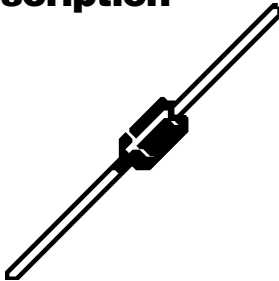


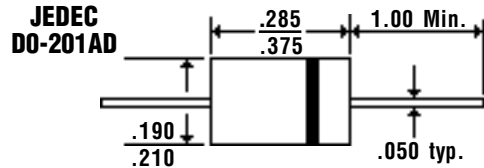
# 5.0 Amp SCHOTTKY BARRIER RECTIFIERS

**SR590 and 5100**

## Description



## Mechanical Dimensions



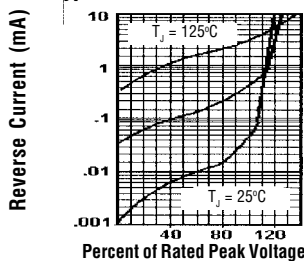
## Features

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

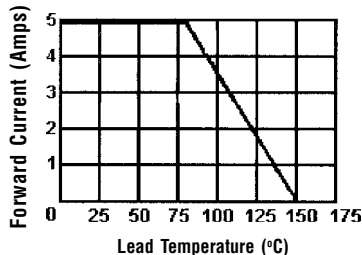
### Electrical Characteristics @ 25°C.

	SR590	SR5100	Units
<b>Maximum Ratings</b>			
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
Typical 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**

