

RJU4351TDPP-EJ

Single Diode
Ultra Fast Recovery Diode

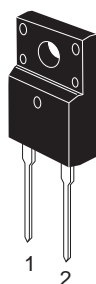
R07DS0634EJ0100
Rev.1.00
Jan 05, 2012

Features

- Ultra fast reverse recovery time: $t_{rr} = 25$ ns typ. (at $I_F = 10$ A, $di/dt = 100$ A/ μ s)
- Low forward voltage: $V_F = 1.6$ V typ. (at $I_F = 10$ A)
- Low reverse current: $I_R = 1$ μ A max. (at $V_R = 430$ V)
- Isolated package: TO-220FP (2pin)

Outline

RENESAS Package code: PRSS0002ZA-A
(Package name: TO-220FP-2L)



1. Cathode
2. Anode

Absolute Maximum Ratings

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

| Item | Symbol | Ratings | Unit |
|-------------------------------------|---------------------------|-------------|---------------------------|
| Maximum reverse voltage | V_{RM} | 430 | V |
| Continuous forward current | $T_C = 25^\circ\text{C}$ | I_F | 10 A |
| | $T_C = 100^\circ\text{C}$ | I_F | 5 A |
| Peak surge forward current | I_{FSM} | 50 | A |
| Junction to case thermal resistance | θ_{j-cd} | 8.33 | $^\circ\text{C}/\text{W}$ |
| Junction temperature | T_j | 150 | $^\circ\text{C}$ |
| Storage temperature | T_{stg} | -55 to +150 | $^\circ\text{C}$ |

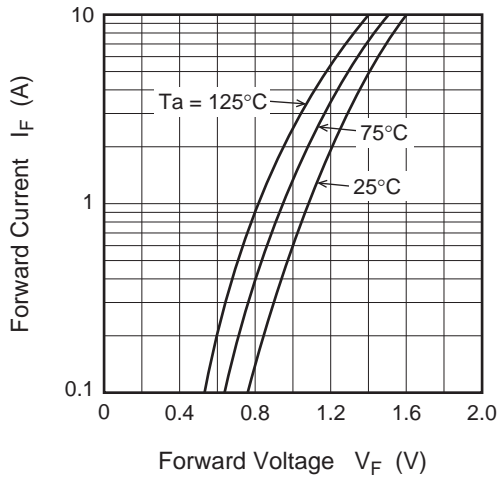
Electrical Characteristics

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

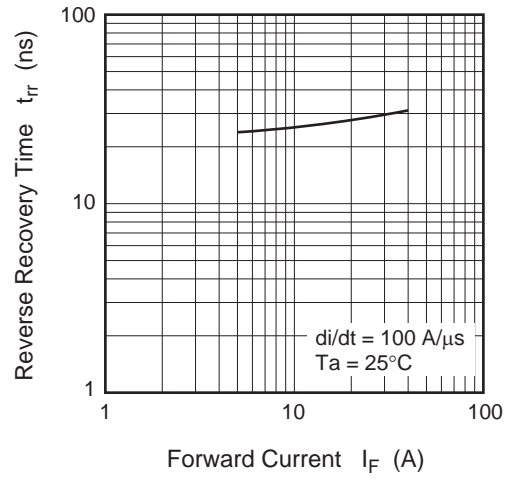
| Item | Symbol | Min | Typ | Max | Unit | Test conditions |
|-----------------------|----------|-----|-----|-----|---------|--|
| Forward voltage | V_F | — | 1.6 | 1.9 | V | $I_F = 10$ A |
| Reverse current | I_R | — | — | 1 | μ A | $V_R = 430$ V |
| Reverse recovery time | t_{rr} | — | 25 | — | ns | $I_F = 10$ A, $di/dt = 100$ A/ μ s |

Main Characteristics

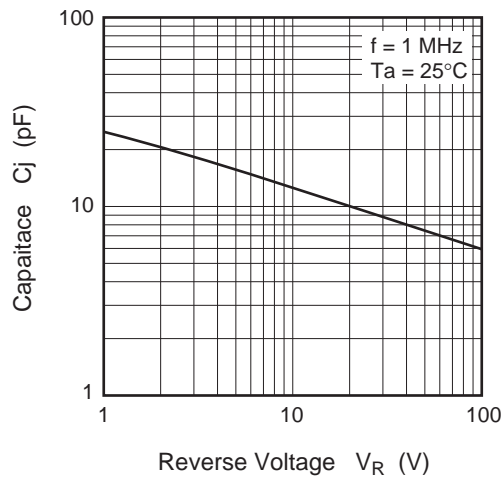
Forward Current vs. Forward Voltage (Typical)



