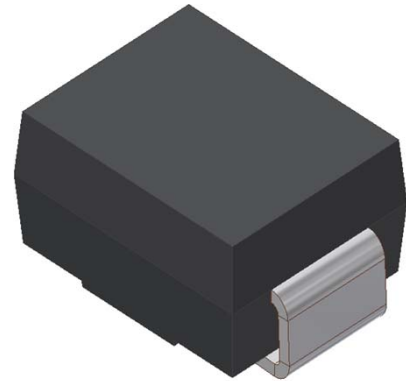


# SZB\*\*\*A Series

## Zener Voltage Regulator Diodes

### 1. FEATURES

- We declare that the material of product compliance with RoHS requirements and Halogen Free.
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications in order to optimize board space
- IEC61000-4-2 ESD Air Contact  $\geq \pm 15KV$
- High temperature soldering guaranteed:  
260°C/10 seconds,
- Weight: 0.088g



### 2. MECHANICAL DATA

**Case:** Epoxy, Molded

**Terminals:** Plated leads, solderable per MIL-STD-202, Method 208

**Polarity:** With Color band denoted cathode

**Mounting Position:** Any

### 3. MAXIMUM RATINGS(Ta = 25°C)

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

RATING	SYMBOL	VALUE	UNITS
Steady State Power Dissipation at T A =50°C(Note1)	PM(AV)	2	Watts
Z-current	IZ	PV/VZ	mA
Storage Temperature Range	TJ,TSTG	-55 to +175	°C

NOTES:

1. Mounted on Copper Leaf area of 1.57in<sup>2</sup>(40mm<sup>2</sup>).
2. 8.3ms single half sine-wave, duty cycle= 4 pulses per minutes maximum.

