

**LOW VF SURFACE MOUNT  
SCHOTTKY BARRIER RECTIFIERS**

**REVERSE VOLTAGE – 40 Volts**  
**FORWARD CURRENT – 3.0 Amperes**

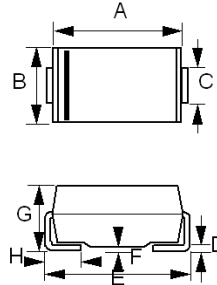
**FEATURES**

- For surface mounted applications
- Metal-Semiconductor junction with guard ring
- Epitaxial construction
- Very Low forward voltage drop
- High current capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- Qualification is according to AEC-Q101 Rev\_C
- **Lead-Free Finish; RoHS Compliant (Notes 1 & 2)**
- **Halogen and Antimony Free. "Green" Device (Note 3)**

**MECHANICAL DATA**

- Case: Molded plastic
- Case Material: Molding compound, UL Flammability classification 94V-0, "Halogen-free".
- Polarity: Indicated by cathode band
- Weight: 0.002 ounces, 0.07 grams (Approximate)

**SMA**



SMA		
DIM.	MIN.	MAX.
A	4.06	4.57
B	2.29	2.92
C	1.27	1.63
D	0.15	0.31
E	4.83	5.59
F	0.05	0.20
G	2.01	2.40
H	0.76	1.52

All Dimensions in millimeter

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified.

CHARACTERISTICS	SYMBOL	B340LA	UNIT
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	40	V
Maximum RMS Voltage	$V_{RMS}$	28	V
Maximum DC Blocking Voltage	VDC	40	V
Maximum Average Forward Rectified Current @TL=100°C	$I_{AV}$	3.0	A
Peak Forward Surge 8.3ms single half sine-wave superimposed on rated load (JEDEC METHOD)	$I_{FSM}$	70	A
Maximum Instantaneous Forward Voltage @IF=1.0A; Tj=25°C @IF=3.0A; Tj=25°C	$V_F$	0.35 0.45	V
Maximum DC Reverse Current at Rated DC Blocking Voltage @VR=15V; Tj=25°C @VR=40V; Tj=25°C	$I_R$	0.15 1.0	mA
Typical Junction Capacitance (Note 4)	$C_j$	300	pF
Typical Thermal Resistance (Note 5)	$R_{\theta JC}$	20	°C/W
Operating Junction Temperature Range	Tj	-55 to +125	°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150	°C

