

RJU3051SDPE

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

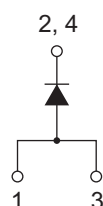
R07DS1067EJ0100
Rev.1.00
Apr 24, 2013

Features

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

Outline

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



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

Absolute Maximum Ratings

($T_a = 25^\circ\text{C}$)

Item	Symbol	Ratings	Unit
Maximum reverse voltage	V_{RM}	360	V
Continuous forward current	$T_c = 25^\circ\text{C}$	$I_F = 10$	A
	$T_c = 100^\circ\text{C}$	$I_F = 4$	A
Peak surge forward current	I_{FSM}	50	A
Junction to case thermal resistance	θ_{j-cd}	2.13	$^\circ\text{C}/\text{W}$
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

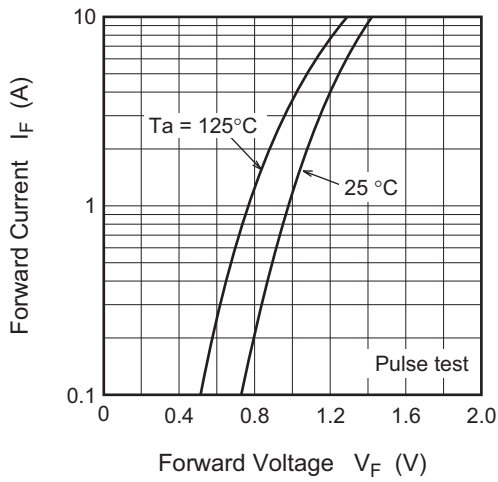
Electrical Characteristics

($T_a = 25^\circ\text{C}$)

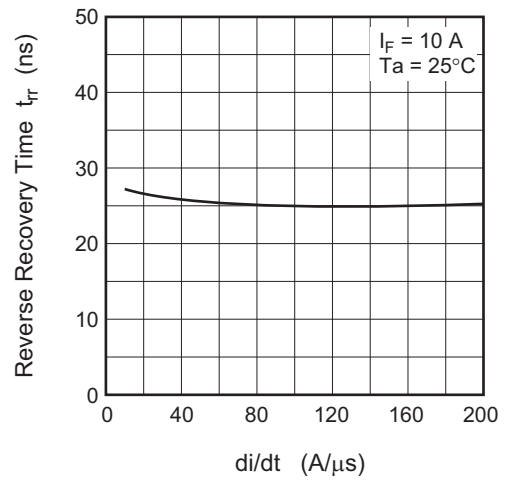
Item	Symbol	Min	Typ	Max	Unit	Test conditions
Forward voltage	V_F	—	1.4	1.7	V	$I_F = 10 \text{ A}$
Reverse current	I_R	—	—	1	μA	$V_R = 360 \text{ V}$
Reverse recovery time	t_{rr}	—	25	—	ns	$I_F = 10 \text{ A}$, $di/dt = 100 \text{ A}/\mu\text{s}$

Main Characteristics

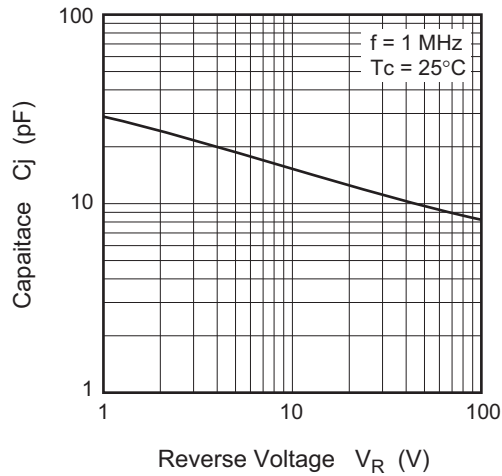
Forward Current vs. Forward Voltage (Typical)



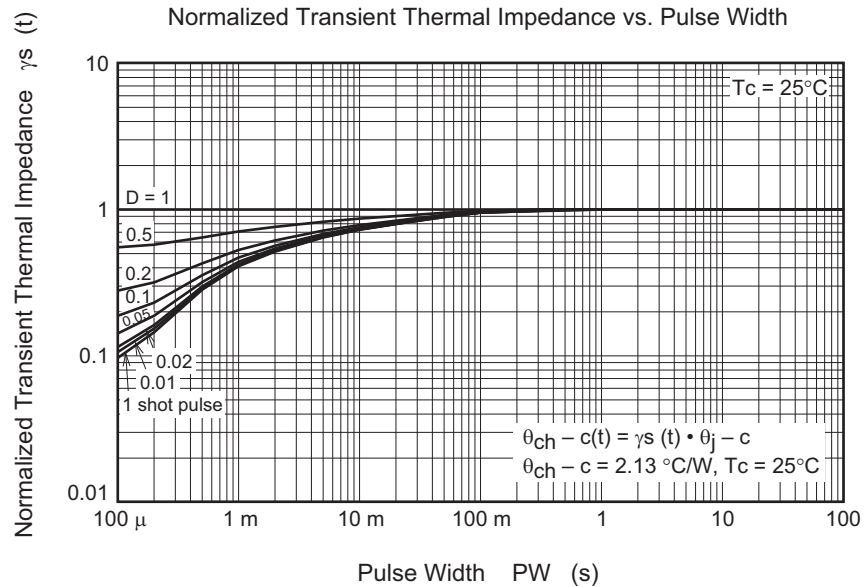
Reverse Recovery Time vs. di/dt (Typical)



