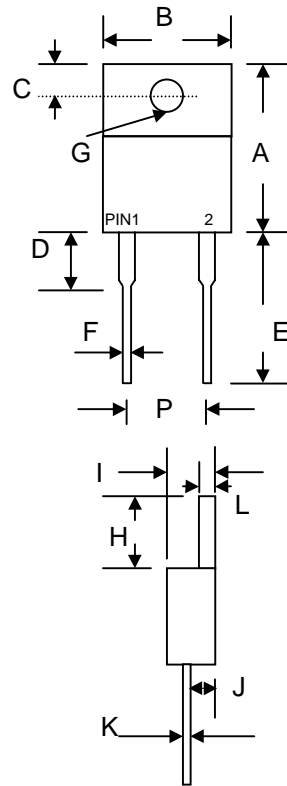


Features

- Schottky Barrier Chip
- Guard Ring for Transient Protection
- High Current Capability, Low Forward
- Low Reverse Leakage Current
- High Surge Current Capability
- Plastic Material has UL Flammability Classification 94V-O

Mechanical Data

- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: See Diagram
- Weight: 2.24 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



TO-220A		
Dim	Min	Max
A	14.9	15.1
B	—	10.5
C	2.62	2.87
D	3.56	4.06
E	13.46	14.22
F	0.68	0.94
G	3.74 Ø	3.91 Ø
H	5.84	6.86
I	4.44	4.70
J	2.54	2.79
K	0.35	0.64
L	1.14	1.40
P	4.95	5.20
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic	Symbol	SB830	SB835	SB840	SB845	SB850	SB860	Unit
Peak Repetitive Reverse Voltage	V_{RRM}							
Working Peak Reverse Voltage	V_{RWM}	30	35	40	45	50	60	V
DC Blocking Voltage	V_R							
RMS Reverse Voltage	$V_{R(RMS)}$	21	24.5	28	31.5	35	42	V
Average Rectified Output Current @ $T_C = 95^\circ\text{C}$	I_O	8.0						A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	200						A
Forward Voltage @ $I_F = 8.0\text{A}$	V_{FM}	0.55				0.7		V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$	I_{RM}	0.5				50		mA
Typical Junction Capacitance (Note 1)	C_j	700						pF
Typical Thermal Resistance Junction to Case (Note 2)	$R_{\theta JC}$	6.9						K/W
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +150						$^\circ\text{C}$

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.
2. Thermal resistance junction to case mounted on heatsink.

