

**SURFACE MOUNT
SCHOTTKY BARRIER RECTIFIERS**

**REVERSE VOLTAGE – 150 Volts
FORWARD CURRENT – 2.0 Amperes**

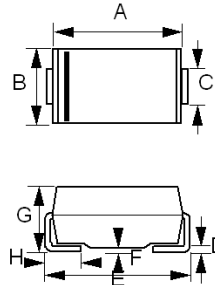
FEATURES

- For surface mounted application
- Metal-Semiconductor junction with guardring
- Epitaxial construction
- Very Low forward voltage drop
- High current capability
- Plastic material has UL flammability classification 94V-0
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- **Lead-Free Finish; RoHS Compliant (Notes 1 & 2)**
- **Halogen and Antimony Free. "Green" Device (Note 3)**

MECHANICAL DATA

- Package : Molded plastic
- Polarity : Color band denotes cathode
- Weight : 0.002 ounces, 0.064 grams

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	B2150A	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	150	V
Maximum RMS Voltage	V _{RMS}	105	V
Maximum DC Blocking Voltage	V _{DC}	150	V
Maximum Average Forward Rectified Current @T _C =125°C	I _(AV)	2.0	A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load	I _{FSM}	60	A
Maximum Forward Voltage at 2.0A DC @T _j =25°C @T _j =125°C	V _F	0.82 0.67	V
Maximum DC Reverse Current at Rated DC Blocking Voltage @T _j =25°C @T _j =125°C	I _R	1.5 1.5	uA mA
Typical Junction Capacitance (Note 4)	C _J	90	pF
Typical Thermal Resistance (Note 5)	R _{ΘJC}	30	°C/W
Operating Junction Temperature Range	T _j	-55 to +175	°C
Storage Temperature Range	T _{STG}	-55 to +175	°C

