

**SURFACE MOUNT
SCHOTTKY BARRIER RECTIFIERS**

REVERSE VOLTAGE – 60 Volts
FORWARD CURRENT – 3.0 Amperes

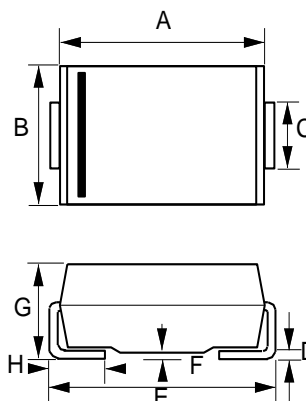
FEATURES

- For surface mounted application
- Metal-Semiconductor junction with guard ring
- Epitaxial construction
- Very Low forward voltage drop
- High current capability
- Qualified according to AEC-Q101 Rev_C
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection application
- IEC 61000-4-2, level 4 (ESD), > 15KV (air)
- **Lead-Free Finish; RoHS Compliant (Notes 1 & 2)**
- **Halogen and Antimony Free. "Green" Device (Note 3)**

MECHANICAL DATA

- Package: Molded plastic
- Package Material: Molding compound, UL Flammability classification 94V-0, "Halogen-free".
- Polarity: Color band denotes cathode
- Weight: 0.007 ounces, 0.21 grams

SMC



SMC		
DIM.	MIN.	MAX.
A	6.60	7.11
B	5.59	6.22
C	2.92	3.18
D	0.15	0.31
E	7.75	8.13
F	0.05	0.20
G	2.01	2.50
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	B360	UNIT
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	60	V
Maximum RMS Voltage	V _{RMS}	42	V
Maximum DC Blocking Voltage	V _{DC}	60	V
Maximum Average Forward Rectified Current @T _L =110°C	I _{AV}	3.0	A
Peak Forward Surge 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	100	A
Maximum Forward Voltage at 3.0A DC	V _F	0.7	V
Maximum DC Reverse Current @T _j =25°C at Rated DC Blocking Voltage @T _j =100°C	I _R	0.05 15	mA
Typical Junction Capacitance (Note 4)	C _j	170	pF
Typical Thermal Resistance (Note 5, 7)	R _{θJL}	20	°C/W
Typical Thermal Resistance (Note 6, 7)	R _{θJA}	60	°C/W
Operating Junction Temperature Range	T _j	-55 to +150	°C
Storage Temperature Range	T _{STG}	-55 to +150	°C

Note:

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.
6. Thermal Resistance Junction to Ambient.
7. Unit mounted on glass epoxy substrate 1oz/ft² 7x5 mm copper pad.