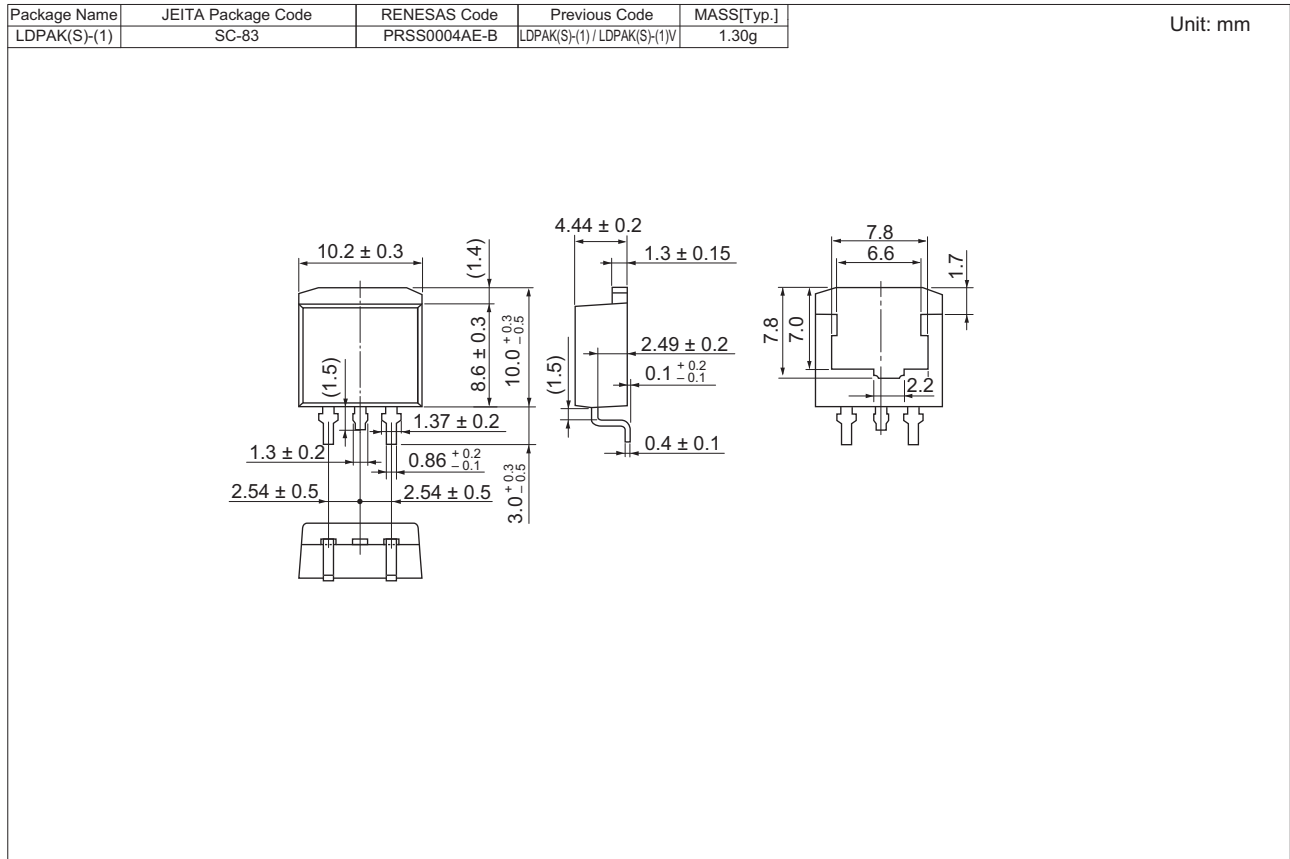
Capacitance vs. Reverse Voltage (Typical)



Normalized Transient Thermal Impedance vs. Pulse Width



Package Dimensions



Ordering Information

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

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