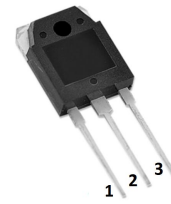


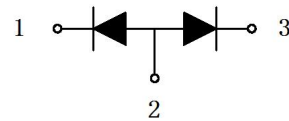
### Features

- Ultra fast Recovery Time
- Soft Recovery Characteristics
- Low Recovery Loss
- Low Forward Voltage
- High Surge Current Capability
- Low Leakage Current



### Applications

- Freewheeling, Snubber, Clamp
- Inversion Welder
- PFC
- Plating Power Supply
- Ultrasonic Cleaner and Welder
- Converter & Chopper
- UPS



1 - 负极 Cathode

3 - 负极 Cathode

2 - 正极 Anode

Back of Case - Anode

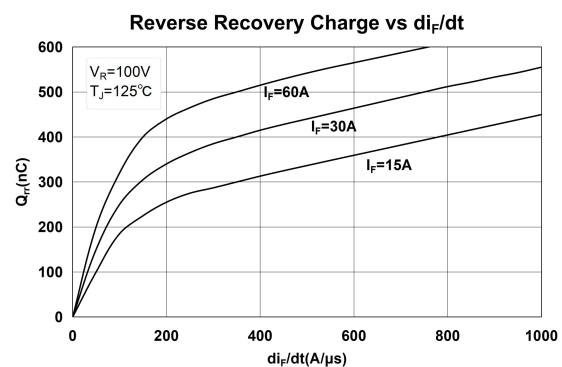
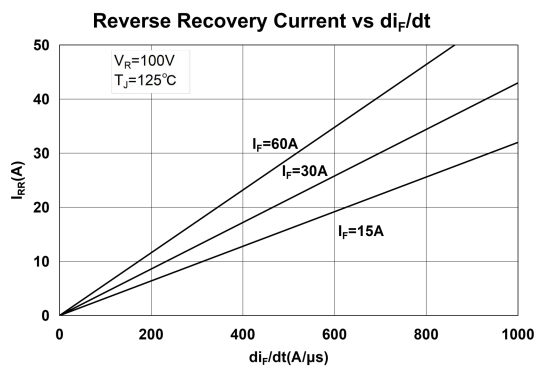
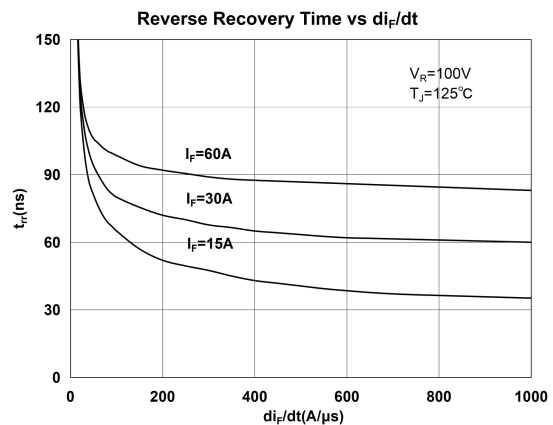
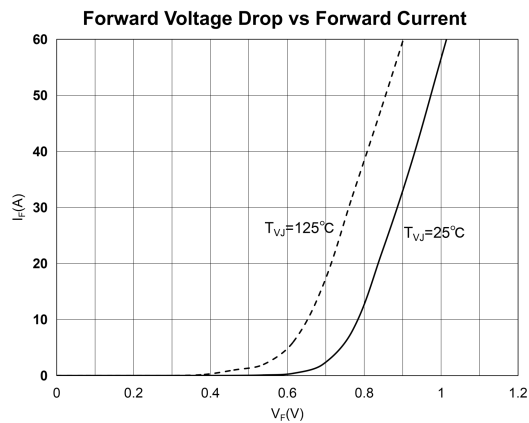
### Absolute Maximum Ratings

