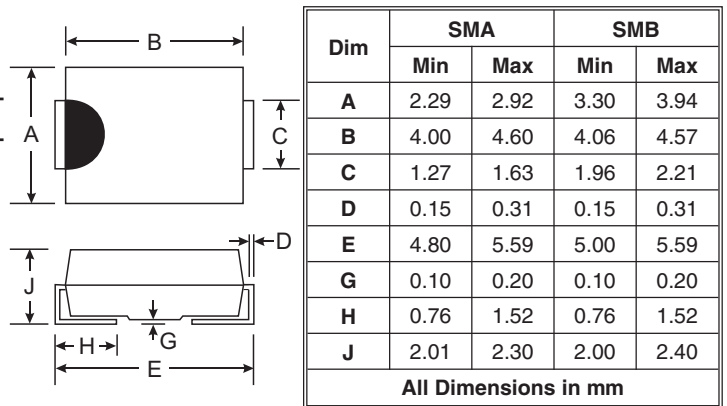


Features

- 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



“A” Suffix Designates SMA Package
“B” Suffix Designates SMB Package

Maximum Ratings @ T_A = 25 C unless otherwise specified

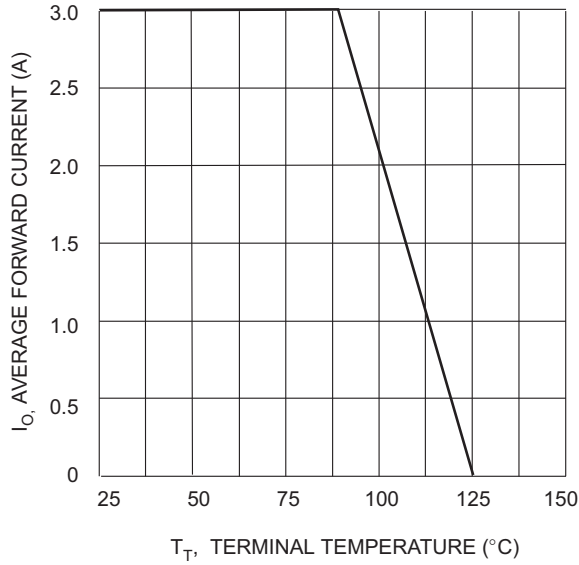
Single phase, half wave, 60Hz, resistive or inductive load unless otherwise noted.
For capacitive load, derate current by 20%.

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

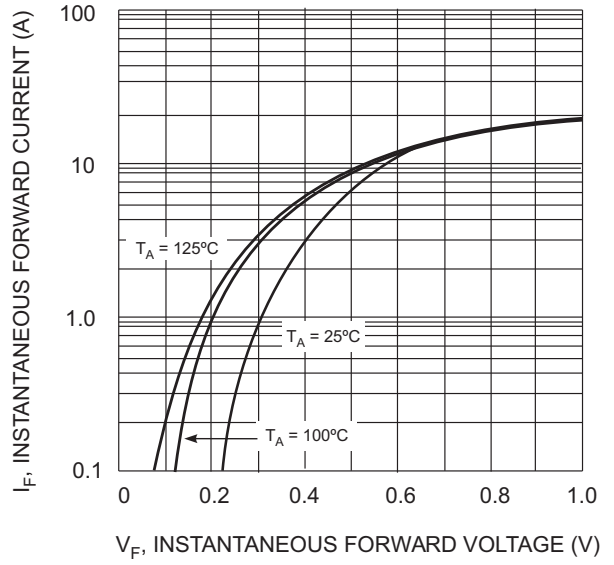
Electrical Characteristics @ T_A = 25 C unless otherwise specified

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	µA	V _R = 15V
				1.0 2.0	mA	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	

