



## Maximum Ratings

| Symbol       | Conditions                            | Values | Units |
|--------------|---------------------------------------|--------|-------|
| $V_R$        |                                       | 1200   | V     |
| $V_{RRM}$    |                                       | 1200   | V     |
| $I_{F(AV)}$  | $T_C=90^{\circ}\text{C}$ , Per Leg    | 60     | A     |
|              | $T_C=90^{\circ}\text{C}$ , Per Module | 120    | A     |
| $I_{F(RMS)}$ | $T_C=90^{\circ}\text{C}$ , Per Leg    | 84     | A     |
| $I_{FSM}$    | 1/2 Cycle , 50Hz, Sine                | 500    | A     |
|              | 1/2 Cycle , 60Hz, Sine                |        |       |



## Electrical Characteristics

| Symbol   | Conditions                             | Values |      |      | Units |
|----------|----------------------------------------|--------|------|------|-------|
|          |                                        | Min.   | Typ. | Max. |       |
| $I_{RM}$ | $V_R=1200V$                            | --     | --   | 0.5  | mA    |
|          | $V_R=1200V, T_J=125^{\circ}C$          | --     | --   | 5    | mA    |
| $V_F$    | $I_F=60A$                              | --     | 1.95 | 2.15 | V     |
|          | $I_F=60A, T_J=125^{\circ}C$            | --     | 1.65 | 1.85 | V     |
| $t_{rr}$ | $I_F=1A, V_R=30V, di_F/dt=-200A/\mu s$ |        |      |      |       |



Fig1. Forward Voltage Drop vs Forward Current

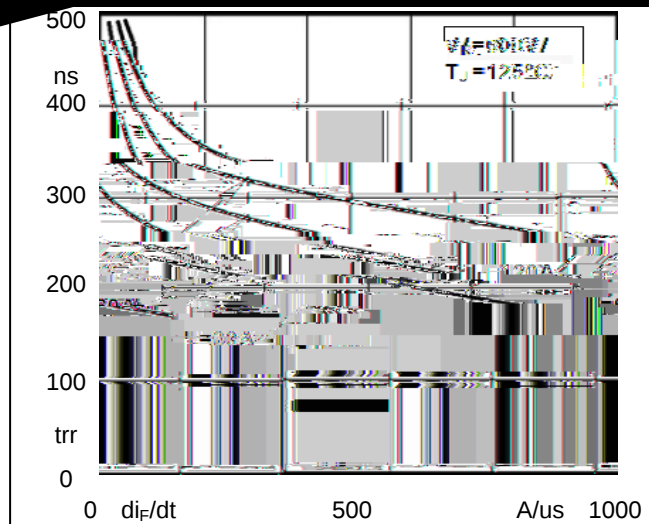


Fig2. Reverse Recovery Time vs  $di_F/dt$



Fig3. Reverse Recovery Current vs  $di_F/dt$

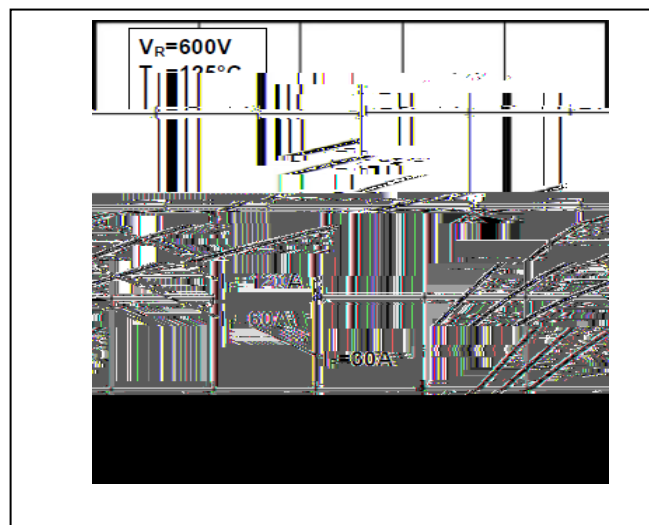


Fig4. Reverse Recovery Charge vs  $di_F/dt$

