RJU3051SDPE

360V - 10A - Single Diode
Ultra Fast Recovery Diode

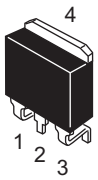
R07DS1067EJ0100
Rev.1.00
Apr 24, 2013

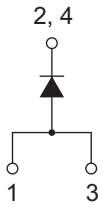
Features

- Ultra fast reverse recovery time: t_{rr} = 25 ns typ. (at I_F = 10 A, di/dt = 100 A/µs)
- Low forward voltage: V_F = 1.4 V typ. (at I_F = 10 A)
- Low reverse current: I_R = 1 µA max. (at V_R = 360 V)

Outline

RENESAS Package code: PRSS0004AE-B
(Package name: LDPAK (S)-(1))





1. Anode
2. Cathode
3. Anode
4. Cathode

Absolute Maximum Ratings

(Ta = 25°C)

Item		Symbol	Ratings	Unit
Maximum reverse voltage		V_{RM}	360	V
Continuous forward current	Tc = 25°C	I_F	10	A
	Tc = 100°C	I_F	4	A
Peak surge forward current		I_{FSM}	50	A
Junction to case thermal resistance		θj-cd	2.13	°C/W
Junction temperature		Tj	150	°C
Storage temperature		Tstg	–55 to +150	°C

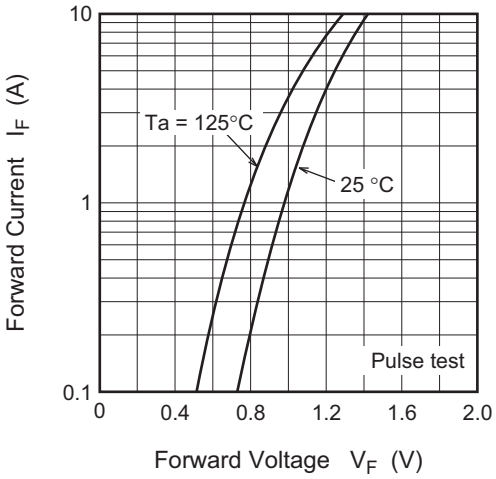
Electrical Characteristics

(Ta = 25°C)

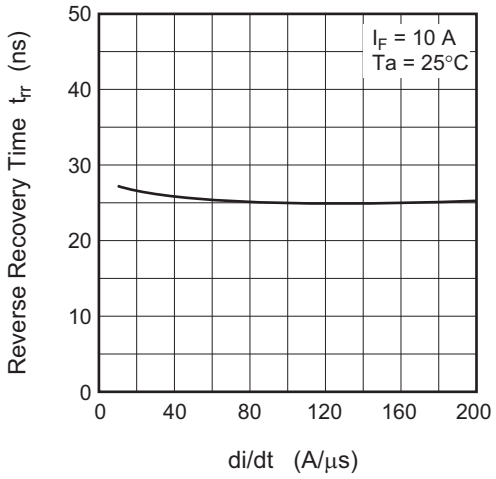
Item	Symbol	Min	Typ	Max	Unit	Test conditions
Forward voltage	V_F	—	1.4	1.7	V	I_F = 10 A
Reverse current	I_R	—	—	1	µA	V_R = 360 V
Reverse recovery time	t_{rr}	—	25	—	ns	I_F = 10A, di/dt = 100 A/µs

Main Characteristics

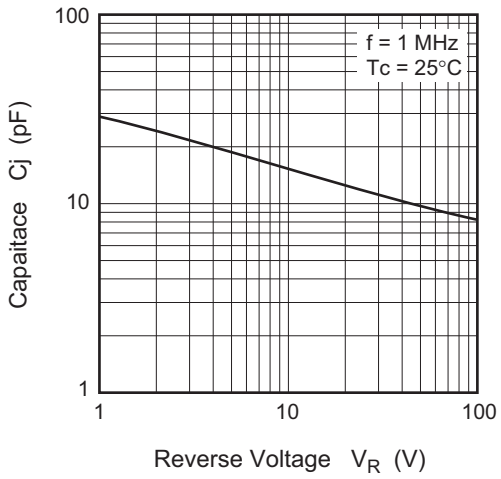
Forward Current vs. Forward Voltage (Typical)



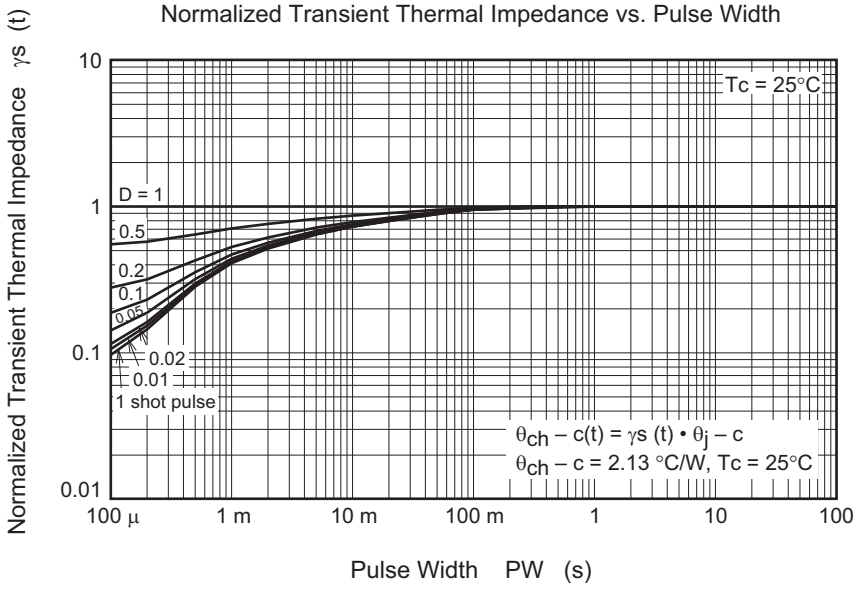
Reverse Recovery Time vs. di/dt (Typical)



Capacitance vs. Reverse Voltage (Typical)



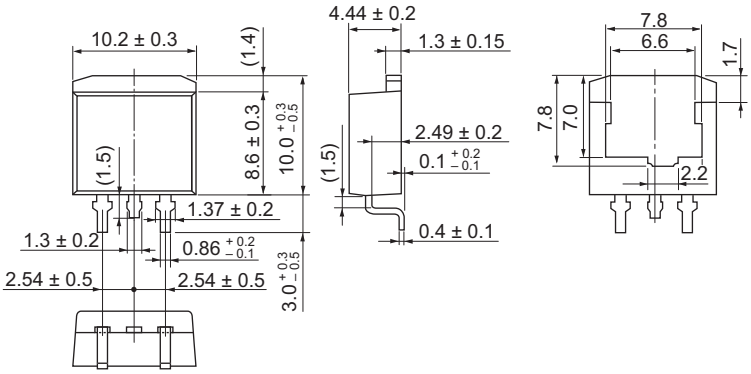
Normalized Transient Thermal Impedance vs. Pulse Width



Package Dimensions

Package Name	JEITA Package Code	RENESAS Code	Previous Code	MASS[Typ.]
LDPAK(S)-(1)	SC-83	PRSS0004AE-B	LDPAK(S)-(1) / LDPAK(S)-(1)V	1.30g

Unit: mm



Ordering Information

Orderable Part Number	Quantity	Shipping Container
RJU3051SDPE-00#J3	1000 pcs	Taping

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