

RJU36B2WDPF

360V - 40A - Dual Diode
Ultra Fast Recovery Diode

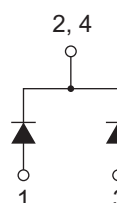
R07DS1136EJ0300
Rev.3.00
Dec 06, 2013

Features

- Ultra fast reverse recovery time: $t_{rr} = 40$ ns typ. (at $I_F = 10$ A, $di/dt = 100$ A/ μ s)
- Low forward voltage: $V_F = 1.1$ V typ. (at $I_F = 20$ A)
- Low reverse current: $I_R = 1$ μ A max. (at $V_R = 360$ V)

Outline

RENESAS Package code: PRSS0004AE-C
(Package name: LDK (S)-(2))



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^{Note1}	20/40	A
	$T_c = 100^\circ\text{C}$	I_F^{Note1}	10/20	A
Peak surge forward current	I_{FSM}^{Note1}	80/160	A	
Junction to case thermal resistance	θ_{j-cd}	2.78	$^\circ\text{C}/\text{W}$	
Junction temperature	T_J^{Note2}	175	$^\circ\text{C}$	
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$	

Notes: 1. Per leg/device

2. Please use this device in the thermal conditions where the junction temperature does not exceed 175°C . IGBT Application Note is disclosed about reliability test and application condition up to $T_J=175^\circ\text{C}$.

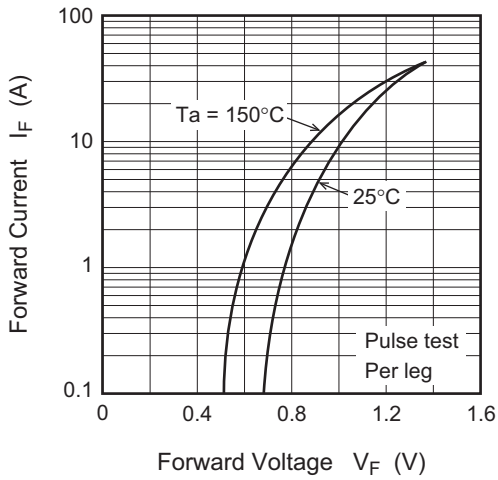
Electrical Characteristics

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

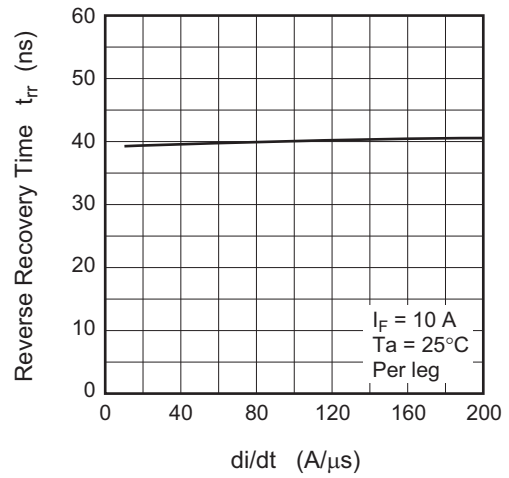
Item	Symbol	Min	Typ	Max	Unit	Test conditions
Forward voltage	V_F^{Note1}	—	1.1	1.5	V	$I_F = 20$ A
Reverse current	I_R^{Note1}	—	—	1	μA	$V_R = 360$ V
Reverse recovery time	t_{rr}^{Note1}	—	40	—	ns	$I_F = 10$ A, $di/dt = 100$ A/ μ s

Main Characteristics

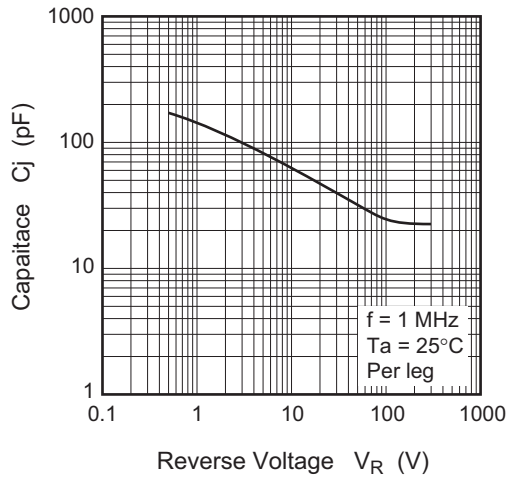
Forward Current vs. Forward Voltage (Typical)



