

# SR520~SR5100

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

<b>VOLTAGE</b>	<b>20 to 100 Volt</b>	<b>CURRENT</b>	<b>5 Ampere</b>
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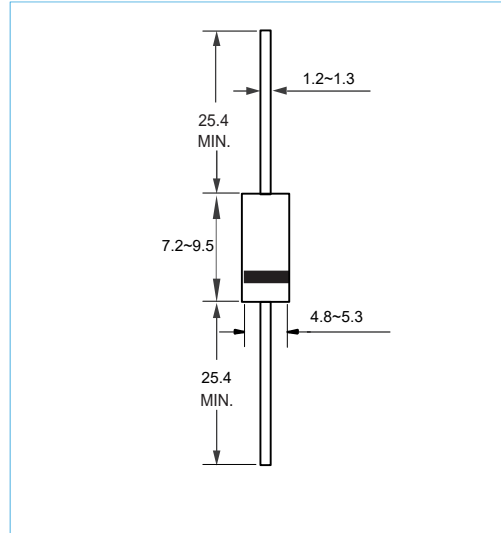
DO-201AD Unit:mm

### FEATURES

- Low power loss, High efficiency
- High surge current capability
- High current capacity, low VF
- Lead free in compliance with EU RoHS 2.0

### MECHANICAL DATA

- Case Material: Molded Plastic.
- UL Flammability Classification Rating 94V-0



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

PARAMETER	SYMBOL	SR520	SR530	SR540	SR550	SR560	SR580	SR5100	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	20	30	40	50	60	80	100	V
Maximum RMS Voltage	$V_{RMS}$	14	21	28	35	42	56	70	V
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	50	60	80	100	V
Maximum Average Forward Current (see FIG.1)	$I_{F(AV)}$	5							A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	150							A
Maximum Forward Voltage at 5 A	$V_F$	0.55		0.70		0.85			V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$	$I_R$	0.5 50							mA
Typical Junction Capacitance (Note1)	$C_J$	200							pF
Thermal Resistance2)	$R_{\theta JA}$	18							°C / W
Operating Junction Temperature Range	$T_J$	-55 to +150							°C
Storage Temperature Range	$T_{STG}$	-55 to +150							°C

### NOTES:

1. Measured at 1.0MHz and applied reverse voltage of 4.0 volt.

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## RATING AND CHARACTERISTIC CURVES

