

RJU60C3WDPP-M0

600V - 60A - Dual Diode
Fast Recovery Diode

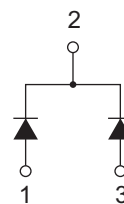
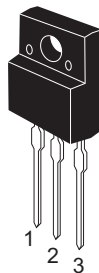
R07DS0886EJ0100
Rev.1.00
Oct 22, 2012

Features

- Fast reverse recovery time: $t_{rr} = 90$ ns typ. (at $I_F = 30$ A, $di/dt = 100$ A/ μ s) per Leg
- Low forward voltage: $V_F = 1.4$ V typ. (at $I_F = 30$ A) per Leg
- Low reverse current: $I_R = 1$ μ A 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

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

| Item | Symbol | Ratings | Unit | |
|-------------------------------------|---------------------------|----------------------|---------------------------|---|
| Maximum reverse voltage | V_{RM} | 600 | V | |
| Continuous forward current | $T_C = 25^\circ\text{C}$ | I_F^{Note1} | 30/60 | A |
| | $T_C = 100^\circ\text{C}$ | I_F^{Note1} | 15/30 | A |
| Peak surge forward current | I_{FSM}^{Note1} | 80/160 | A | |
| Junction to case thermal resistance | θ_{j-cd} | 4.4 | $^\circ\text{C}/\text{W}$ | |
| Junction temperature | T_j | 150 | $^\circ\text{C}$ | |
| Storage temperature | T_{stg} | -55 to +150 | $^\circ\text{C}$ | |

Notes: 1. Per leg/device

Electrical Characteristics

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

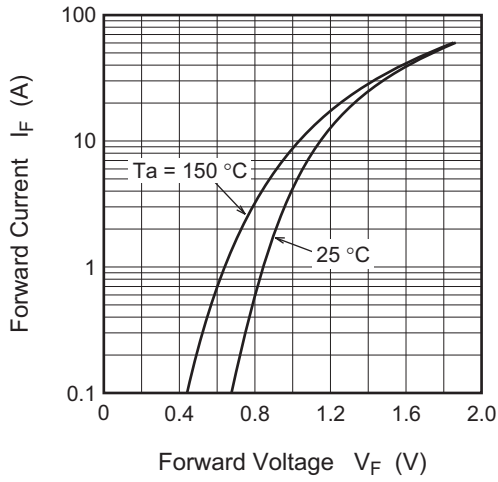
| Item | Symbol | Min | Typ | Max | Unit | Test conditions |
|-----------------------|-------------------------|-----|-----|-----|---------------|--|
| Forward voltage | V_F^{Note2} | — | 1.4 | 2.1 | V | $I_F = 30$ A |
| Reverse current | I_R^{Note1} | — | — | 1/2 | μA | $V_R = 600$ V |
| Reverse recovery time | t_{rr}^{Note2} | — | 90 | — | ns | $I_F = 30$ A, $di/dt = 100$ A/ μ s |

Notes: 1. Per leg/device

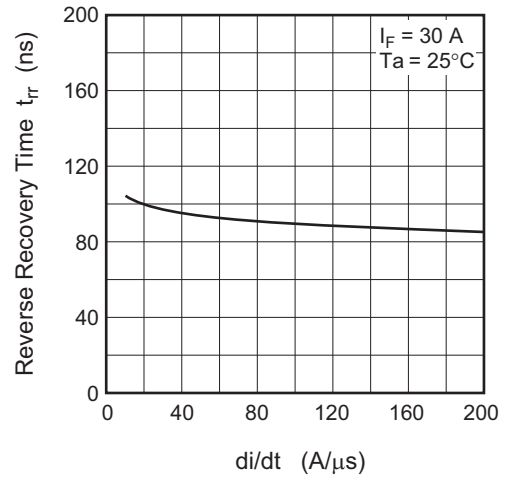
2. Per leg

Main Characteristics

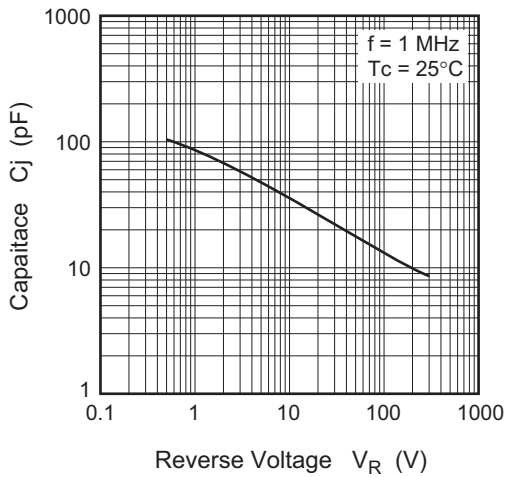
Forward Current vs. Forward Voltage (Typical)



