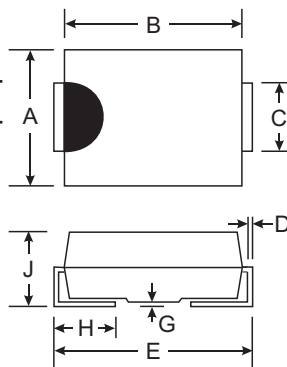


Features

- 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
- Lead Free Finish/RoHS Compliant (Note 3)

Mechanical Data

Case: SMA/SMB
 Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
 Moisture sensitivity: Level 1 per J-STD-020C
 Terminals: Lead Free Plating (Matte Tin Finish). Solderable per MIL-STD-202, Method 208 (E3)
 Polarity: Cathode Band or Cathode Notch
 Marking: See Last Page
 Approximate Weight: SMA 0.064 grams
 SMB 0.093 grams



Dim	SMA		SMB	
	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	2.30	2.00	2.40
All Dimensions in mm				

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

Maximum Ratings @ T_A = 25 °C unless otherwise specified

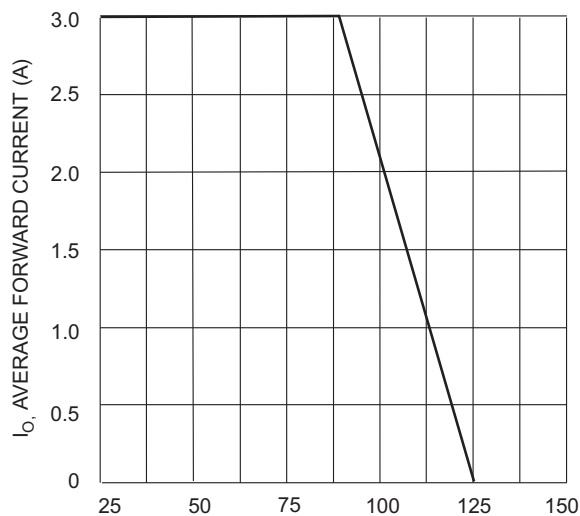
Single phase, half wave, 60Hz, resistive or inductive load unless otherwise noted.
 For capacitive load, derate current by 20%.

Characteristic	Symbol	Value	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 _T = 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 , T _{STG}	-40 to +125	°C

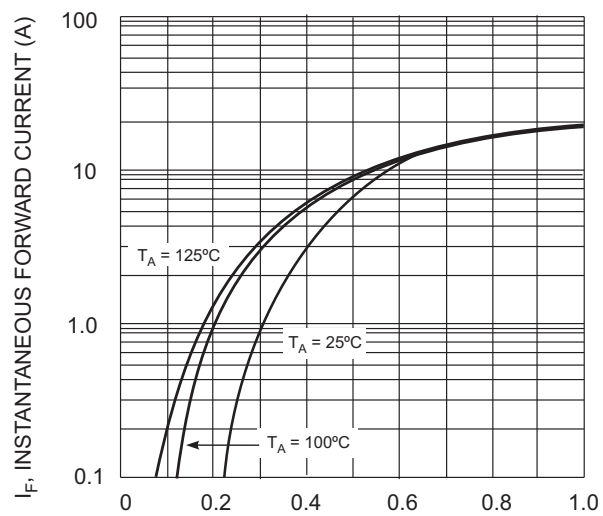
Electrical Characteristics @ T_A = 25 °C unless otherwise specified

Characteristic	Symbol	Min	Typ	Max	Unit	Conditions
Reverse Breakdown Voltage (Note 2)	$V_{(BR)R}$	40			V	I _R = 2.0mA
Forward Voltage Drop	V _F		0.310	0.350 0.450	V	I _F = 1.0A I _F = 3.0A
Leakage Current (Note 2)	I _R			150 1.0 2.0	uA mA	V _R = 15V V _R = 20V V _R = 40V
Total Capacitance	C _T		180		pF	f = 1MHz, V _R = 4.0VDC
Thermal Resistance, Junction to Terminal	R _{JT}		25		°C/W	