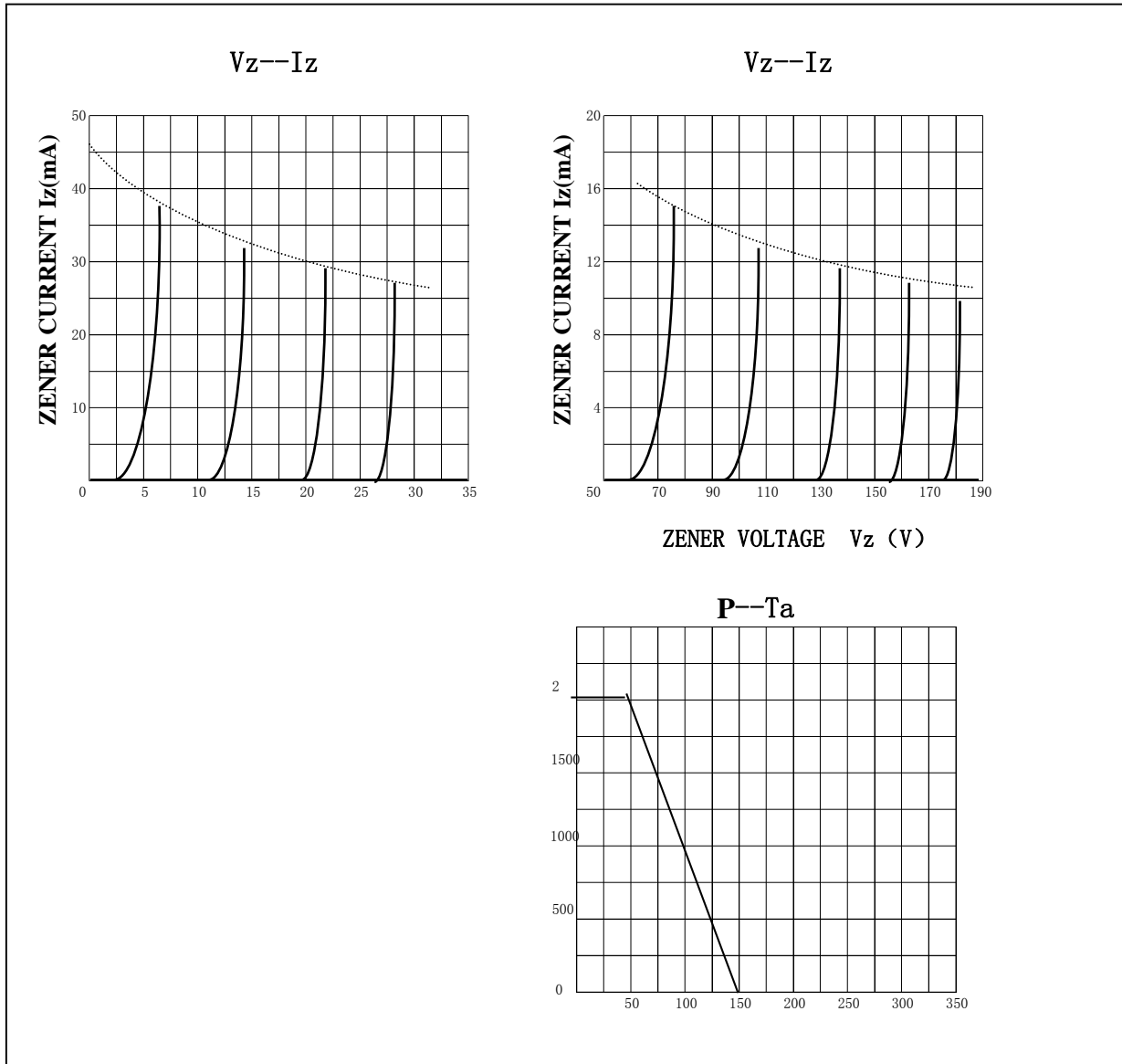
## SZB\*\*\* A Series

### 4. Product Characteristic

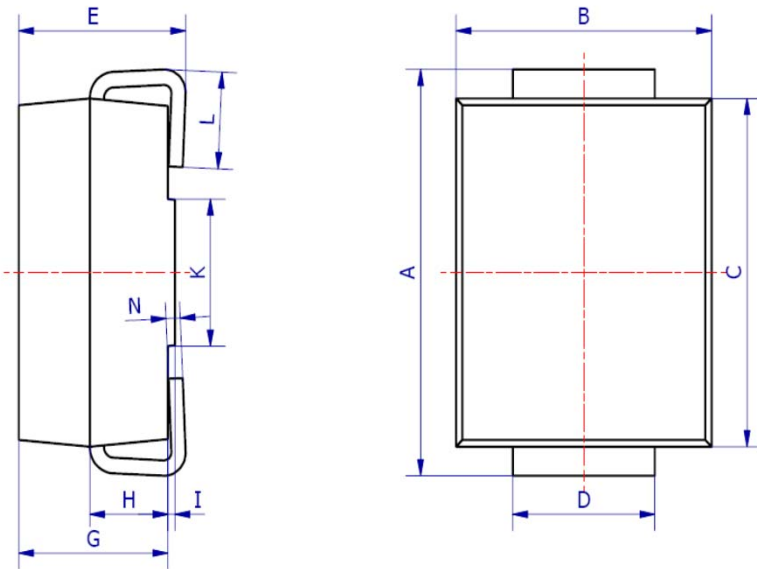
Vz tolerance :  $\pm 5\%$ ; Ta=25°C Vfmax =1.2V @ IF = 200mA P=2 W; Tested with pulse tp=40ms