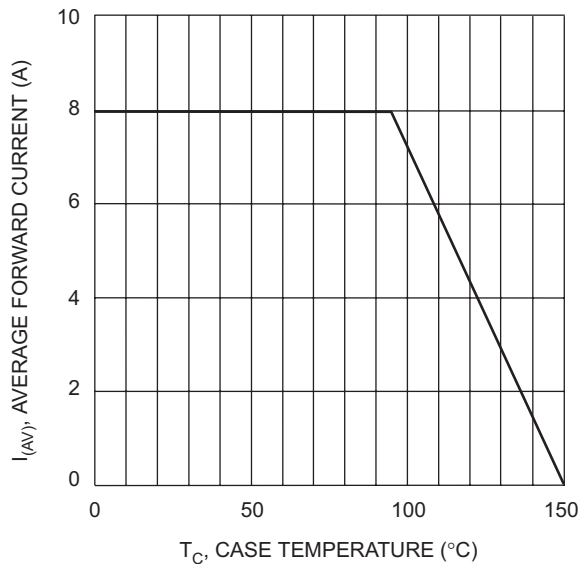


Fig. 1 Fwd Current Derating Curve

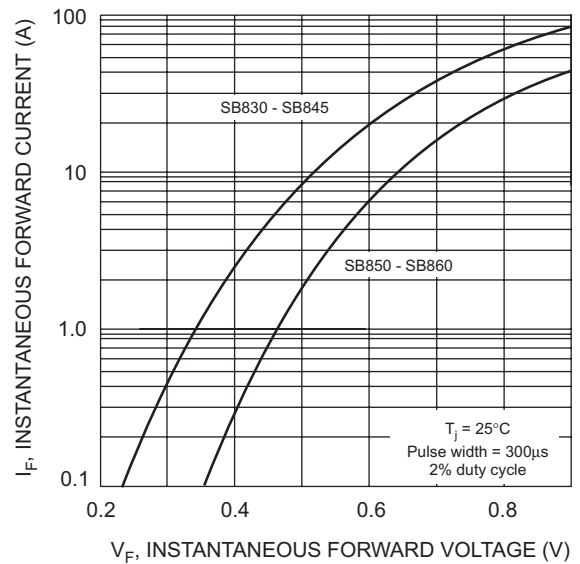


Fig. 2 Typical Forward Characteristics

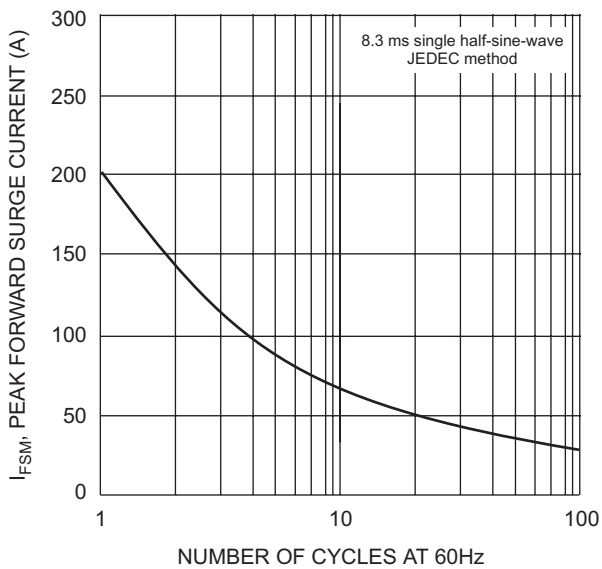


Fig. 3 Max Non-Repetitive Surge Current

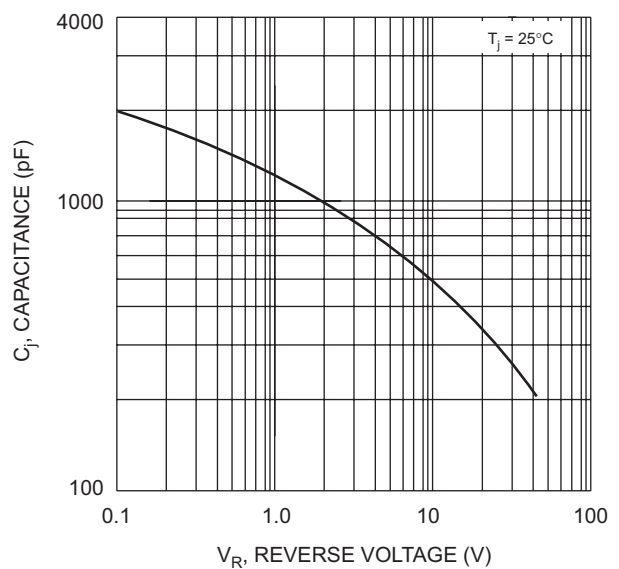


Fig. 4 Typical Junction Capacitance

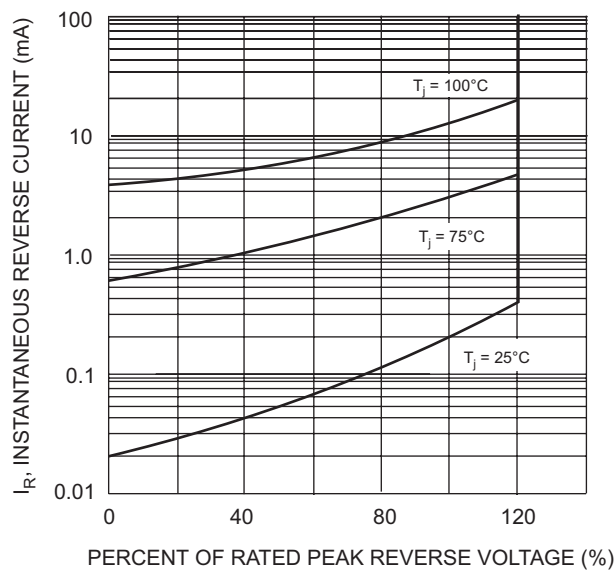


Fig. 5 Typical Reverse Characteristics