



SR5A20-G Thru SR5A100-G

Reverse Voltage: 20 ~ 100 Volts

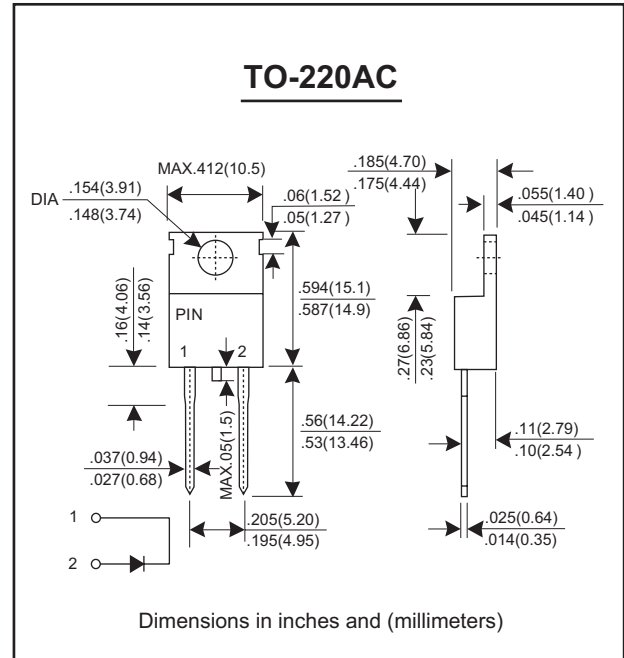
Current: 5.0 Amp

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	SR5A20-G	SR5A40-G	SR5A60-G	SR5A80-G	SR5A100-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}	100					A
Max. Average Forward Rectified Current ($T_C=95^\circ\text{C}$)	$I_{(AV)}$	5.0					A
Max. Instantaneous Forward Voltage at 5.0A	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 @ $T_j = 100^\circ\text{C}$		30					
Typical junction Capacitance (Note1)	C_J	350					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 SR5A20-G THRU SR5A100-G

FIG.1 - FORWARD CURRENT DERATING CURVE

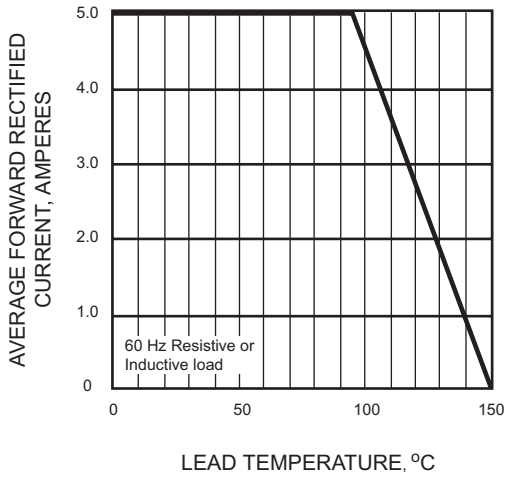


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

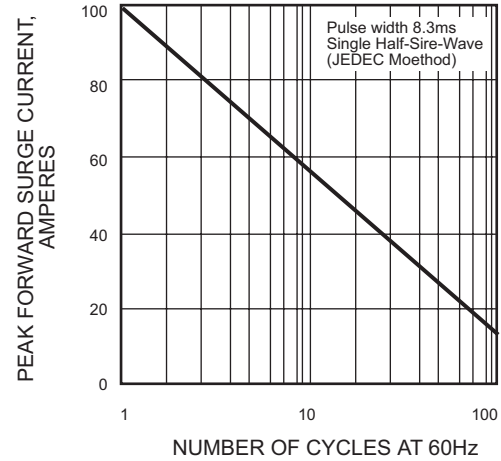


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

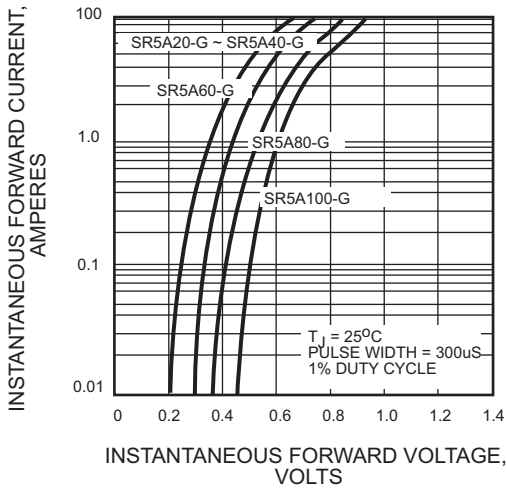


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

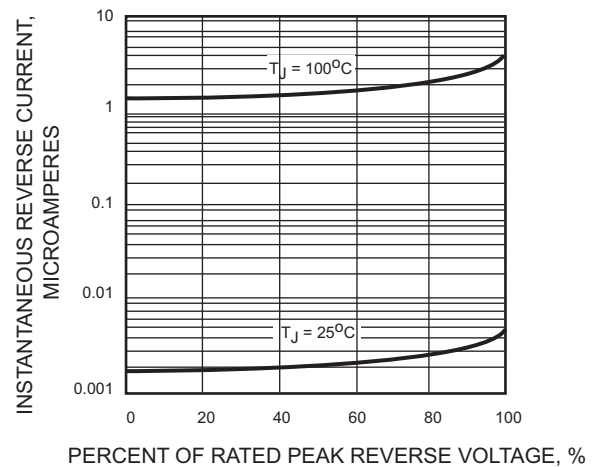


FIG.5 - TYPICAL JUNCTION CAPACITANCE