Type	Device marking code	Zener Voltage		Zener Impedance			Leakage Current		IZM	
		Vz@Izt	Izt	Zzt @ Izt	Zzk@ Izk		IR	VR		
		Volts	mA	Ohms	Ohms	m A	uA Max	Volts	mA	
SZB4.3A	SZB4.3A	4.3	116	22	400	1	100	1	465	
SZB5.1A	SZB5.1A	5.1	98	7	550			1	392	
SZB5.6A	SZB5.6A	5.6	89	5	600			2	357	
SZB6.2A	SZB6.2A	6.2	81	2	700			3	323	
SZB6.8A	SZB6.8A	6.8	74	4	1300			4	294	
SZB7.5A	SZB7.5A	7.5	67	4.5	1300			0.5	5	267
SZB8.2A	SZB8.2A	8.2	61	5.5	1300			0.5	6	244
SZB9.1A	SZB9.1A	9.1	55	6	1300	0.5	7	220		
SZB10A	SZB10A	10	50	7	1300	0.25	20	7.6	200	
SZB11A	SZB11A	11	45	8	1300			8.4	182	
SZB12A	SZB12A	12	42	9	1300			9.1	167	
SZB13A	SZB13A	13	38	10	1300			9.9	154	
SZB15A	SZB15A	15	33	14	1300			11.4	133	
SZB16A	SZB16A	16	31	16	1300			12.2	125	
SZB18A	SZB18A	18	28	20	1300			13.7	111	
SZB20A	SZB20A	20	25	22	1300			15.2	100	
SZB22A	SZB22A	22	23	23	1300			16.7	91	
SZB24A	SZB24A	24	21	25	1300			18.2	83	
SZB27A	SZB27A	27	19	35	1300	20.6	74			
SZB30A	SZB30A	30	17	40	1500	22.8	67			
SZB33A	SZB33A	33	15	45	1500	5	25.1	61		
SZB36A	SZB36A	36	14	50	1500		27.4	56		
SZB39A	SZB39A	39	13	60	1500		29.7	51		
SZB43A	SZB43A	43	12	70	2500		32.7	47		
SZB47A	SZB47A	47	11	80	2500		35.8	43		
SZB51A	SZB51A	51	10	95	2500		38.8	39		
SZB56A	SZB56A	56	9	110	2500		42.6	36		
SZB62A	SZB62A	62	8	125	2500		47.1	32		
SZB68A	SZB68A	68	7	150	2500		51.7	29		
SZB75A	SZB75A	75	7	175	2500		56	27		
SZB82A	SZB82A	82	6	200	3000	62.2	24			
SZB91A	SZB91A	91	5	250	3000	69.2	22			
SZB100A	SZB100A	100	5	350	3000	76	20			
SZB110A	SZB110A	110	5	550	5000	83	18			
SZB120A	SZB120A	120	4	750	5500	90	17			
SZB130A	SZB130A	130	4	900	6000	98	15			
SZB150A	SZB150A	150	3	1200	6500	113	13			
SZB160A	SZB160A	160	3	1350	7000	120	13			
SZB180A	SZB180A	180	3	1650	8500	135	11			
SZB200A	SZB200A	200	3	1950	10000	150	10			

### 5. ELECTRICAL CHARACTERISTICS CURVES

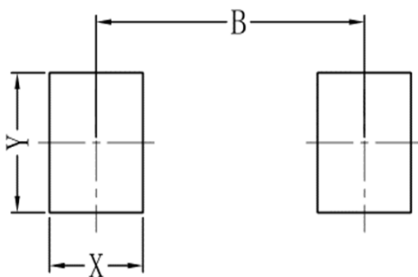


### 6.OUTLINE AND DIMENSIONS



SMB			
DIM	Min	Max	Typ.
A	5.00	5.45	5.25
B	3.20	4.00	3.60
C	4.30	4.70	4.50
D	1.80	2.20	2.00
E	2.20	2.50	2.35
G	1.90	2.30	2.10
H	0.95	1.25	1.10
I	0.05	0.15	0.10
K	1.70	2.10	1.90
L	0.90	1.60	1.30
N	0.10	0.30	0.20
All Dimensions in mm			

### 7.SOLDERING FOOTPRINT



SMB	
DIM	(mm)
X	1.60
Y	2.20
B	4.60