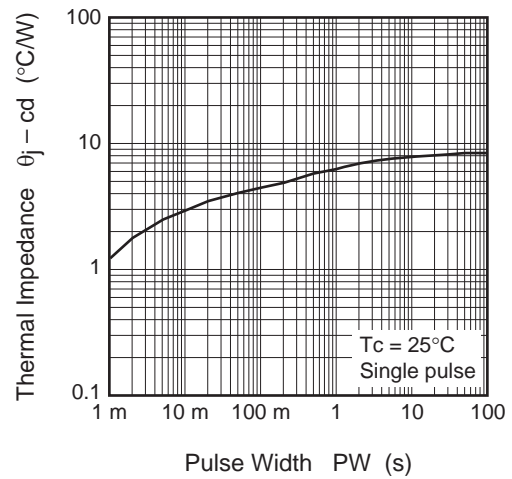
Reverse Recovery Time vs. Forward Current (Typical)



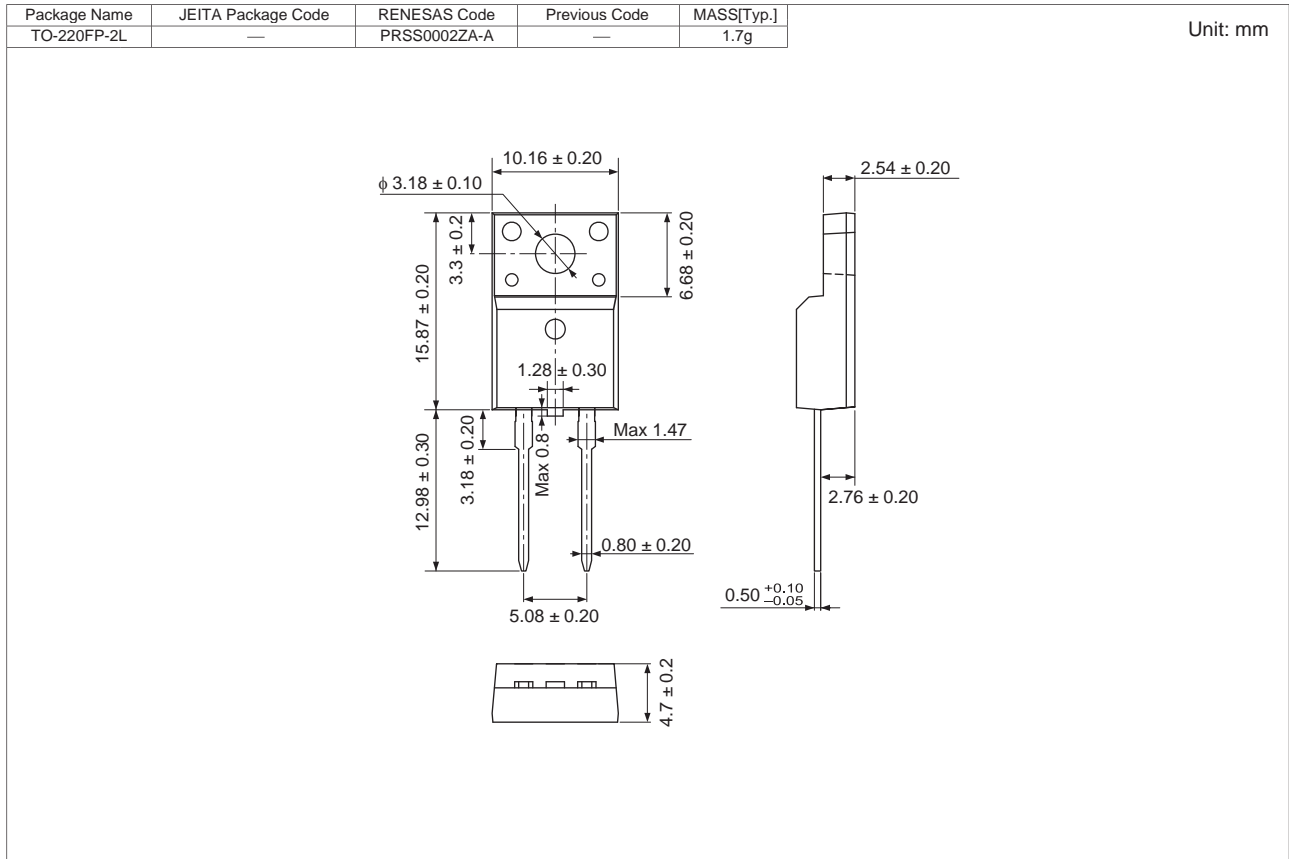
Capacitance vs. Reverse Voltage (Typical)



Thermal Impedance vs. Pulse Width



Package Dimensions



Ordering Information

| Orderable Part No. | Quantity | Shipping Container |
|--------------------|----------|--------------------|
| RJU4351TDPP-EJ#T2 | 600 pcs | Box (Tube) |

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