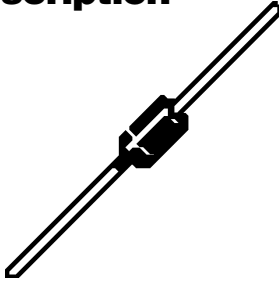




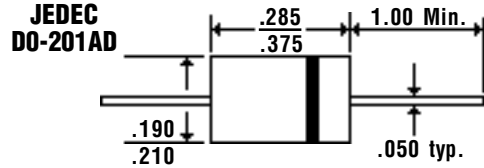
5.0 Amp SCHOTTKY BARRIER RECTIFIERS

SR590 and 5100

Description



Mechanical Dimensions



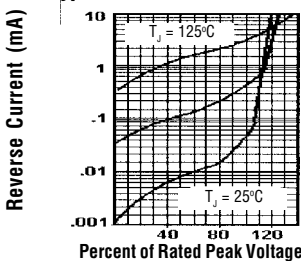
Features

- EXTREMELY LOW V_F
- LOW POWER LOSS — HIGH EFFICIENCY
- LOW STORED CHARGE; MAJORITY CARRIER CONDUCTION
- MEETS UL SPECIFICATION 94V-0

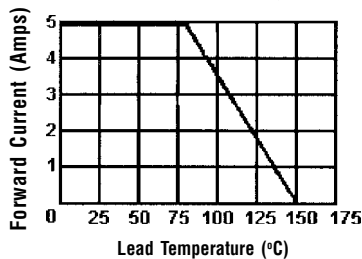
Electrical Characteristics @ 25°C.

| | SR590 | SR5100 | Units |
|--|---|--------|-----------------------------|
| Maximum Ratings | | | |
| Peak Repetitive Reverse Voltage... V_{RRM} | 90 | 100 | Volts |
| Working Peak Reverse Voltage... V_{RWM} | 90 | 100 | Volts |
| DC Blocking Voltage... V_{DC} | 90 | 100 | Volts |
| Average Forward Rectified Current... $I_{F(av)}$ @ $T_A = 55^\circ\text{C}$ | 5.0 | | Amps |
| Non-Repetitive Peak Forward Surge Current... I_{FSM} @ Rated Load Conditions, 1/2 Wave, 8.3ms | 150 | | Amps |
| Forward Voltage... V_F @ $I_F = 5.0$ Amps | $T_L = 25^\circ\text{C}$: 0.79 $T_L = 100^\circ\text{C}$: 0.69 | | Volts |
| DC Reverse Current... I_R @ Rated DC Blocking Voltage | $T_L = 25^\circ\text{C}$: 0.6 $T_L = 100^\circ\text{C}$: 20.0 | | mAmps |
| Typical Junction Capacitance... C_j | 500 | | pF |
| Thermal Resistance... $R_{\theta JL}$ | 15.0 | | $^\circ\text{C} / \text{W}$ |
| Operating Temperature Range... T_j | -65 to 150 | | $^\circ\text{C}$ |
| Storage Temperature Range... T_{STRG} | -65 to 175 | | $^\circ\text{C}$ |

Typical Reverse Characteristics



Forward Current Derating Curve



Typical Junction Capacitance

