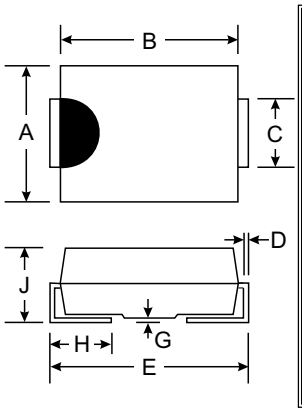
B340LA/B

3.0A LOW VF SCHOTTKY BARRIER RECTIFIER

NEW PRODUCT

Features

- Very Low Forward Voltage Drop
- Guard Ring Die Construction for Transient Protection
- Ideally Suited for Automatic Assembly
- Low Power Loss, High Efficiency
- Surge Overload Rating to 70A Peak
- Plastic Material - UL Flammability Classification 94V-0



	SMA		SMB	
Dim	**Min**	**Max**	**Min**	**Max**
A	2.29	2.92	3.30	3.94
B	4.00	4.60	4.06	4.57
C	1.27	1.63	1.96	2.21
D	0.15	0.31	0.15	0.31
E	4.80	5.59	5.00	5.59
G	0.10	0.20	0.10	0.20
H	0.76	1.52	0.76	1.52
J	2.01	2.62	2.00	2.62
All Dimensions in mm				

"A" Suffix Designates SMA Package
"B" Suffix Designates SMB Package

Mechanical Data

- Case: Molded Plastic
- Terminals: Solder Plated Terminal - Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band or Cathode Notch
- Approx. Weight: SMA 0.064 grams
  SMB 0.093 grams
- Marking: Type Number

Maximum Ratings @ T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load unless otherwise noted.
For capacitive load, derate current by 20%.

Characteristic	Symbol	B340LA/B	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	40	V
RMS Reverse Voltage	$V_{R(RMS)}$	28	V
Average Rectified Output Current (Note 1) T_L = 90°C	I_O	3.0	A
Non-Repetitive Peak Forward Surge Current, single sine-wave superimposed on rated load, 60Hz	I_{FSM}	70	A
Operating and Storage Temperature Range	$T_{j, TSTG}$	-40 to +125	°C

Electrical Characteristics @ T_A = 25°C unless otherwise specified

Characteristic	Symbol	Min	Typ	Max	Unit	Conditions
Reverse Breakdown Voltage (Note 2)	$V_{(BR)R}$	40	—	—	—	I_R = 2.0mA
Forward Voltage Drop (Note 2)	V_{FM}	— —	0.310 —	0.350 0.450	V	I_F = 1.0A I_F = 3.0A
Leakage Current (Note 2)	I_{RM}	—	—	150	uA	V_R = 15V
			— —	1.0 2.0	mA	V_R = 20V V_R = 40V
Typical Junction Capacitance	C_j	—	180	—	pF	f = 1MHz, V_R = 4.0VDC
Typical Thermal Resistance, Junction to Terminal	$R_{\theta JT}$	—	25	—	°C/W	Mounted on alumina substrate

Notes: 1. When mounted on alumina substrate, 180° half sine wave.
2. Short duration test pulse used to minimize self-heating effect.