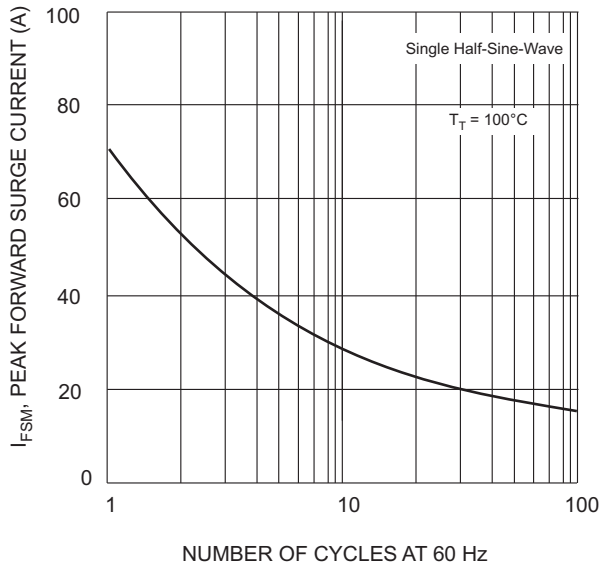
- Notes:
1. When mounted on alumina substrate, 180° half sine wave.
 2. Short duration test pulse used to minimize self-heating effect.
 3. RoHS revision 13.2.2003. High Temperature Solder Exemption Applied, see EU Directive Annex Note 7.



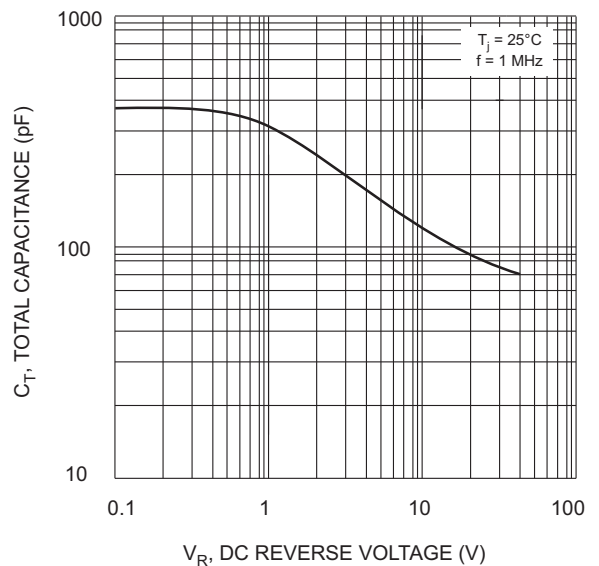
T_T , TERMINAL TEMPERATURE (°C)
Fig. 1 Forward Current Derating Curve



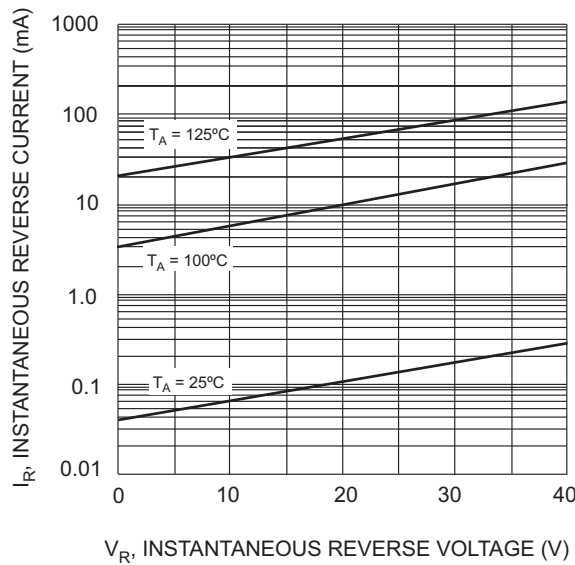
V_F , INSTANTANEOUS FORWARD VOLTAGE (V)
Fig. 2 Typical Forward Characteristics



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



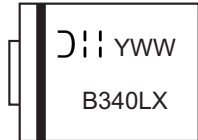
V_R , INSTANTANEOUS REVERSE VOLTAGE (V)
Fig. 5 Typical Reverse Characteristics

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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