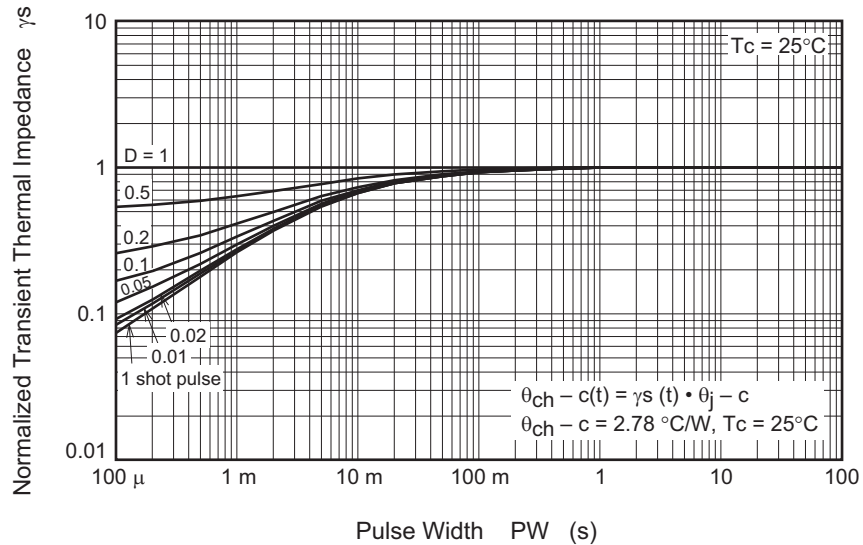
Reverse Recovery Time vs. di/dt (Typical)



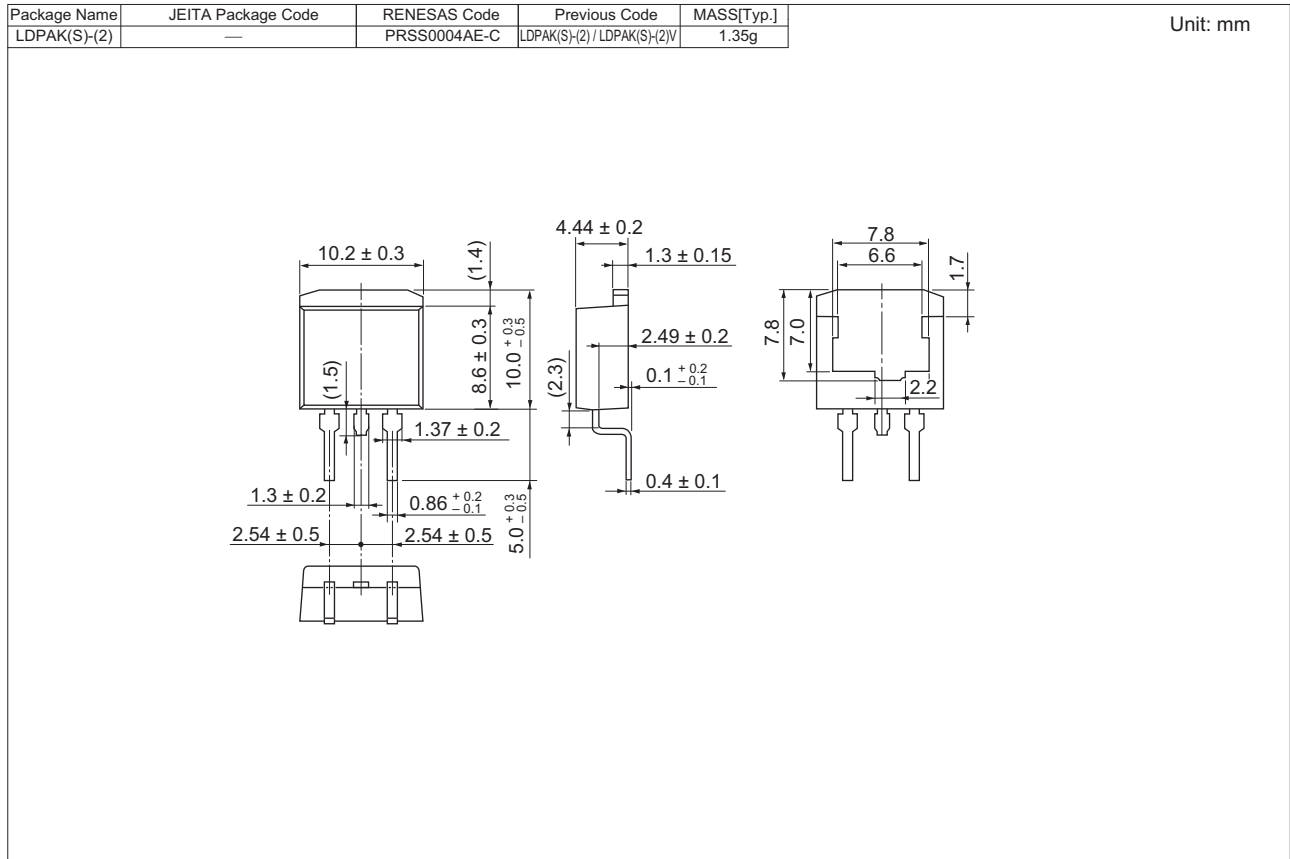
Capacitance vs. Reverse Voltage (Typical)



Normalized Transient Thermal Impedance vs. Pulse Width



Package Dimensions



Ordering Information

Orderable Part No.	Quantity	Shipping Container
RJU36B2WDPF-00#J3	1000 pcs	Taping

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