Schottky Barrier Rectifiers

COMCHIP
SMD DIODE SPECIALIST

SR30C20CF-G Thru SR30C100CF-G

Reverse Voltage: 20 ~ 100 Volts
Current: 30.0 Amp

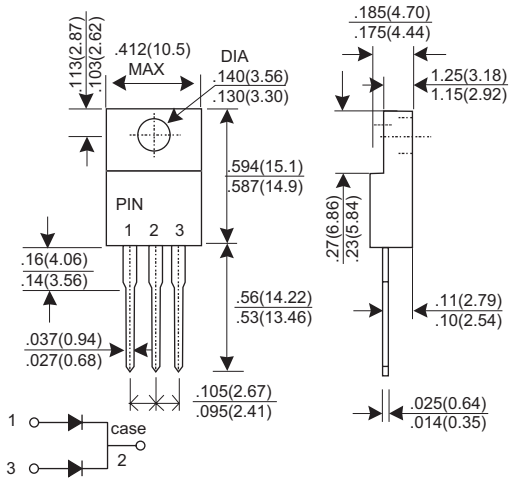
Features:

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

Mechanical Data:

- Case: ITO-220AB molded plastic
- Epoxy: UL 94V-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

ITO-220AB



Dimensions in inches and (millimeters)

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	SR30C20CF -G	SR30C40CF -G	SR30C60CF -G	SR30C80CF -G	SR30C100CF -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}	250					A
Max. Average Forward Rectified Current T_C=100°C	$I_{(AV)}$	30.0					A
Max. Instantaneous Forward Voltage at 15A	V_F	0.55		0.65	0.75	0.85	V
Max. DC Reverse Current @Tj = 25°C	I_R	1.0					mA
At Rated DC Blocking Voltage @Tj = 100°C		30					
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.

"-G" suffix designates RoHS compliant version

RATINGS AND CHARACTERISTIC CURVES SR30C20C-G THRU SR30C100C-G

FIG.1 - FORWARD CURRENT DERATING CURVE

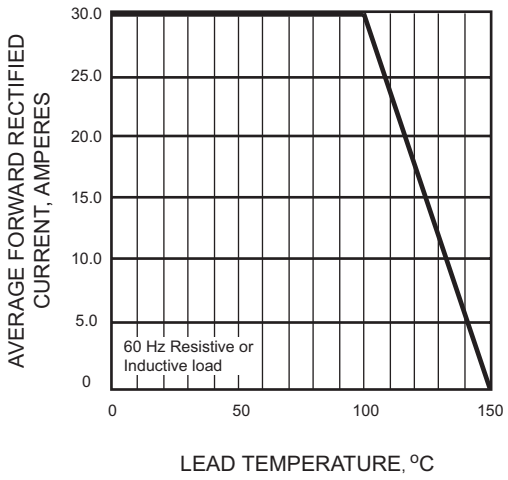


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

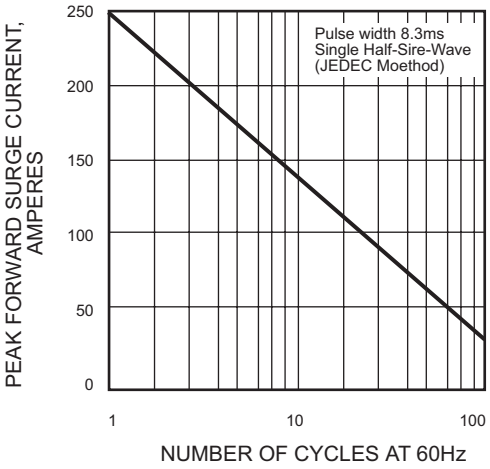


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

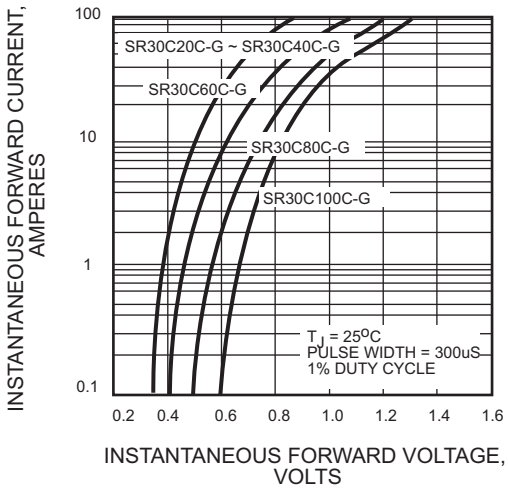


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

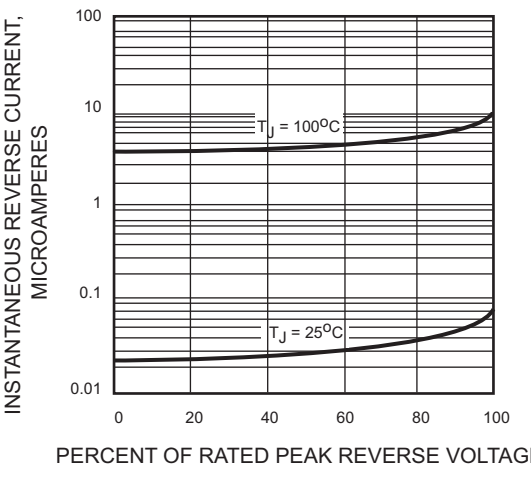


FIG.5 - TYPICAL JUNCTION CAPACITANCE