NEW PRODUCT

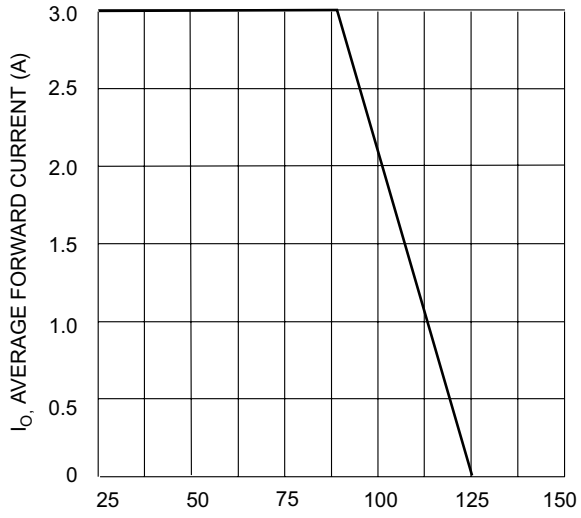


Fig. 1 Forward Current Derating Curve

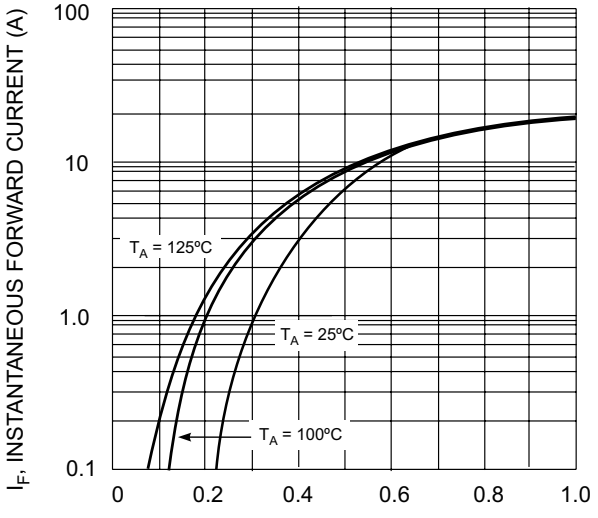


Fig. 2 Typical Forward Characteristics

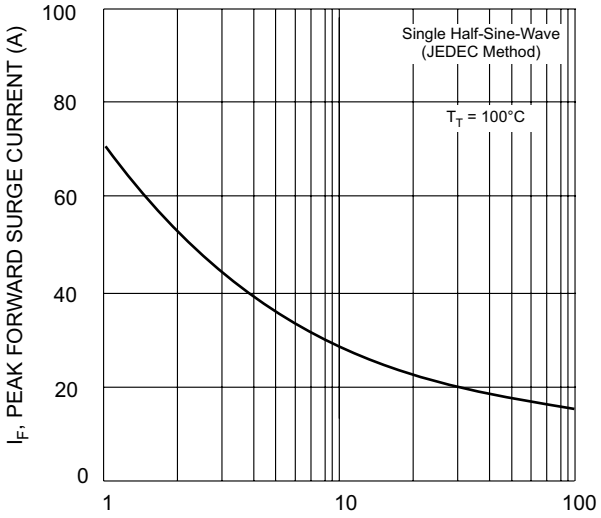


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

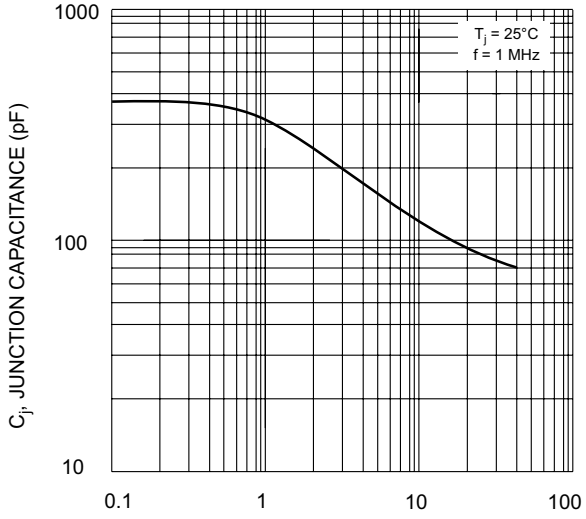


Fig. 4 Typical Junction Capacitance

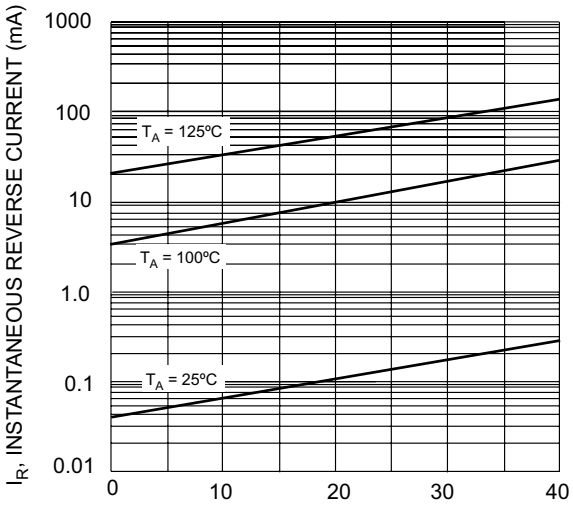


Fig. 5 Typical Reverse Characteristics