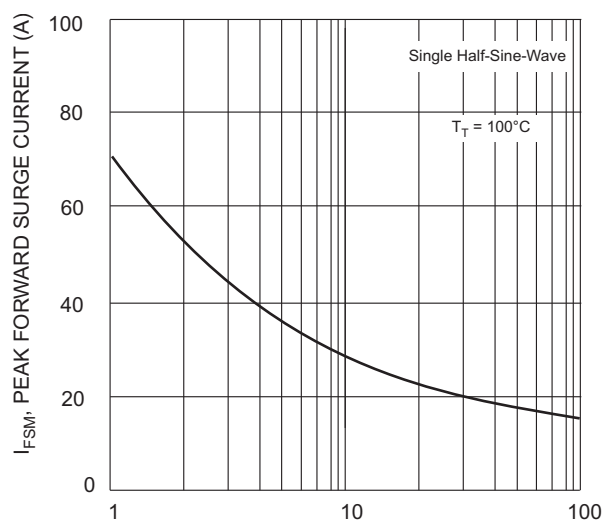
- Notes:
- When mounted on alumina substrate, 180° half sine wave.
 - Short duration test pulse used to minimize self-heating effect.
 - RoHS revision 13.2.2003. High Temperature Solder Exemption Applied, see EU Directive Annex Note 7.



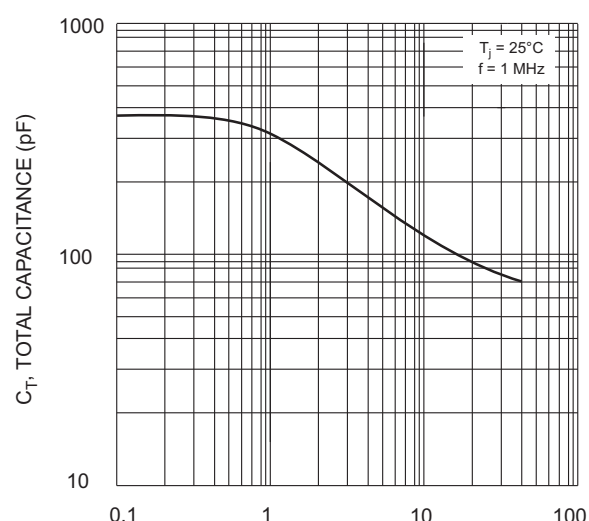
T_T , TERMINAL TEMPERATURE ($^{\circ}\text{C}$)
Fig. 1 Forward Current Derating Curve



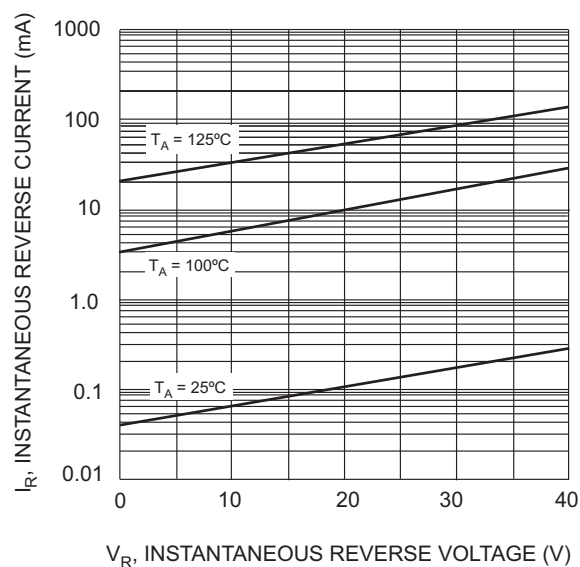
V_F , INSTANTANEOUS FORWARD VOLTAGE (V)
Fig. 2 Typical Forward Characteristics



NUMBER OF CYCLES AT 60 Hz
Fig. 3 Max Non-Repetitive Peak Forward Surge Current



V_R , DC REVERSE VOLTAGE (V)
Fig. 4 Typical Total Capacitance

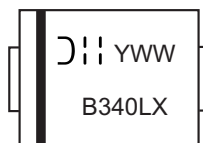


V_R , INSTANTANEOUS REVERSE VOLTAGE (V)
Fig. 5 Typical Reverse Characteristics

Ordering Information (Note 4)

Device	Packaging	Shipping
B340LA-13-F B340LB-13-F	SMA SMB	5000/Tape & Reel 3000/Tape & Reel

Notes: 4. For Packaging Details, go to our website at <http://www.diodes.com/datasheets/ap02007.pdf>.

Marking Information

B340LA = Product type marking code, ex: B340LA (SMA package)
B340LB = Product type marking code, ex: B340LB (SMB package)
D||| = Manufacturers' code marking
YWW = Date code marking
Y = Last digit of year ex: 2 for 2002
WW = Week code 01 to 52

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