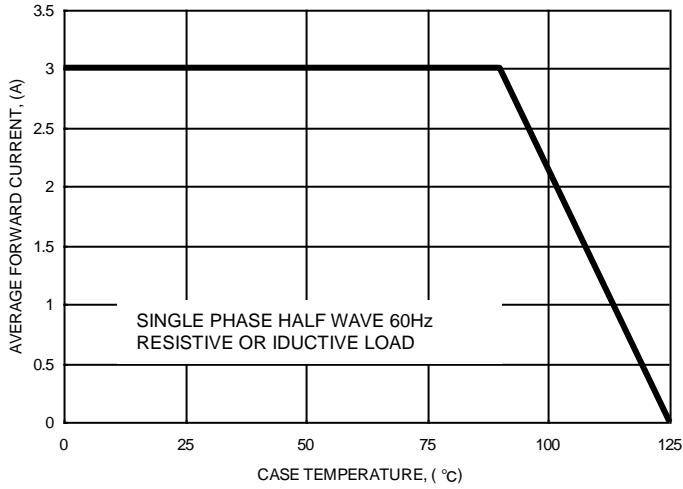
**Note:**

REV.-10, Sept-2021, KSHA13

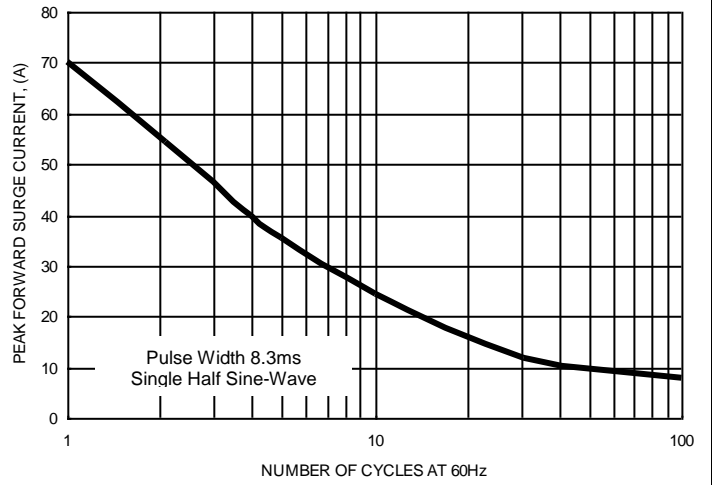
1. EU Directive 2002/95/EC (RoHS), 2011/65/EU (RoHS 2) & 2015/863/EU (RoHS 3) compliant. All applicable RoHS exemptions applied
2. See <https://www.diodes.com/quality/lead-free/> for more information about Diodes Incorporated's definitions of Halogen- and Antimony-free, "Green" and Lead-free.
3. Halogen- and Antimony-free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
4. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
5. Thermal Resistance Junction to Lead.

**RATING AND CHARACTERISTIC CURVES**  
**B340LA**

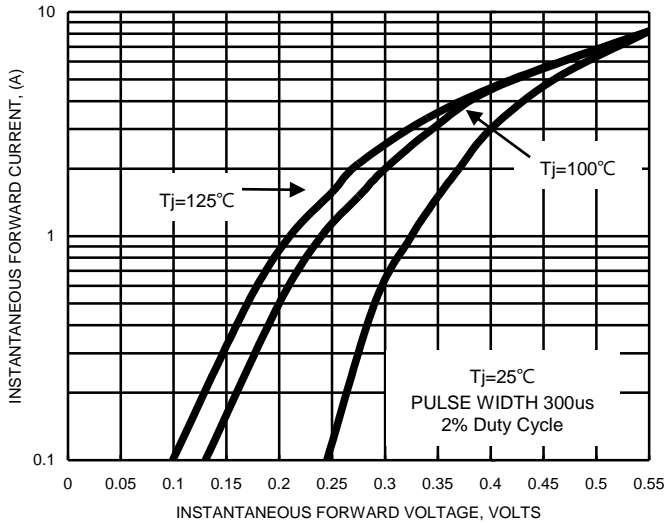
**FIG.1- FORWARD CURRENT DERATING CURVE**



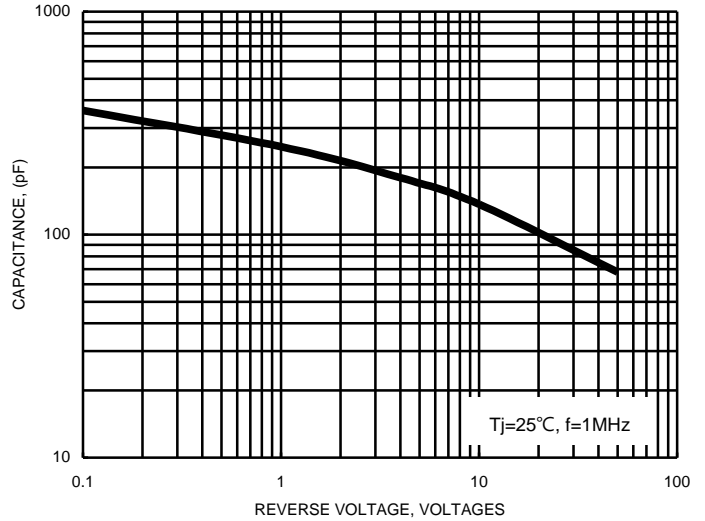
**FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT**



