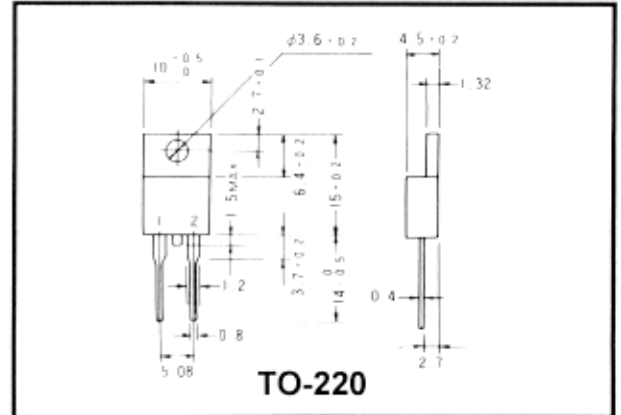


ERC90-02B (8A)

LOW LOSS SUPER HIGH SPEED RECTIFIER

NOTE: ALSO AVAILABLE IN 5A VERSION ERC90-02

Outline Drawing



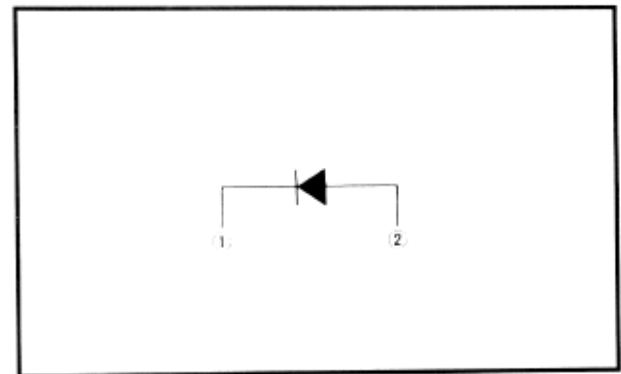
Features

- Low V_F
- Super high speed switching
- High reliability by planer design

Applications

- High speed power switching

Connection Diagram



Maximum Ratings & Characteristics

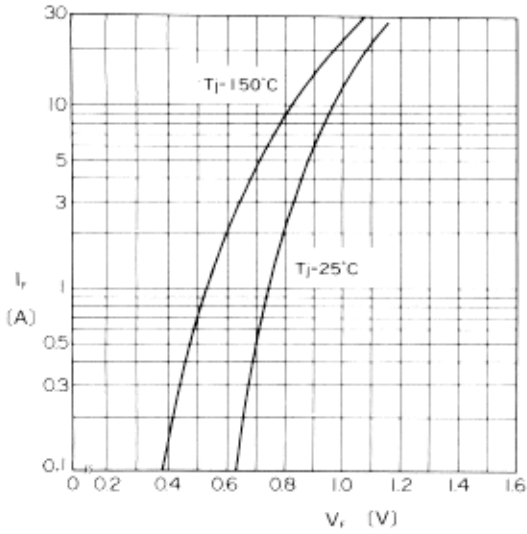
- Absolute Maximum Ratings

| Items | Symbols | Conditions | Ratings | Units |
|---------------------------------|-----------|--|-------------|------------------|
| Repetitive Peak Reverse Voltage | V_{RRM} | | 200 | V |
| Average Output Current | I_O | $T_C = 125^\circ\text{C}$, Sq. Wave, duty = 1/2 | 8 | A |
| Surge Current | I_{FSM} | Sine Wave, 10ms | 50 | A |
| Operating Junction Temperature | T_J | | -40 to +150 | $^\circ\text{C}$ |
| Storage Temperature | T_{stg} | | -40 to +150 | $^\circ\text{C}$ |

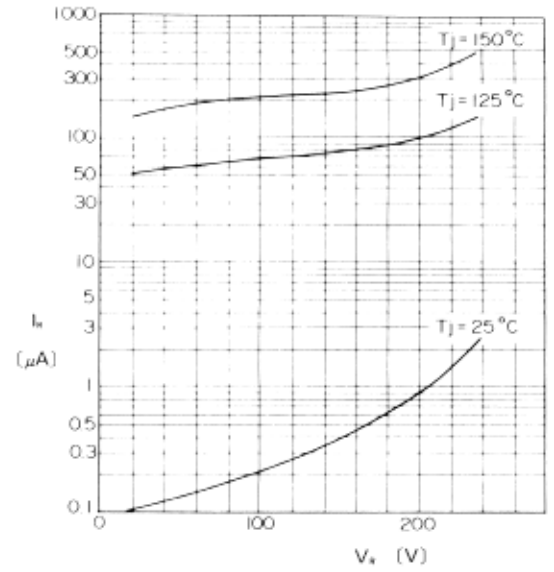
- Electrical Characteristics ($T_a = 25^\circ\text{C}$ Unless otherwise specified)