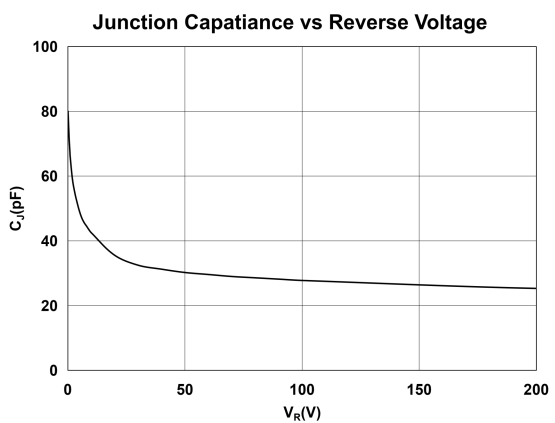
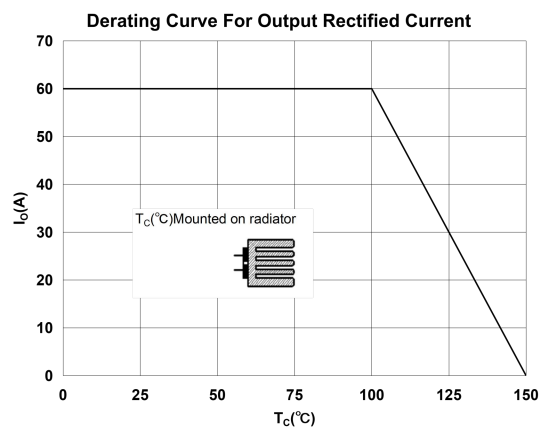
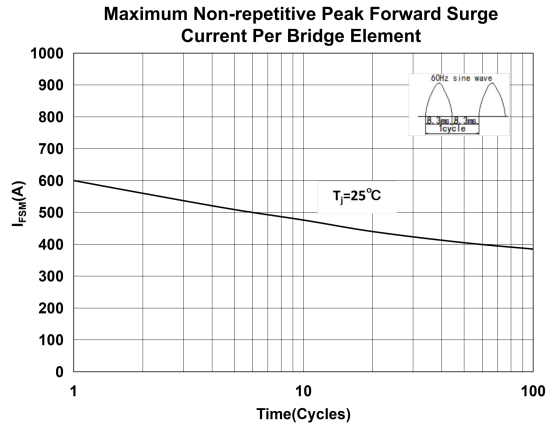
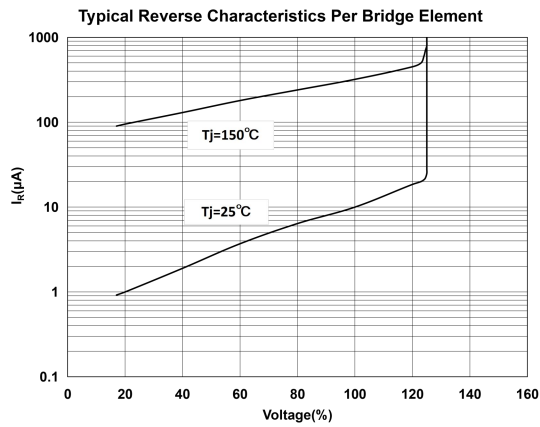
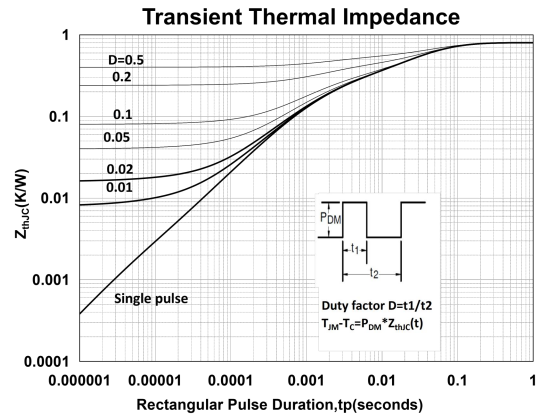
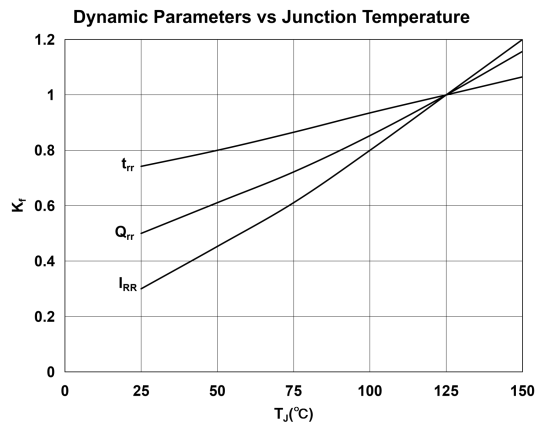
| Parameter                            | Symbol          | Test Conditions                                            | Values  | Unit                        |
|--------------------------------------|-----------------|------------------------------------------------------------|---------|-----------------------------|
| Maximum D.C. Reverse Voltage         | $V_R$           |                                                            | 200     | V                           |
| Maximum Repetitive Reverse Voltage   | $V_{RRM}$       |                                                            | 200     |                             |
| Average Forward Current              | $I_{F(AV)}$     | $T_C=25^{\circ}\text{C}$ , Per Diode                       | 60      | A                           |
|                                      |                 | $T_C=110^{\circ}\text{C}$ , Per Diode                      | 30      |                             |
|                                      |                 | $T_C=25^{\circ}\text{C}$ , Per Package                     | 120     |                             |
|                                      |                 | $T_C=110^{\circ}\text{C}$ , Per Package                    | 60      |                             |
| RMS Forward Current                  | $I_{F(RMS)}$    | $T_C=25^{\circ}\text{C}$ , Per Diode                       | 112     | A                           |
|                                      |                 | $T_C=110^{\circ}\text{C}$ , Per Diode                      | 56      |                             |
| Non-Repetitive Surge Forward Current | $I_{FSM}$       | $t=10\text{ms}$ , $T_J=45^{\circ}\text{C}$ ,<br>50Hz, Sine | 600     | A                           |
| Power Dissipation                    | $P_D$           |                                                            | 156     | W                           |
| Junction Temperature Range           | $T_J$           |                                                            | -40~150 | $^{\circ}\text{C}$          |
| Storage Temperature Range            | $T_{STG}$       |                                                            | -55~150 |                             |
| Thermal Resistance                   | $R_{\theta JC}$ | Junction-to-Case                                           | 0.8     | $^{\circ}\text{C}/\text{W}$ |
| Module-to-Sink                       | Torque          | Recommended(M3)                                            | 1.1     | N.m                         |
| Package weight                       | Weigh           |                                                            | 6.0     | g                           |