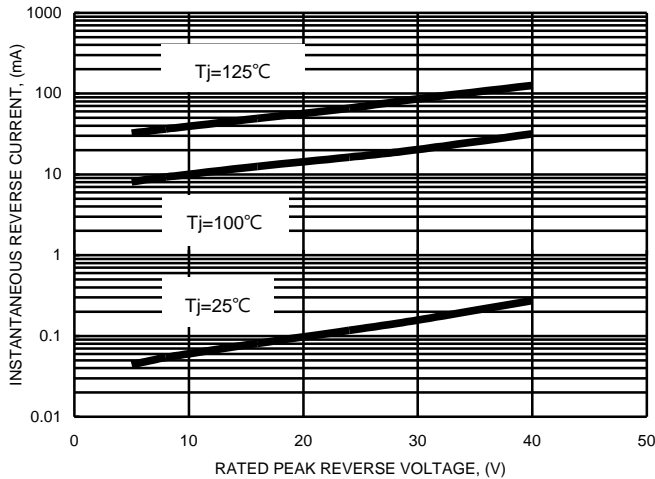
**FIG.3- TYPICAL FORWARD CHARACTERISTICS**



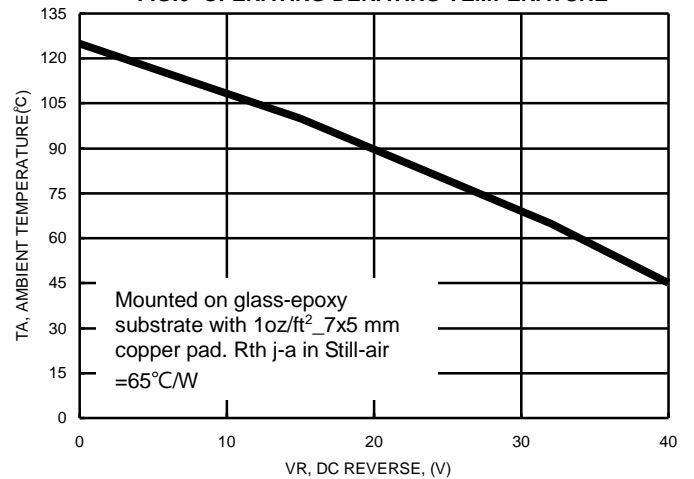
**FIG.4- TYPICAL JUNCTION CAPACITANCE**



**FIG.5- TYPICAL REVERSE CHARACTERISTICS**



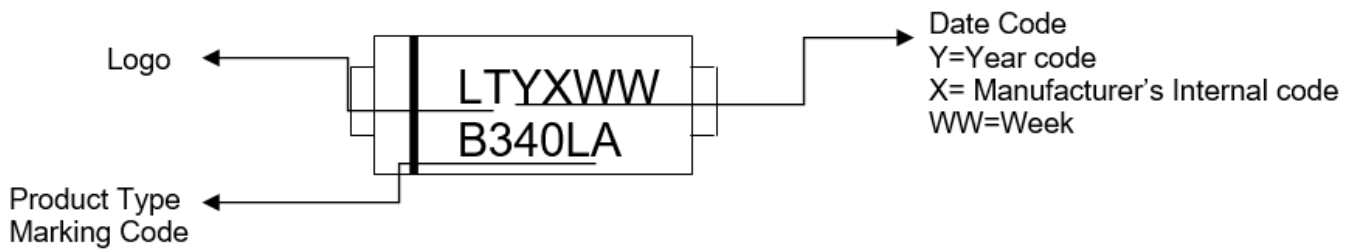
**FIG.6- OPERATING DERATING TEMPERATURE**



**Ordering Information :**

Part Number	Case	Packaging
B340LA	SMA	5000/Tape & Reel

**Marking Information :**



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