| Items | Symbols | Conditions | Ratings | Units |
|-----------------------|---------------|--|---------|--------------------|
| Forward Voltage Drop | V_F | $I_F = 8\text{A}$ | 0.98 | V |
| Reverse Current | I_R | $V_R = V_{RRM}$ | 100 | μA |
| Reverse Recovery Time | t_{rr} | $I_F = 0.1\text{A}$, $I_R = 0.2\text{A}$, $I_{rec} = 0.05\text{A}$ | 35 | ns |
| Thermal Resistance | $R_{th(j-c)}$ | Junction to case | 3.0 | $^\circ\text{C/W}$ |

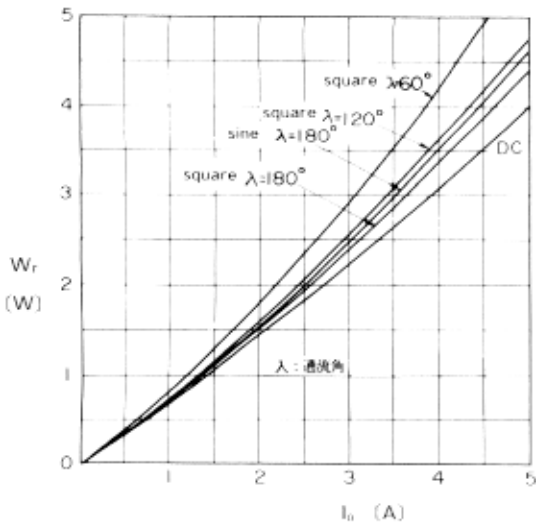
ERC90-02B (8A)



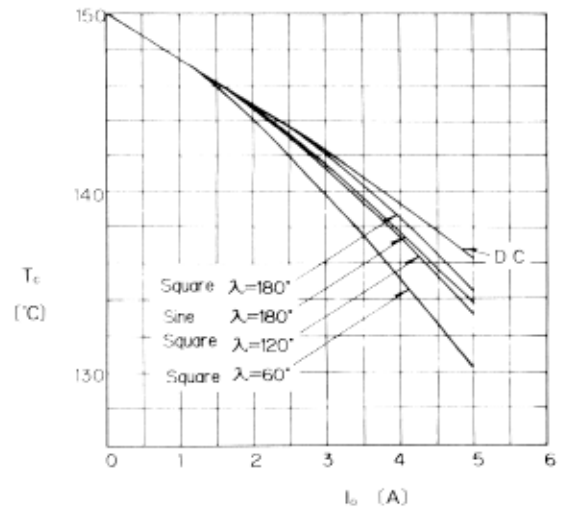
Forward Characteristics



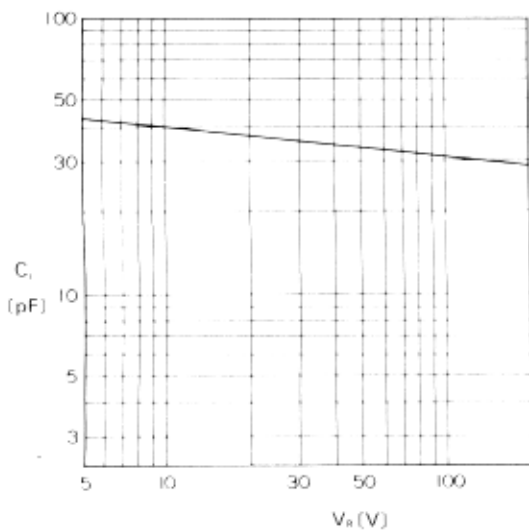
Reverse Characteristics



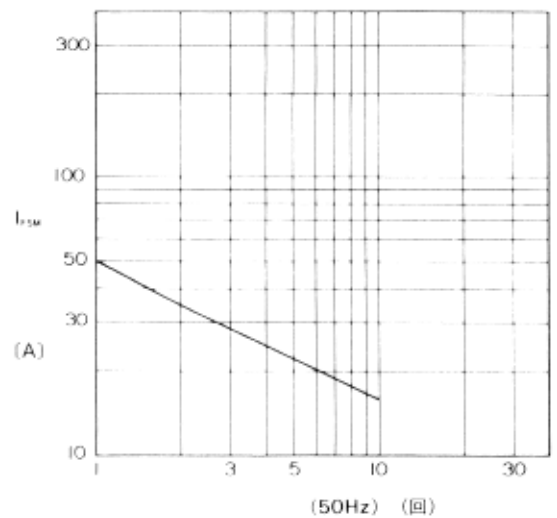
Forward Power Dissipation



Average Forward Current-Case Temperature



Junction Capacitance



Surge Capability