RJU60C6SDPE

Single Diode
Fast Recovery Diode

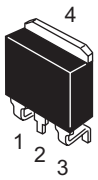
R07DS0377EJ0100
Rev.1.00
Apr 26, 2011

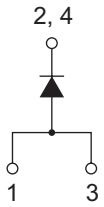
Features

- Fast reverse recovery time: t_{rr} = 100 ns typ. (at I_F = 30 A, di/dt = –100 A/μs)
- Low forward voltage: V_F = 1.4 V typ. (at I_F = 50 A)
- Low reverse current: I_R = 1 μA max. (at V_R = 600 V)

Outline

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





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

Absolute Maximum Ratings

(Tc = 25°C)

Item		Symbol	Ratings	Unit
Maximum reverse voltage		V_{RM}	600	V
Average rectified forward current		I_o	30	A
Continuous forward current	Tc = 25°C	I_F	50	A
	Tc = 100°C	I_F	25	A
Peak surge forward current		I_{FSM}	140	A
Junction to case thermal resistance		θj-cd	1.6	°C /W
Junction temperature		Tj	150	°C
Storage temperature		Tstg	–55 to +150	°C

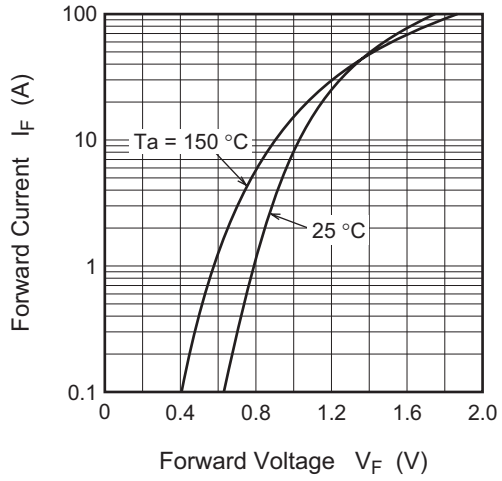
Electrical Characteristics

(Ta = 25°C)

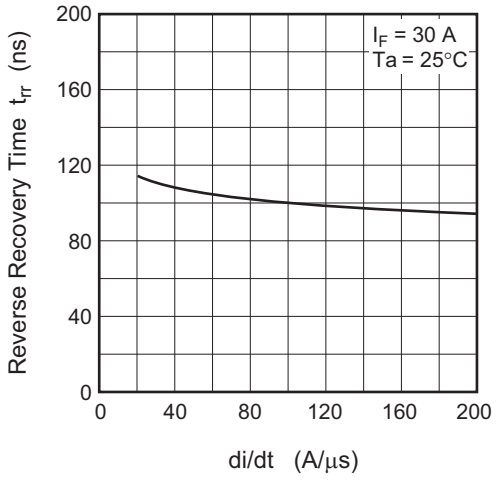
Item	Symbol	Min	Typ	Max	Unit	Test conditions
Forward Voltage	V_F	—	1.4	2.0	V	I_F = 50 A
Reverse current	I_R	—	—	1	μA	V_R = 600 V
Reverse Recovery Time	t_{rr}	—	100	—	ns	I_F = 30 A, di/dt = –100 A/μs

Main Characteristics

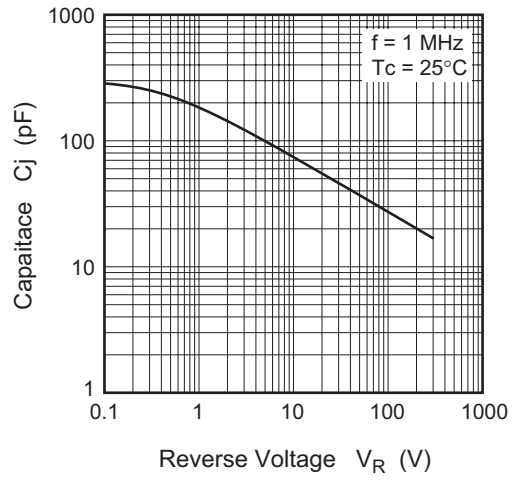
Forward Current vs. Forward Voltage (Typical)



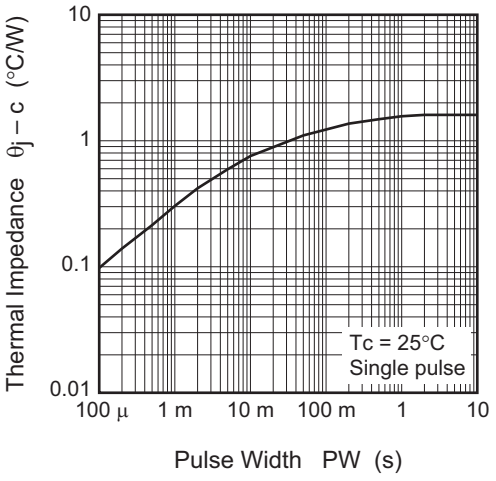
Reverse Recovery Time vs. di/dt (Typical)



Capacitance vs. Reverse Voltage (Typical)



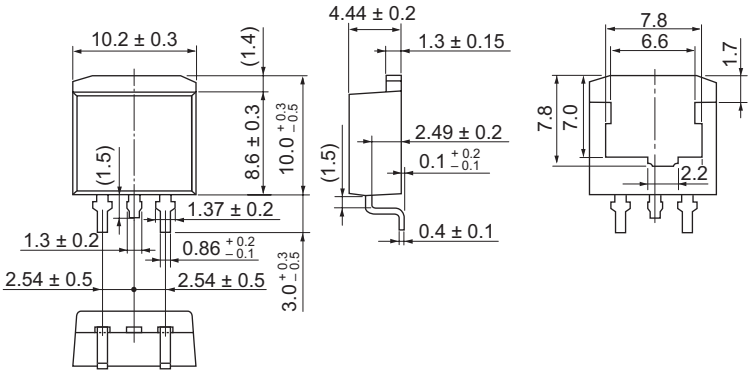
Thermal Impedance vs. Pulse Width



Package Dimensions

Package Name	JEITA Package Code	RENESAS Code	Previous Code	MASS[Typ.]
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
RJU60C6SDPE-00-J3	1000 pcs	Taping

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