

# Schottky Barrier Rectifiers



## SR10A20-G Thru SR10A100-G

**Reverse Voltage: 20 ~ 100 Volts**

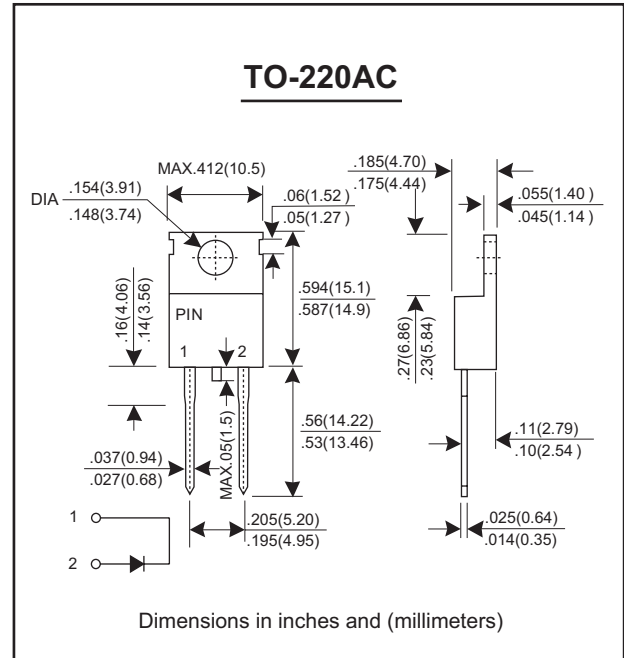
**Current: 10.0 Amp**

**Features:**

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability

**Mechanical Data:**

- Case: TO-220AC molded plastic
- Epoxy: UL94V-0 rate flame retardant
- Terminals: Solderable per MIL-STD-202, method 208
- Polarity: Color band denotes cathode end
- Mounting position: Any
- Approx. Weight: 2.03 grams



### Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Parameter	Symbol	SR10A20-G	SR10A40-G	SR10A60-G	SR10A80-G	SR10A100-G	Unit
Max. Recurrent Peak Reverse Voltage	$V_{RRM}$	20	40	60	80	100	V
Max. RMS Voltage	$V_{RMS}$	14	28	42	56	70	V
Max. DC Blocking Voltage	$V_{DC}$	20	40	60	80	100	V
Peak Surge Forward Current 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	$I_{FSM}$	175					A
Max. Average Forward Rectified Current ( $T_C=100^\circ\text{C}$ )	$I_{(AV)}$	10.0					A
Max. Instantaneous Forward Voltage at 10A	$V_F$	0.55		0.65	0.75	0.85	V
Max. DC Reverse Current @ $T_j = 25^\circ\text{C}$	$I_R$	1.0					mA
At Rated DC Blocking Voltage @ $T_j = 100^\circ\text{C}$		50					
Typical junction Capacitance (Note1)	$C_J$	500					pF
Max. Operating Junction Temperature	$T_j$	-55 to +125					°C
Storage Temperature	$T_{STG}$	-55 to +150					°C

Note1: (1) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts DC.



## RATINGS AND CHARACTERISTIC CURVES SR10A20-G THRU SR10A100-G

FIG.1 - FORWARD CURRENT DERATING CURVE

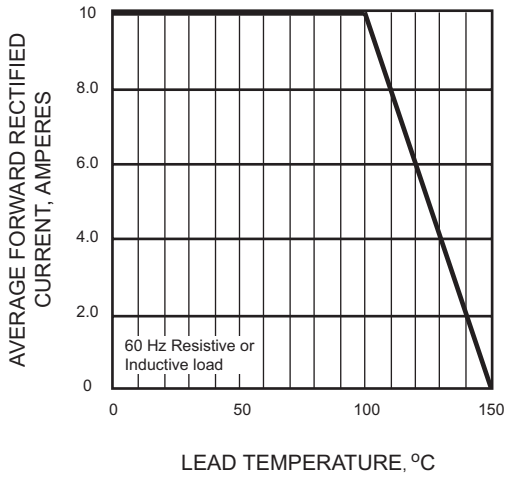


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

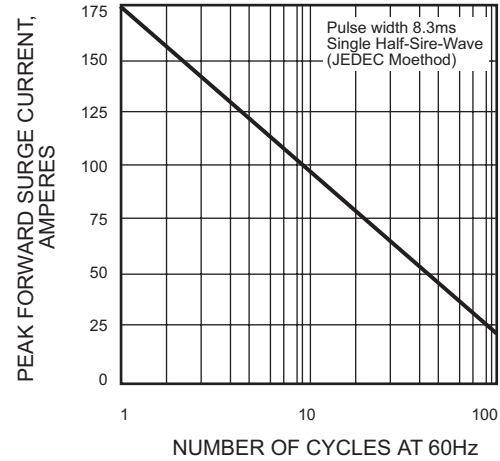


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

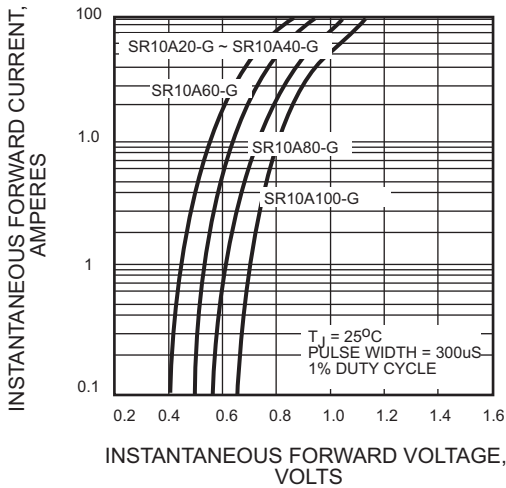


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

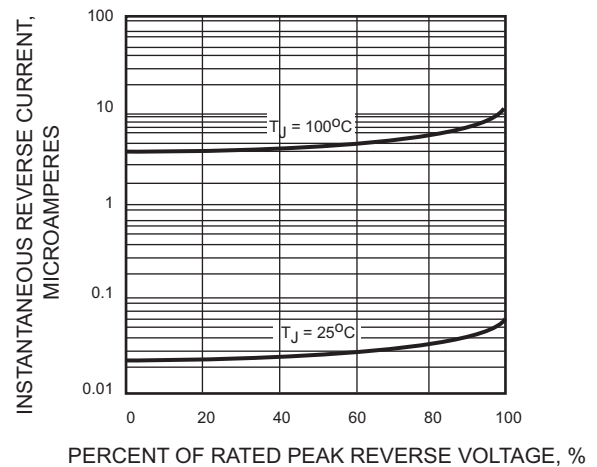


FIG.5 - TYPICAL JUNCTION CAPACITANCE