- Notes :**
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
B2150A

FIG.1 - FORWARD CURRENT DERATING CURVE

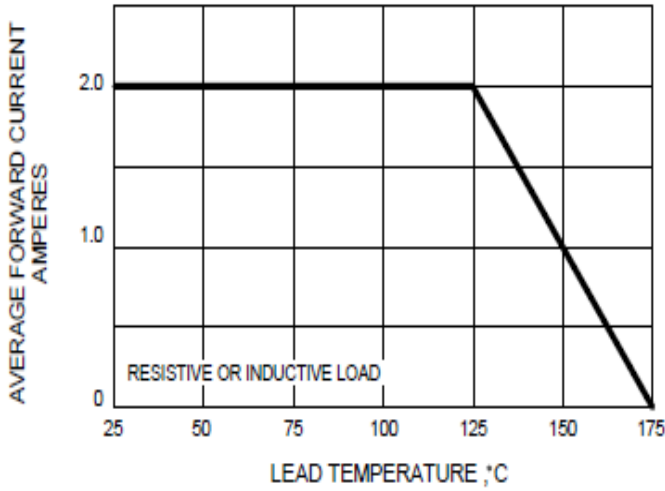


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

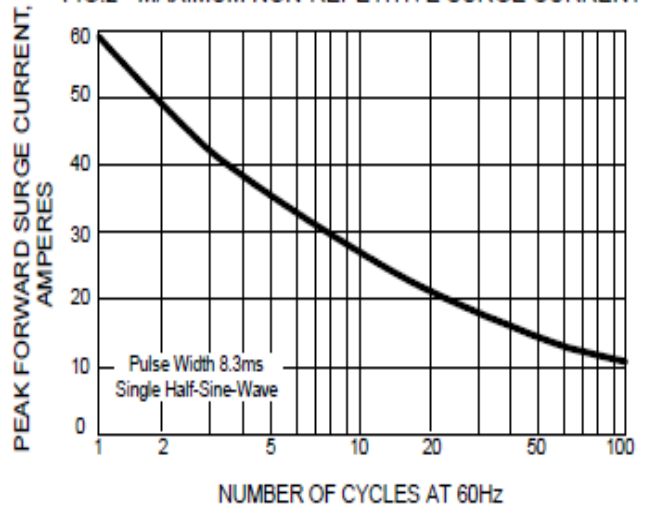


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

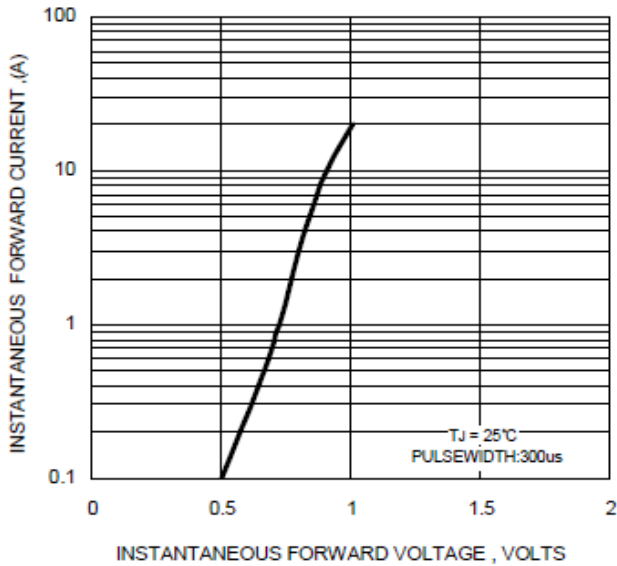


FIG.4 - TYPICAL JUNCTION CAPACITANCE

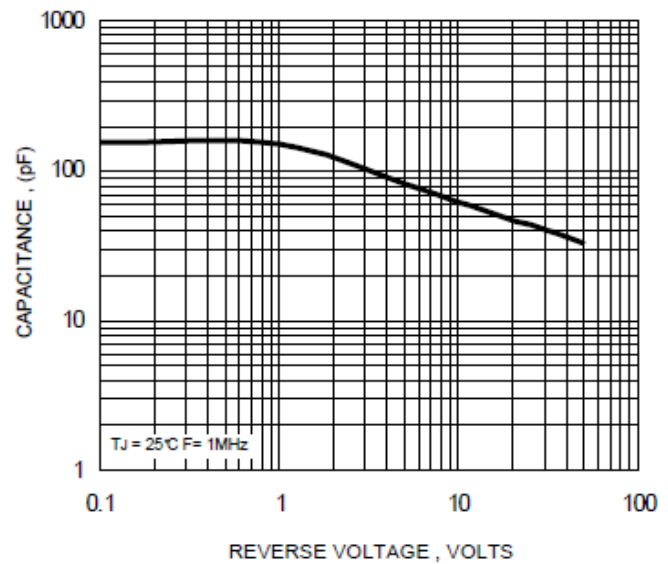
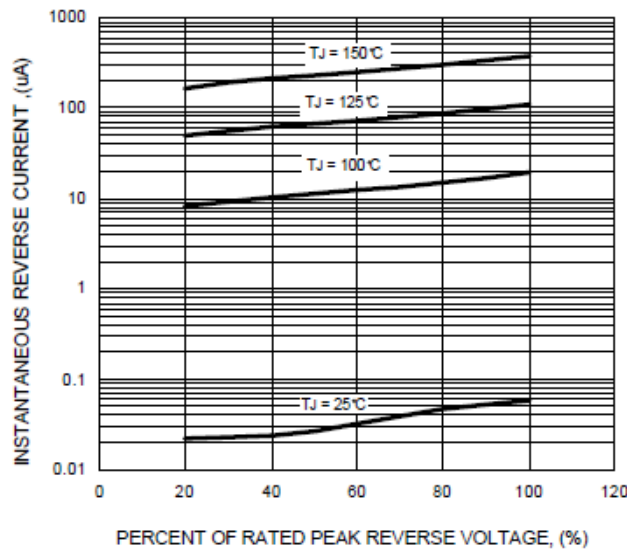


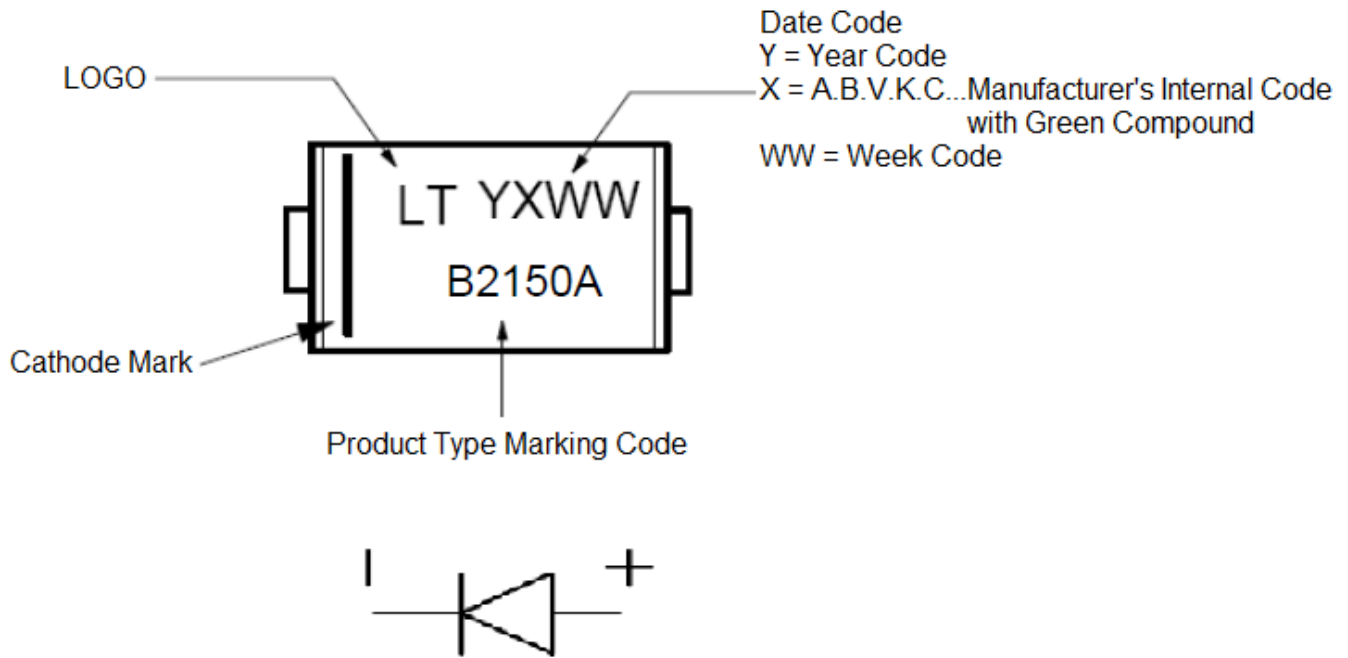
FIG.5 - TYPICAL REVERSE CHARACTERISTICS



Ordering Information:

Part Number	Package	Packing	
		Qty.	Carrier
B2150A	SMA	5000 pcs	Tape & Reel

Marking Information:



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