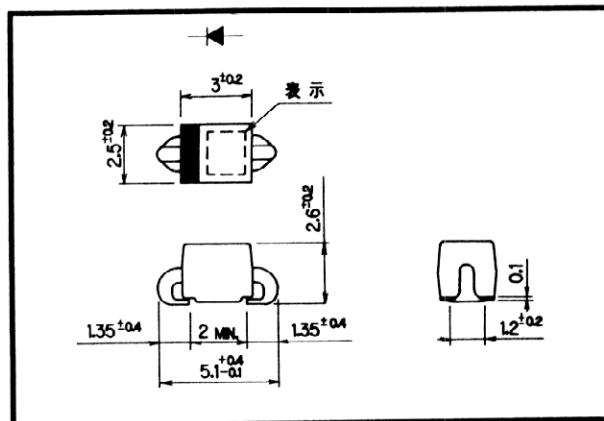


SC902-2 (1.0A)

LOW LOSS SUPER HIGH SPEED RECTIFIER

Outline Drawing



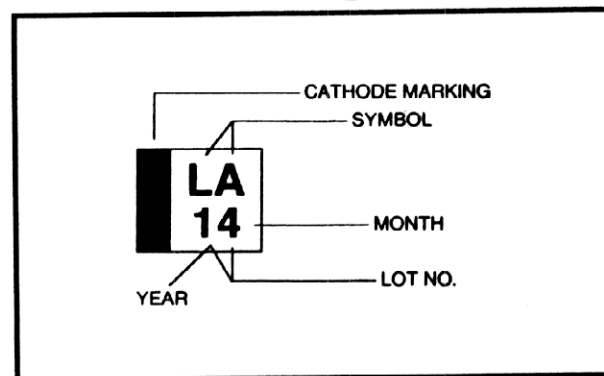
Features

- Surface mount device
- 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 |
|-------------------------------------|-----------|-------------------------------------|-------------|------------------|
| Repetative Peak Reverse Voltage | V_{RRM} | | 200 | V |
| Non-Repetative Peak Reverse Voltage | V_{RSM} | | 200 | |
| Average Output Current | I_o | $T_a = 25^\circ\text{C}$, Duty 1/2 | 1.0* | A |
| Surge Current | I_{FSM} | Sine Wave, 10ms | 25 | A |
| Operating Junction Temperature | T_J | | -40 to +150 | $^\circ\text{C}$ |
| Storage Temperature | T_{slg} | | -40 to +150 | $^\circ\text{C}$ |

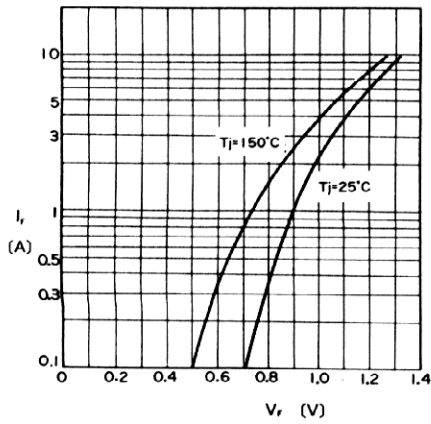
*Mounted to glass fabric base epoxy resin printed circuits.

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

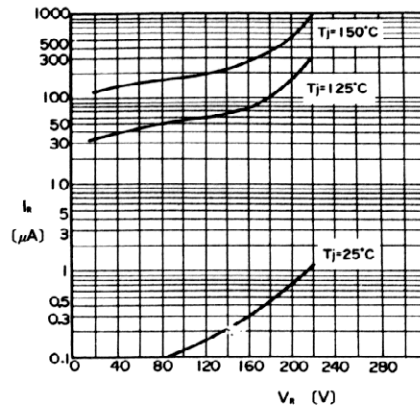
| Items | Symbols | Conditions | Ratings | Units |
|-----------------------|---------------|--|---------|--------------------|
| Forward Voltage Drop | V_F | $I_F = 1\text{A}$ | 1.05 | V |
| Reverse Current | I_R | $V_R = V_{RRM}$ | 50 | μA |
| Reverse Recovery Time | t_{rr} | $I_F = 0.1\text{A}$, $I_R = 0.2\text{A}$, $I_{rec} = 0.05\text{A}$ | 35 | ns |
| Thermal Resistance | $R_{th(j-a)}$ | Junction to Ambient | 120* | $^\circ\text{C/W}$ |



