

# SR5200

**FMS**

## 5.0 AMP SCHOTTKY BARRIER RECTIFIERS



### FEATURES

- \* Low forward voltage drop
- \* High current capability
- \* High reliability
- \* High surge current capability
- \* Epitaxial construction

### MECHANICAL DATA

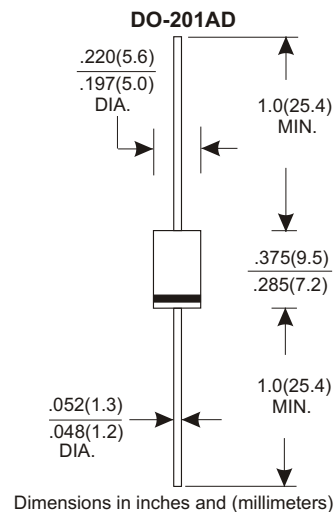
- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any
- \* Weight: 1.10 grams

### VOLTAGE RANGE

20 to 100 Volts

### CURRENT

5.0 Amperes



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwise specified.  
Single phase half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

TYPE NUMBER	SR5200	UNITS
Maximum Recurrent Peak Reverse Voltage	200	V
Maximum RMS Voltage	140	V
Maximum DC Blocking Voltage	200	V
Maximum Average Forward Rectified Current		
See Fig. 1	5.0	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	150	A
Maximum Instantaneous Forward Voltage at 5.0A	0.90	V
Maximum DC Reverse Current Ta=25°C	0.5	mA
at Rated DC Blocking Voltage Ta=100°C	10	mA
Typical Junction Capacitance (Note1)	380	pF
Typical Thermal Resistance R JA (Note 2)	10	°C/W
Operating Temperature Range Tj	-65 — +150	°C
Storage Temperature Range Tstg	-65 — +150	°C

#### NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Ambient Vertical PC Board Mounting 0.5"(12.7mm) Lead Length.

## RATING AND CHARACTERISTIC CURVES (SR5200)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

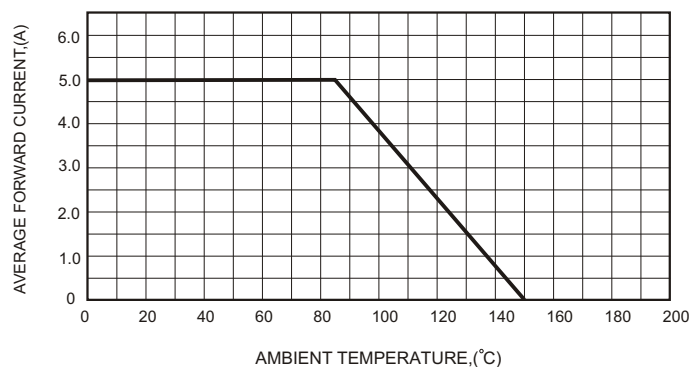


FIG.2-TYPICAL FORWARD CHARACTERISTICS

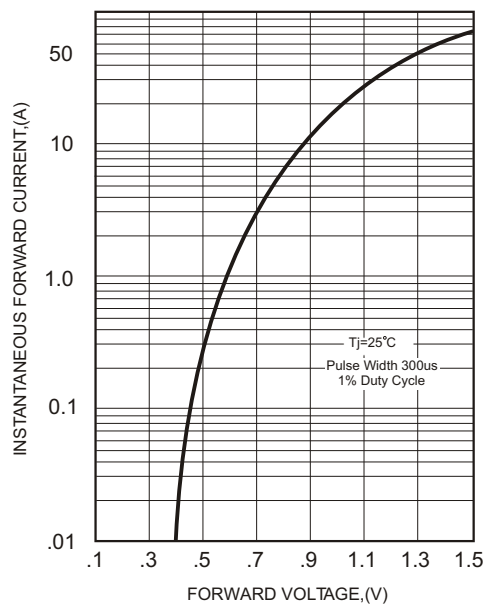


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

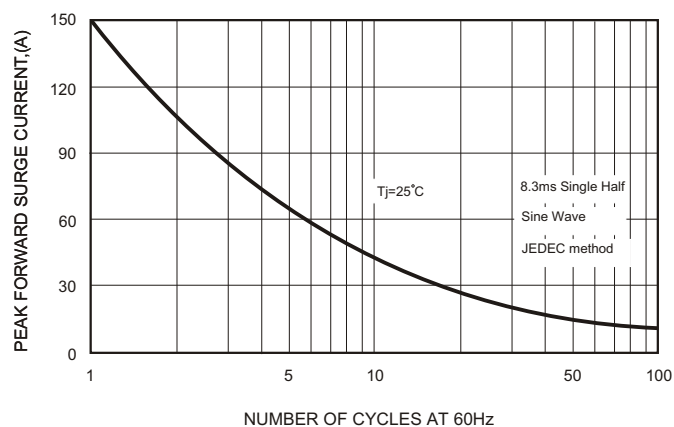


FIG.4-TYPICAL JUNCTION CAPACITANCE

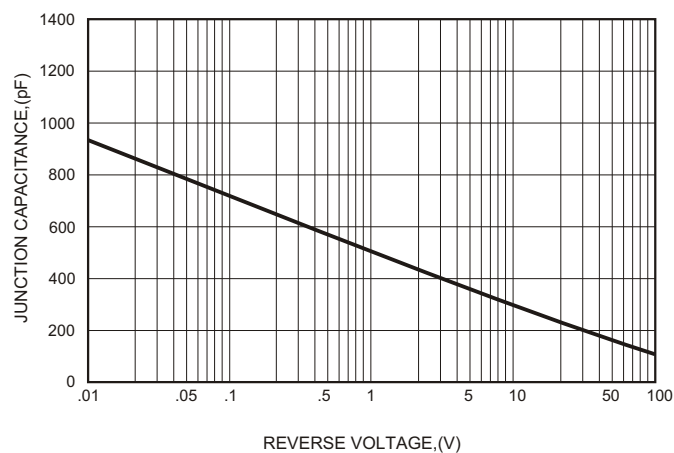


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