RATING AND CHARACTERISTIC CURVES

B360

FIG.1- FORWARD CURRENT DERATING CURVE

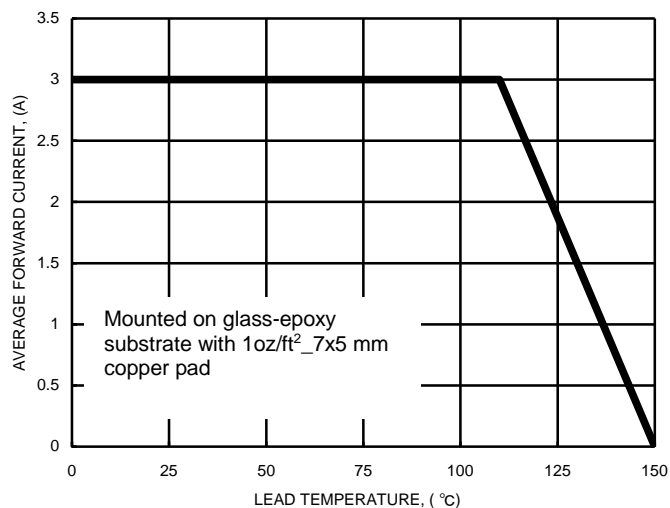


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

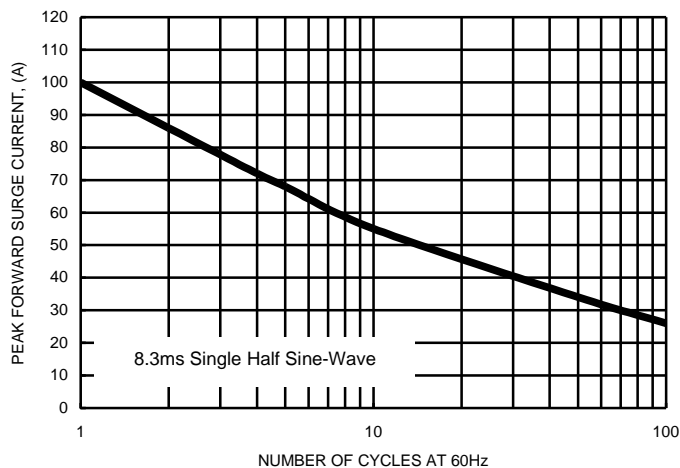


FIG.3- TYPICAL JUNCTION CAPACITANCE

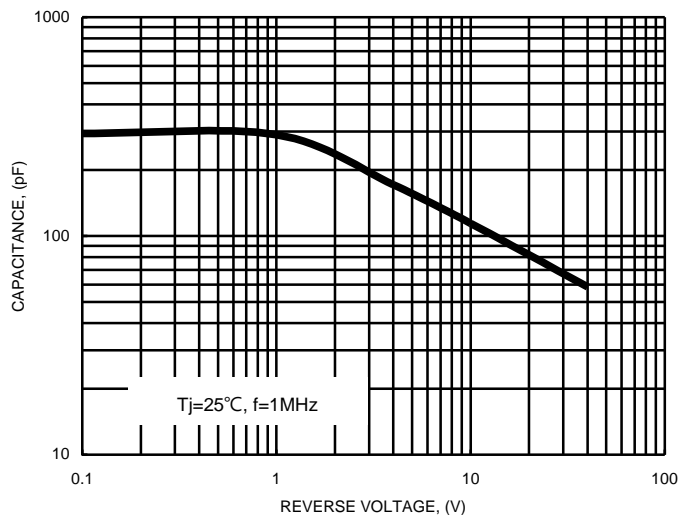


FIG.4- TYPICAL FORWARD CHARACTERISTICS

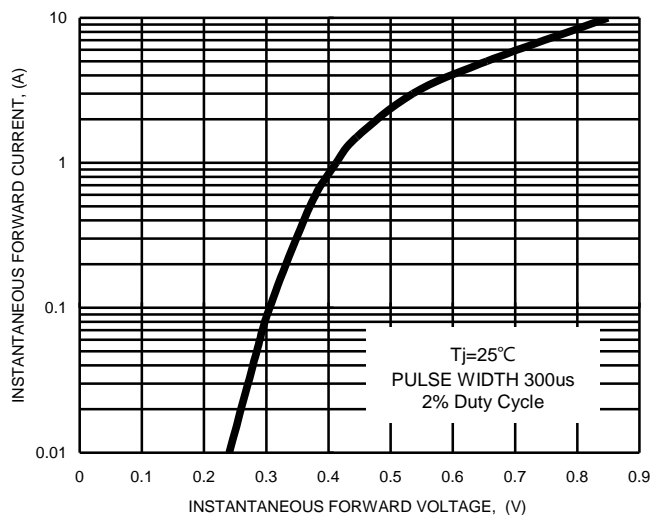