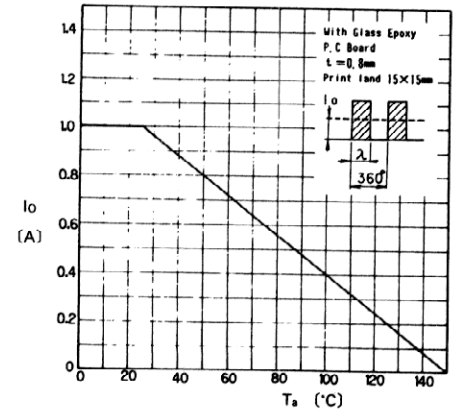
SC902-2 (1.0A)



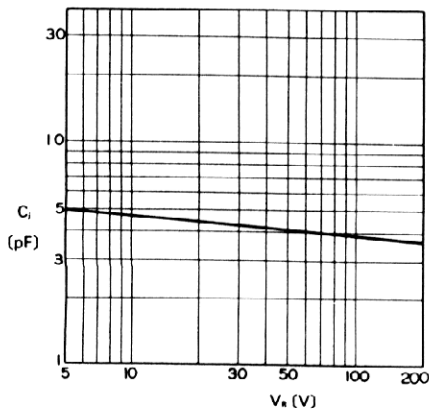
Forward Characteristics



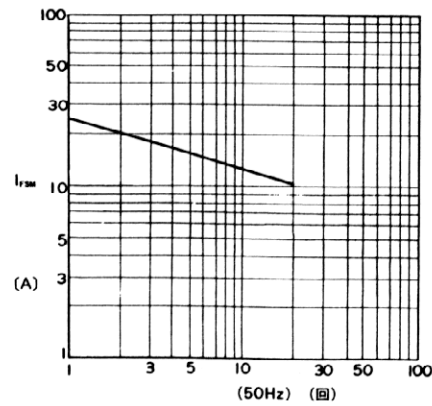
Reverse Characteristics



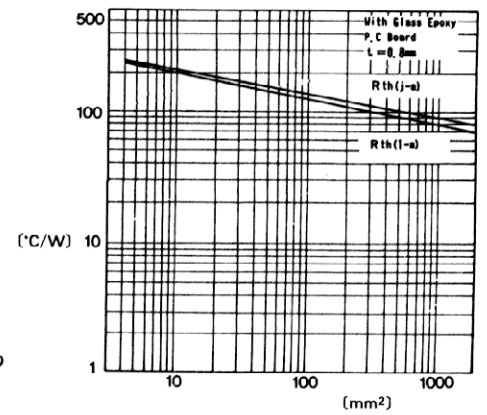
Current Derating (I_o - T_a)



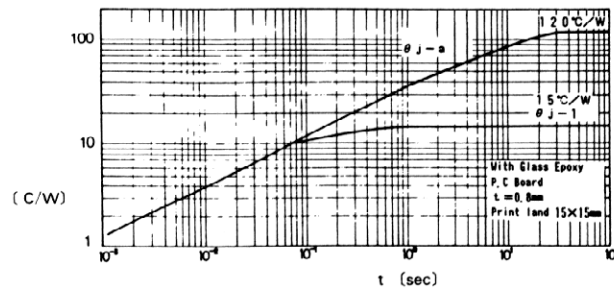
Junction Capacitance



Surge Capability



Thermal Resistance Print Land



Transient Thermal Impedance