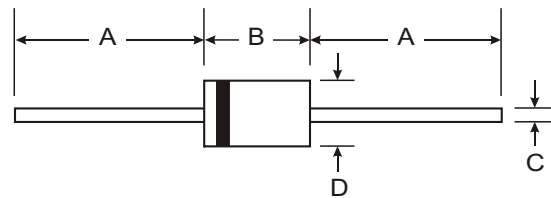
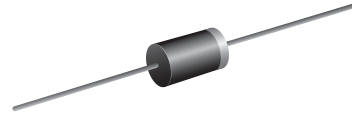


**VOLTAGE RANGE: 150-200V**  
**CURRENT: 5.0 A**

### Features

- Schottky Barrier Chip
- Guard Ring Die Construction for Transient Protection
- High Current Capability
- Low Power Loss, High Efficiency
- High Surge Current Capability
- For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Applications



### Mechanical Data

- Case: DO-201AD, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 1.2 grams (approx.)
- Mounting Position: Any
- Marking: Type Number

DO-201AD		
Dim	Min	Max
A	25.40	—
B	8.50	9.53
C	0.96	1.06
D	4.80	5.21
All Dimensions in mm		



### Maximum Ratings and Electrical Characteristics T<sub>A</sub> = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Number	SYMBOLS	SR5150	SR5200	UNITS
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	150	200	VOLTS
Maximum RMS voltage	V <sub>RMS</sub>	105	140	VOLTS
Maximum DC blocking voltage	V <sub>DC</sub>	150	200	VOLTS
Maximum average forward rectified current 0.375" (9.5mm) lead length(see fig.1)	I <sub>(AV)</sub>	5.0		Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	150.0		Amps
Maximum instantaneous forward voltage at 5.0A	V <sub>F</sub>	0.95		Volts
Maximum DC reverse current at rated DC blocking voltage	I <sub>R</sub>	0.2		mA
<small>T<sub>A</sub>=25°C</small> <small>T<sub>A</sub>=100°C</small>		2.0		
Typical junction capacitance (NOTE 1)	C <sub>J</sub>	400		pF
Typical thermal resistance (NOTE 2)	R <sub>θJA</sub>	25.0		°C/W
Operating junction temperature range	T <sub>J</sub>	-65 to +150		°C
Storage temperature range	T <sub>STG</sub>	-65 to +150		°C

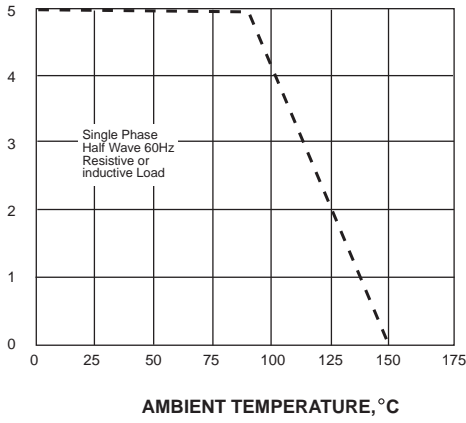
**Note:** 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

## RATINGS AND CHARACTERISTIC CURVES SR5150THRU SR5200

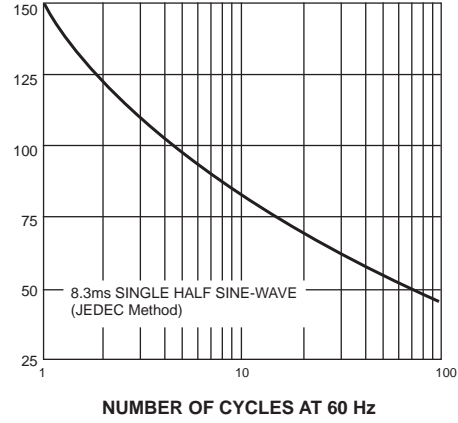
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



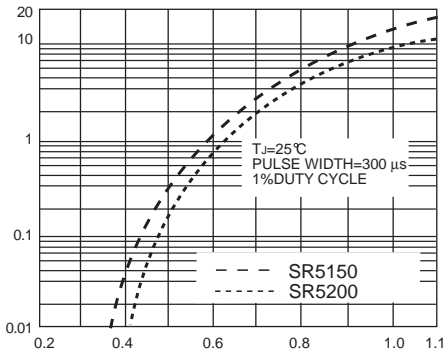
PEAK FORWARD SURGE CURRENT, AMPERES

FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



INSTANTANEOUS FORWARD CURRENT, AMPERES

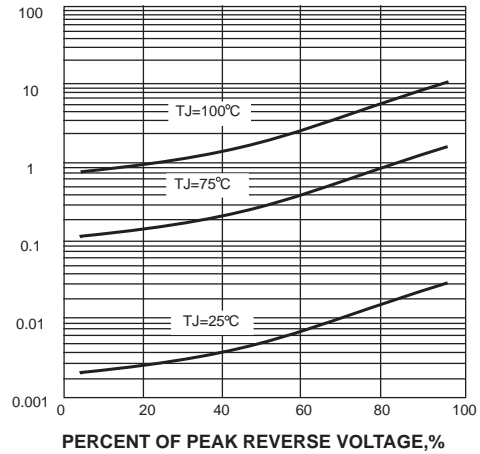
FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



INSTANTANEOUS FORWARD VOLTAGE, VOLTS

INSTANTANEOUS REVERSE CURRENT, MILLIAMPERES

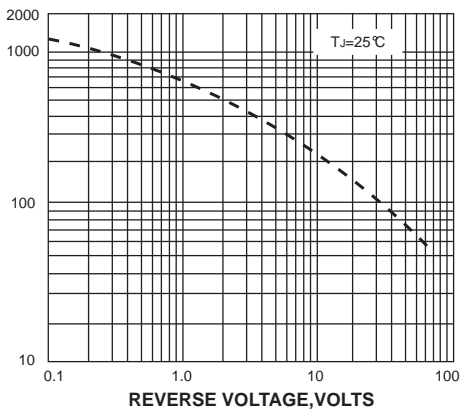
FIG. 4-TYPICAL REVERSE CHARACTERISTICS



PERCENT OF PEAK REVERSE VOLTAGE, %

JUNCTION CAPACITANCE, pF

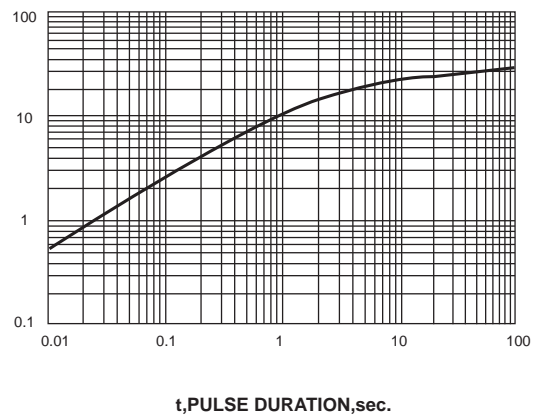
FIG. 5-TYPICAL JUNCTION CAPACITANCE



REVERSE VOLTAGE, VOLTS

TRANSIENT THERMAL IMPEDANCE, °C/W

FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



t, PULSE DURATION, sec.