

## Absorb Diode Rectifier

### ABD-50B SMB



Cathode  Anode

### Features

- Low forward voltage drop
- Low power losses
- High efficiency operation
- Lead Free Finish, RoHS Compliant

### Applications

- DC/DC Converters
- AC/DC Adaptors
- Switching Power Supplies
- Freewheeling Diodes

### Maximum ratings and electrical characteristics (T<sub>J</sub> = 25°C unless otherwise noted)

Parameter	Symbol	Limit	Unit		
Maximum repetitive peak reverse voltage	VRRM	800	V		
Maximum average forward rectified current	IF(AV)	5	A		
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	IFSM	150	A		
Operating junction and storage temperature range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150	°C		
Typical thermal resistance	R <sub>θJA</sub>	50	°C/W		
Instantaneous forward voltage	VF	TYP.	MAX.	V	
		IF=5A TJ=25°C	1.10		1.30
		IF=5A TJ=125°C	1.00		-
Instantaneous reverse current at rated reverse voltage	IR	TJ=25°C	10	μA	
		TJ=125°C	100		

## RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)

FIG1: Io-TL Curve

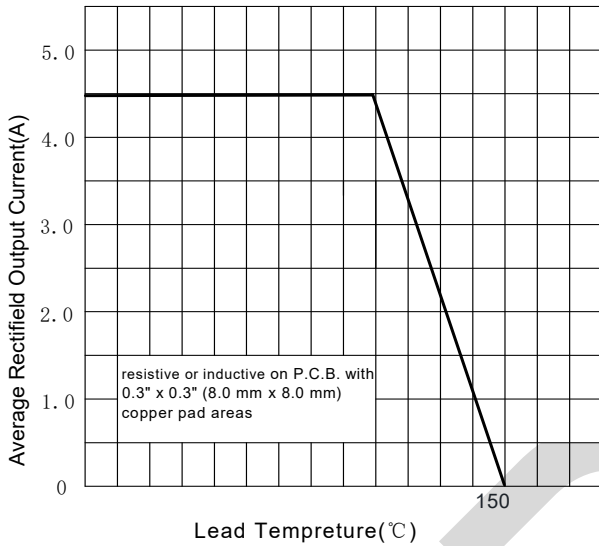


FIG2: Surge Forward Current Capability

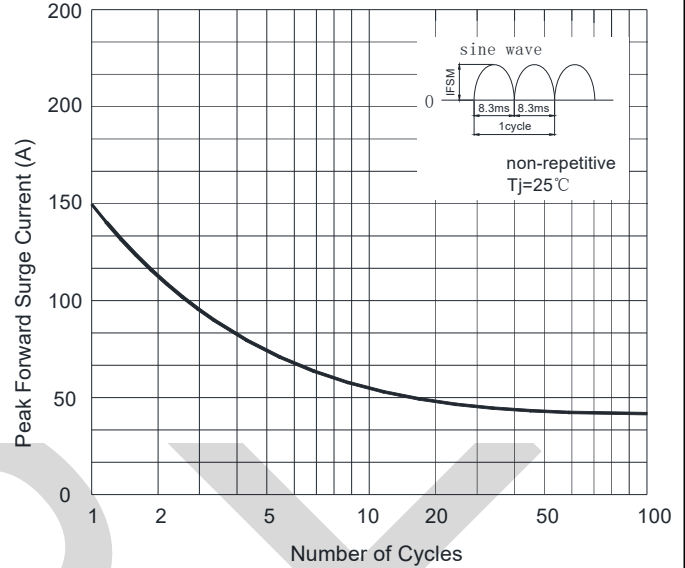


FIG3: Forward Voltage

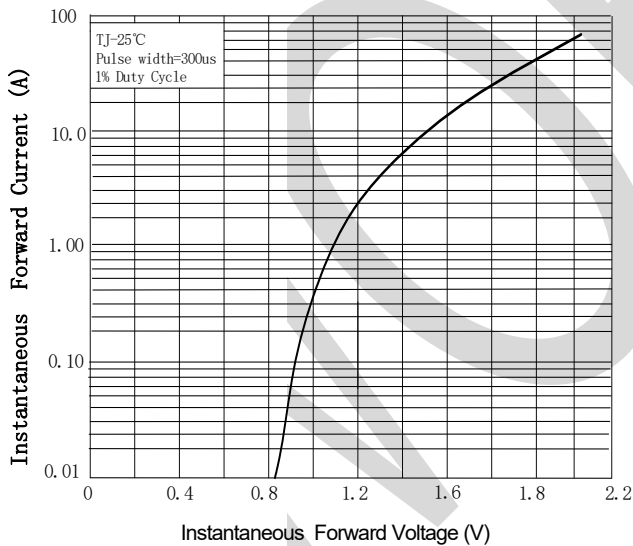
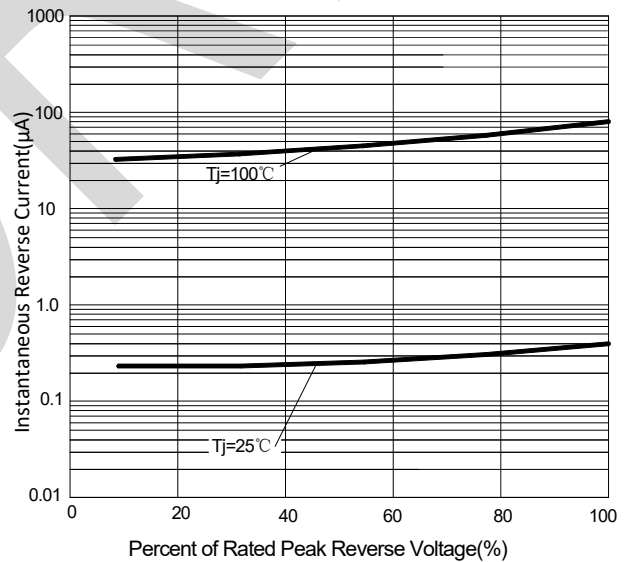
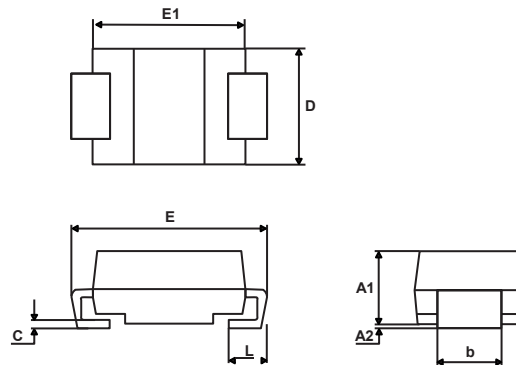


FIG4: Typical Reverse Characteristics



## PACKAGE OUTLINE DIMENSIONS

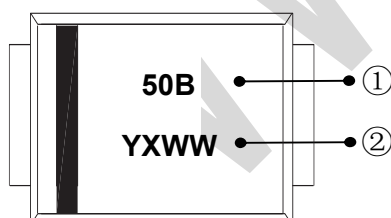
### SMB dimension definitions



### SMB dimension values

Ref.	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A1	1.90	2.45	0.075	0.096
A2	0.05	0.20	0.002	0.008
b	1.95	2.20	0.077	0.087
c	0.15	0.40	0.006	0.016
D	3.30	3.95	0.130	0.156
E	5.10	5.60	0.201	0.220
E1	4.05	4.60	0.159	0.181
L	0.75	1.50	0.030	0.059

### Marking Information



① Product model : 50B

② PDC information :

Y X WW

WW: Week code(01 to 53)

X: Internal identification code

Y: Year code(ex:0=2020)