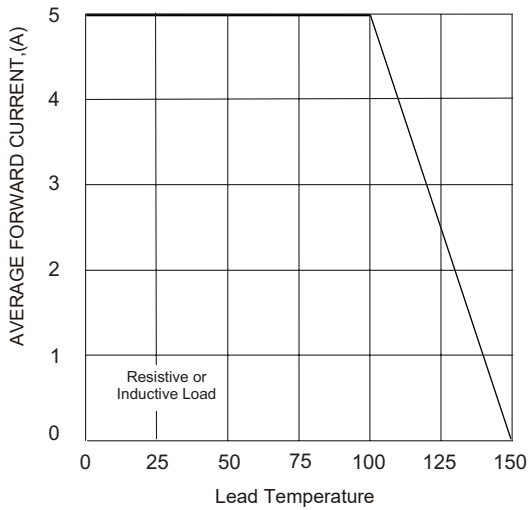


Fig. 1 Forward Current Derating Curve

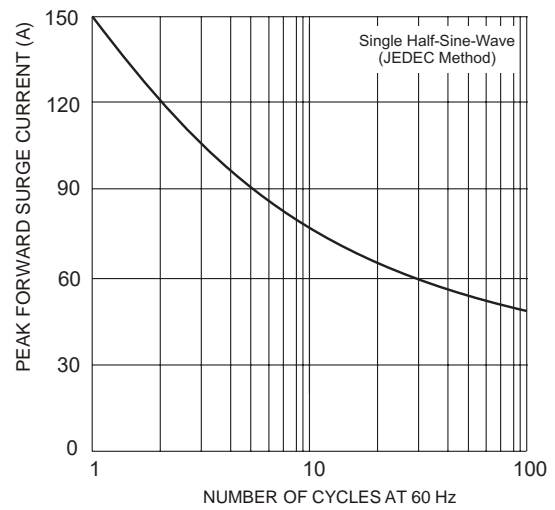


Fig. 2 Surge Current Derating Curve

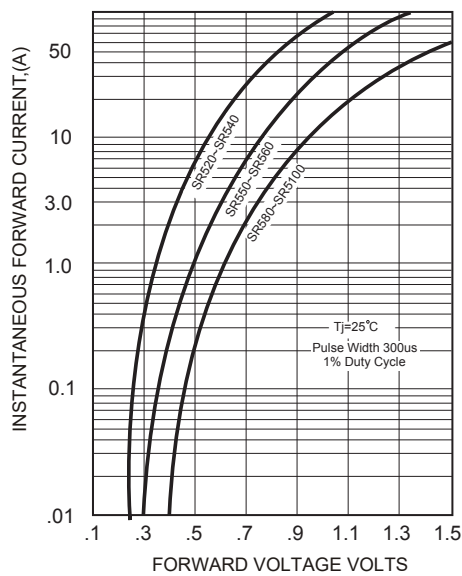


Fig. 3 Typical Forward Characteristics

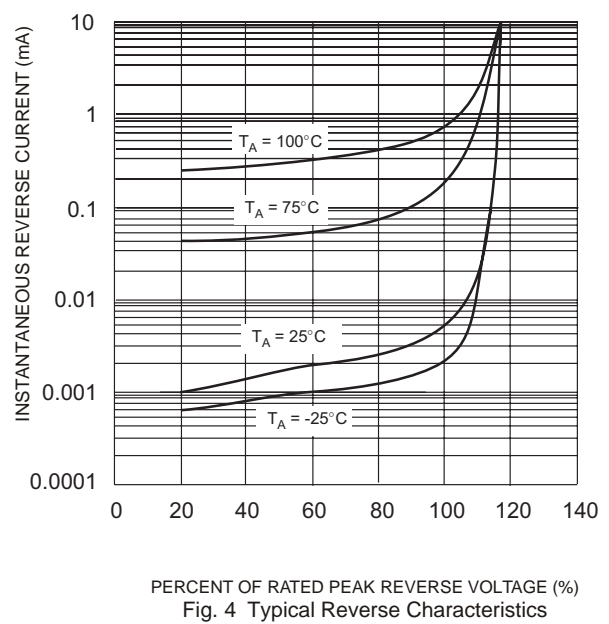


Fig. 4 Typical Reverse Characteristics

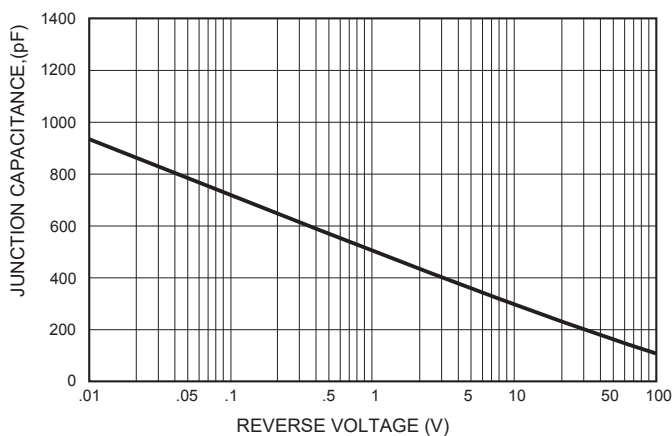


Fig. 5 Typical Junction Capacitance

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### ORDER INFORMATION

- Packing information

Part Number	Case	Reel Size	QUANTITY
SR520~SR5100	DO-201AD	13 Inch	1200