### Electrical Characteristics ( $T_C=25^\circ\text{C}$ unless otherwise specified, per diode)

| Parameter                    | Symbol    | Test Conditions                                                                            | Min. | Typ. | Max. | Unit          |
|------------------------------|-----------|--------------------------------------------------------------------------------------------|------|------|------|---------------|
| Reverse Leakage Current      | $I_{RM}$  | $T_J=25^\circ\text{C}, V_R=V_{RRM}$                                                        | -    | -    | 10   | $\mu\text{A}$ |
|                              |           | $T_J=125^\circ\text{C}, V_R=V_{RRM}$                                                       | -    | -    | 500  |               |
| Forward Voltage              | $V_F$     | $I_F=30\text{A}, T_C=25^\circ\text{C}$                                                     | -    | 0.88 | 1.10 | V             |
|                              |           | $I_F=30\text{A}, T_C=125^\circ\text{C}$                                                    | -    | 0.76 | -    |               |
| Junction Capacitance         | $C_J$     | $V_R=100\text{V}$                                                                          |      | 27   |      | pF            |
| Reverse Recovery Time        | $t_{rr}$  | $I_F=1\text{A}, V_R=30\text{V}$ ,<br>$di/dt=-200\text{A}/\mu\text{s}$                      | -    | 45   | 60   | ns            |
| Reverse Recovery Time        | $t_{rr}$  | $I_F=30\text{A}, V_R=100\text{V}, di_F/dt=-200\text{A}/\mu\text{s}, T_J=25^\circ\text{C}$  | -    | 52   | -    | ns            |
| Max.Reverse Recovery Current | $I_{RRM}$ |                                                                                            | -    | 2.8  | -    | A             |
| Reverse Recovery Charge      | $Q_{rr}$  |                                                                                            | -    | 165  | -    | nC            |
| Reverse Recovery Time        | $t_{rr}$  | $I_F=30\text{A}, V_R=100\text{V}, di_F/dt=-200\text{A}/\mu\text{s}, T_J=125^\circ\text{C}$ | -    | 71   | -    | ns            |
| Max.Reverse Recovery Current | $I_{RRM}$ |                                                                                            | -    | 9    | -    | A             |
| Reverse Recovery Charge      | $Q_{rr}$  |                                                                                            | -    | 340  | -    | nC            |

### Typical Performance Curves





### Package outline dimension

