



SR16C20C-G Thru SR16C100C-G

Reverse Voltage: 20 ~ 100 Volts

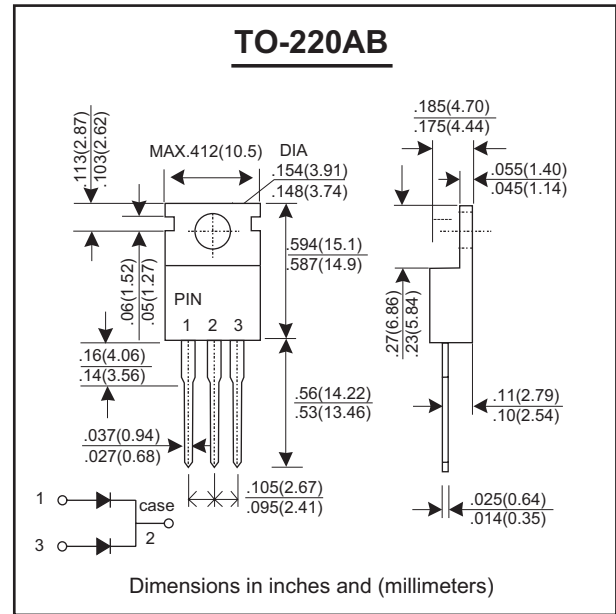
Current: 16.0 Amp

Features:

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

Mechanical Data:

- Case: TO-220AB 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: 2.24 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	SR16C20C -G	SR16C40C -G	SR16C60C -G	SR16C80C -G	SR16C100C -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}	150						A
Max. Average Forward Rectified Current $T_C=100^\circ\text{C}$	$I_{(AV)}$	16.0						A
Max. Instantaneous Forward Voltage at 5A	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	600						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 SR16C20C-G THRU SR16C100C-G

FIG.1 - FORWARD CURRENT DERATING CURVE

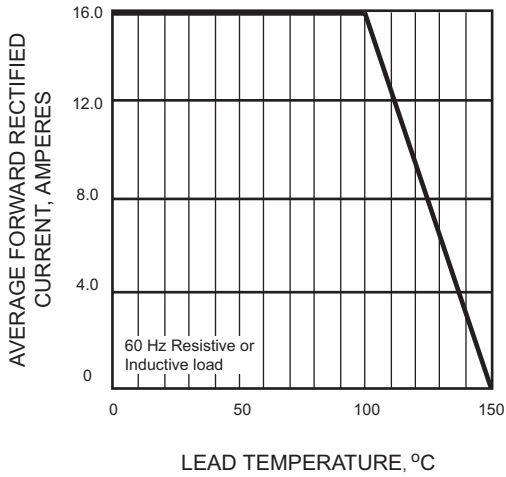


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

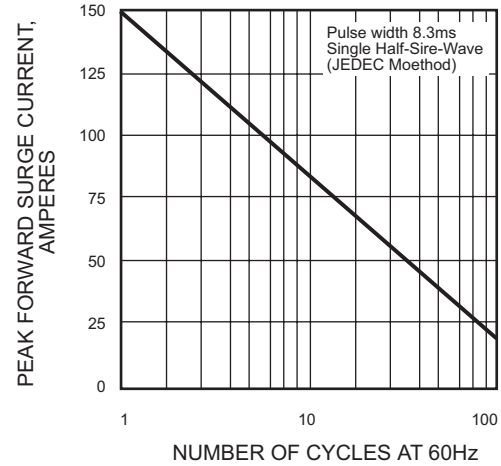


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

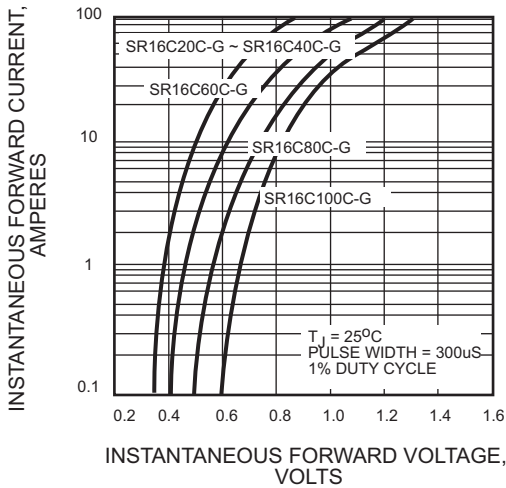


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

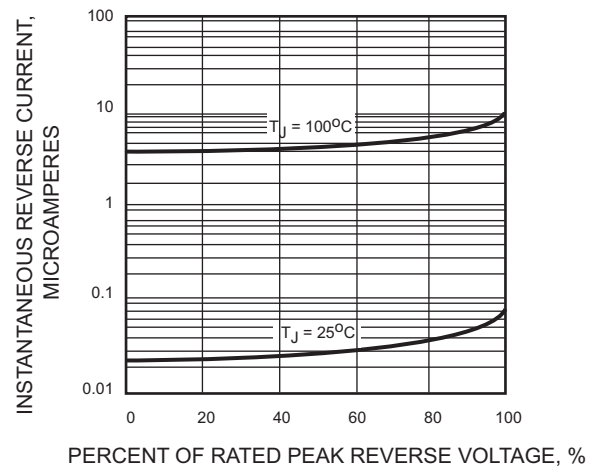


FIG.5 - TYPICAL JUNCTION CAPACITANCE

