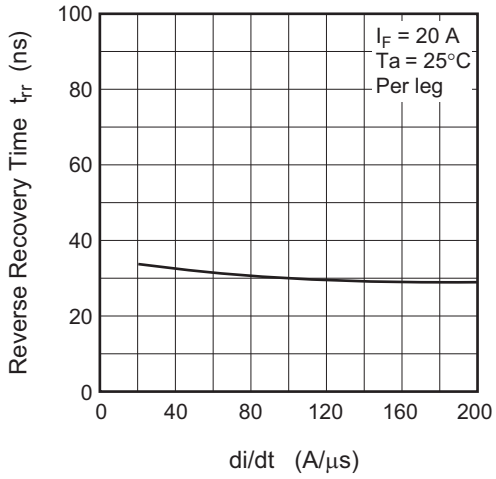
Notes: 1. Per leg/device
2. Per leg

Main Characteristics

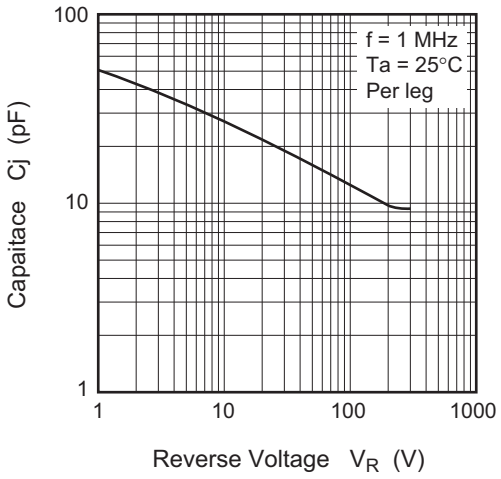
Forward Current vs. Forward Voltage (Typical)



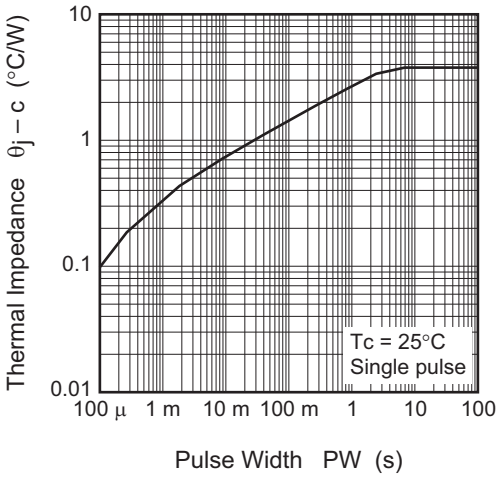
Reverse Recovery Time vs. di/dt (Typical)



Capacitance vs. Reverse Voltage (Typical)



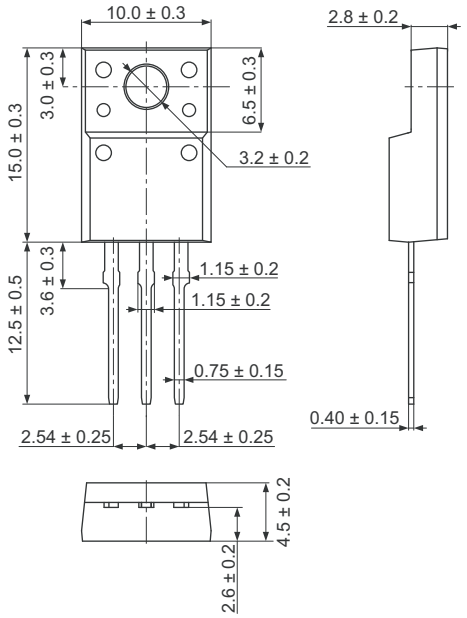
Thermal Impedance vs. Pulse Width



Package Dimensions

Package Name	JEITA Package Code	RENESAS Code	Previous Code	MASS[Typ.]
TO-220FL	—	PRSS0003AF-A	TO-220FL	1.5g

Unit: mm



Ordering Information

Orderable Part Number	Quantity	Shipping Container
RJU6053WDPP-M0#T2	600 pcs	Box (Tube)

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