FIG.5- TYPICAL REVERSE CHARACTERISTICS

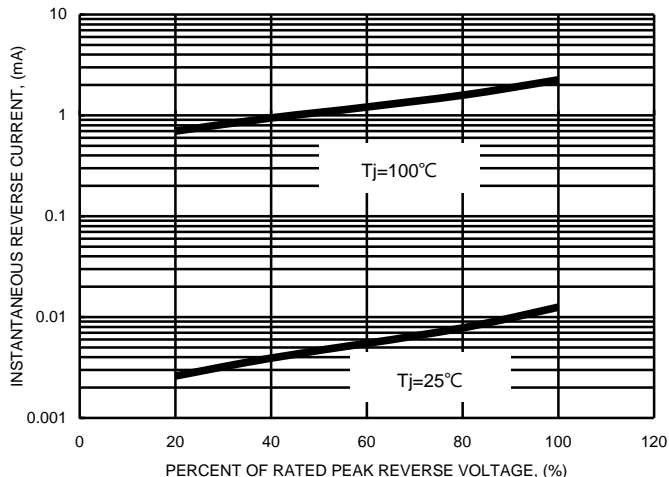
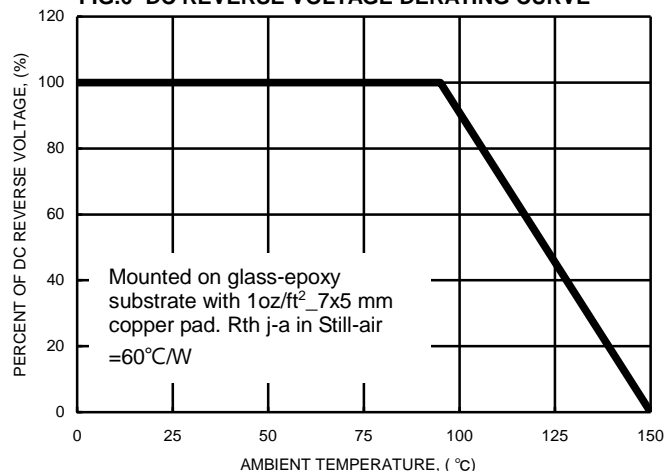


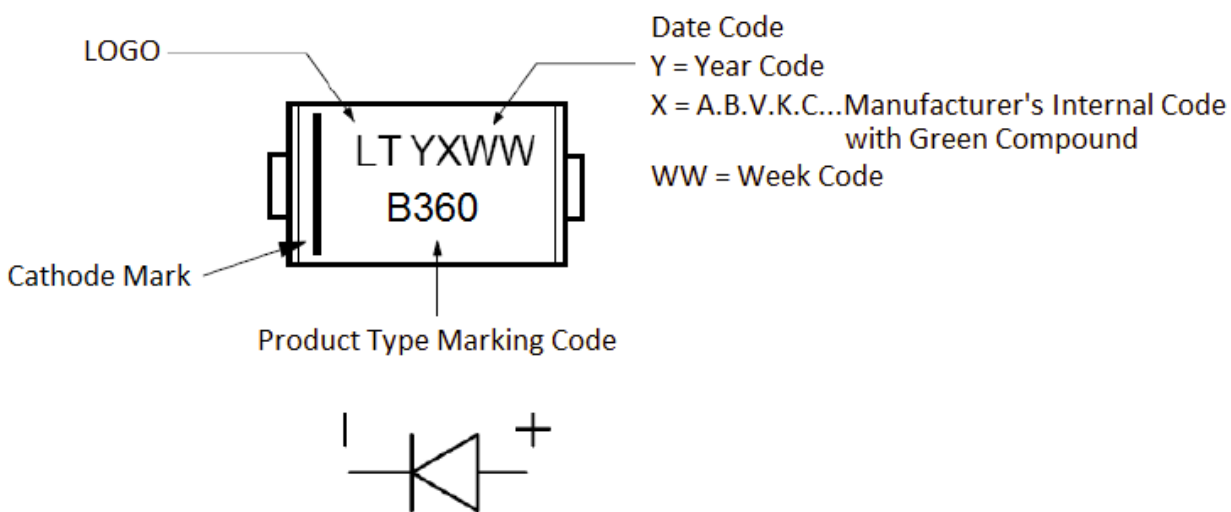
FIG.6- DC REVERSE VOLTAGE DERATING CURVE



Ordering Information :

Part Number	Package	Packing	
		Qty.	Carrier
B360	SMC	3000 pcs	Tape & Reel

Marking Information :



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