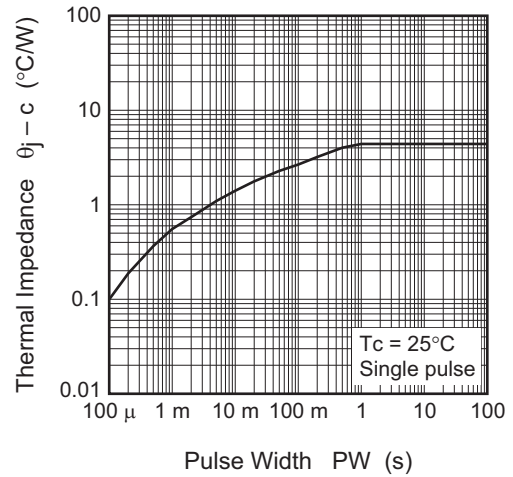
Reverse Recovery Time vs. di/dt (Typical)



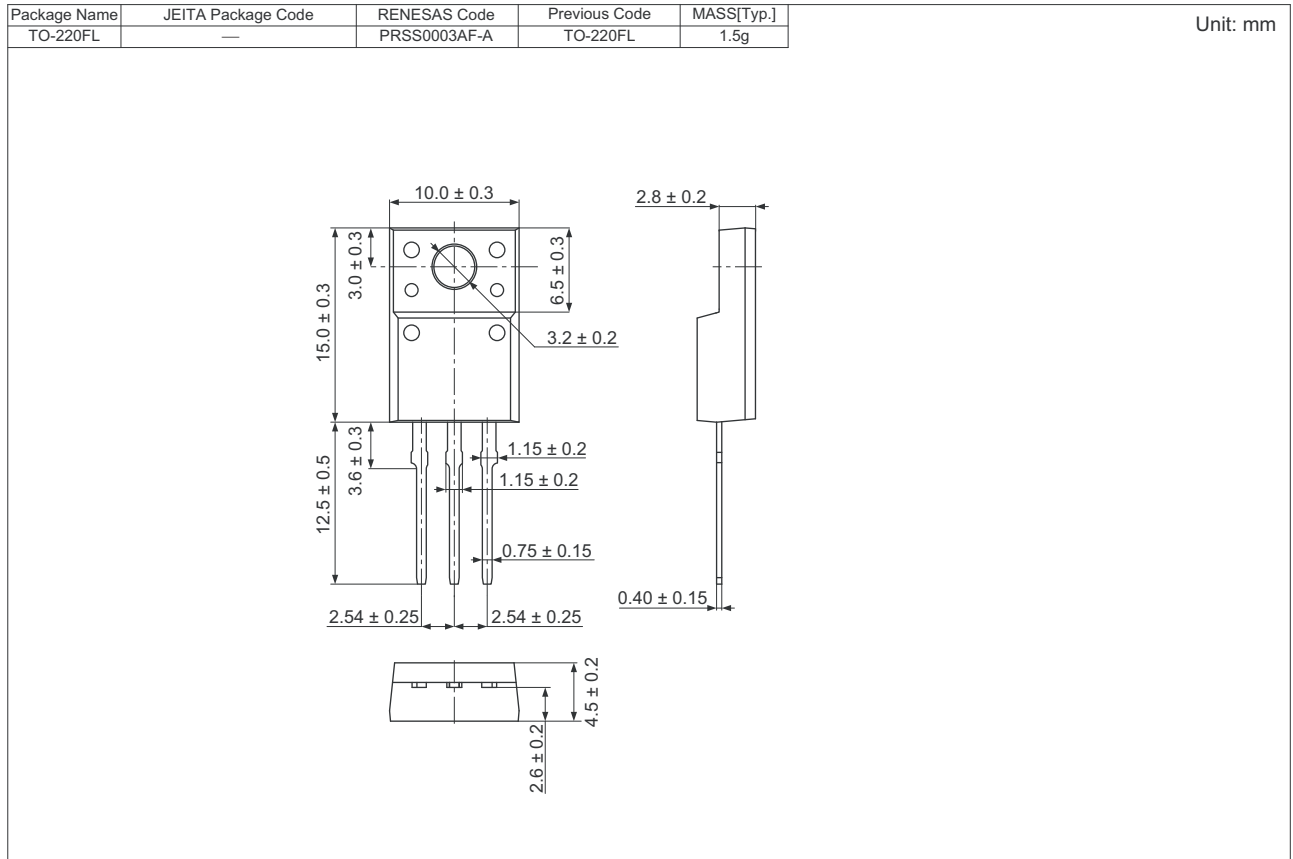
Capacitance vs. Reverse Voltage (Typical)



Thermal Impedance vs. Pulse Width



Package Dimensions



Ordering Information

| Orderable Part Number | Quantity | Shipping Container |
|-----------------------|----------|--------------------|
| RJU60C3WDPP-M0#T2 | 600 pcs | Box (Tube) |

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