5 é / Descriptions

SOD-123 .> / / x l 9 8 â ’ož

Zener Diode in a SOD-123 Plastic Package.

¤ ª / Features

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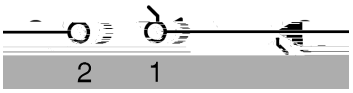
500mW power dissipation, medium current, automated assembly processes, Qualified to AEC-Q101 Standards for High Reliability, HF Product.

Ð ÷ / Applications

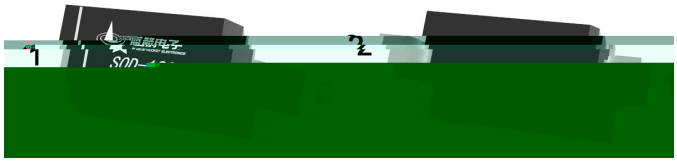
9 < < ! 8 l 9 è k á V ñ • } Lož

2.4V to 39V wide zener voltage range applications, Meet the stringent requirements of automotive applications.

Ã W] Ô · / Equivalent Circuit



• Û - æ / Pinning



PIN1:Cathode PIN2:Anode

, M V / Marking

• - ~ ª ¢ož

See Marking Instructions.

Ã a ? d / Absolute Maximum Ratings(Ta=25 ;)

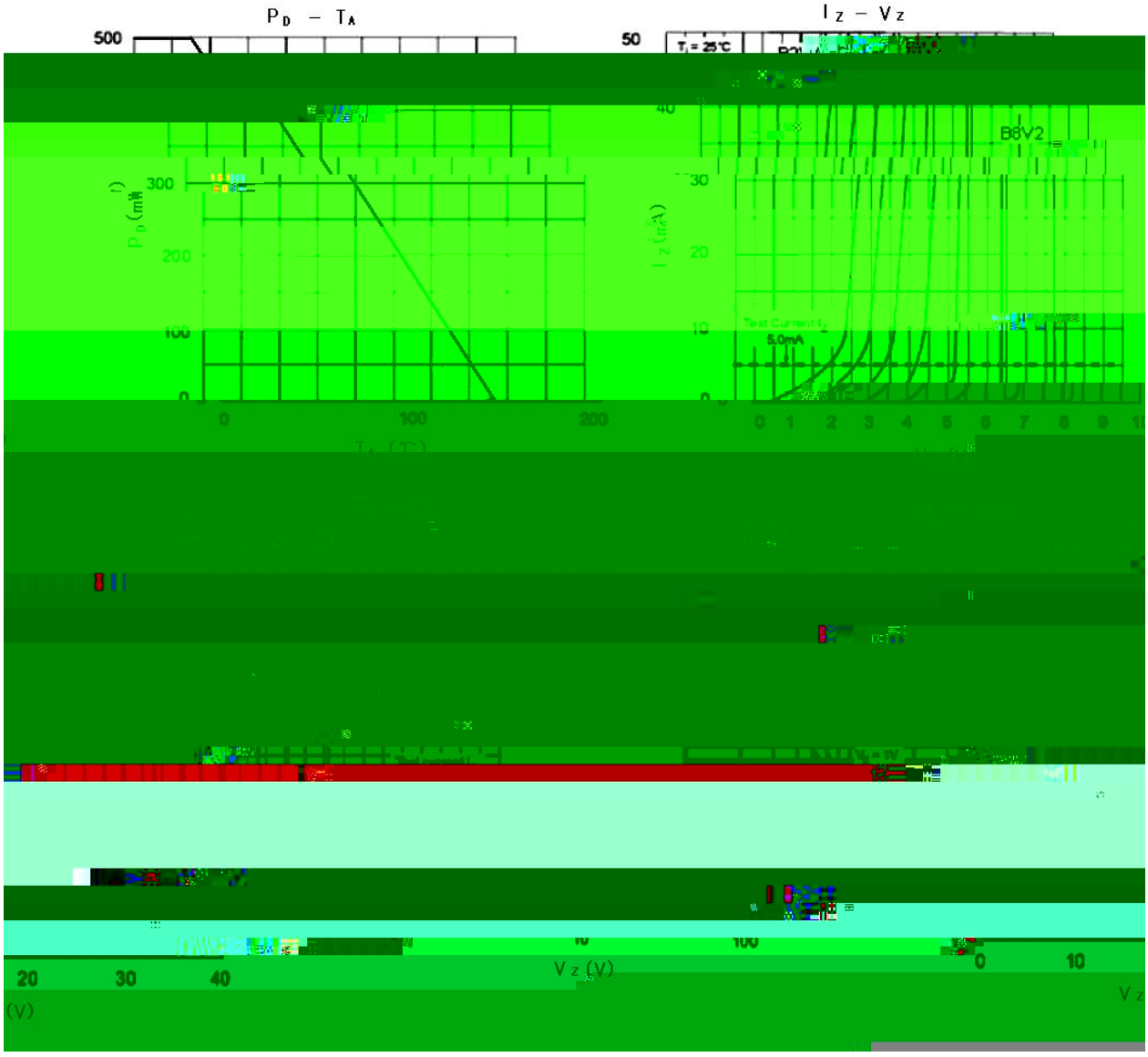
@ *f* Parameter	… Z Symbol	*f* › Rating	% y Unit
Forward Voltage (Note 2) I_F=10mA	V_F	0.9	V
Power Dissipation(Note 1)	P_D	500	mW
Typical Thermal Resistance Junction to Ambient(Note 1)	R_{JA}	305	/W
Junction and Storage Temperature Range	T_j,T_{stg}	-65 150	

Ô4ì × ? d / Electrical Characteristics(Ta=25 ;)

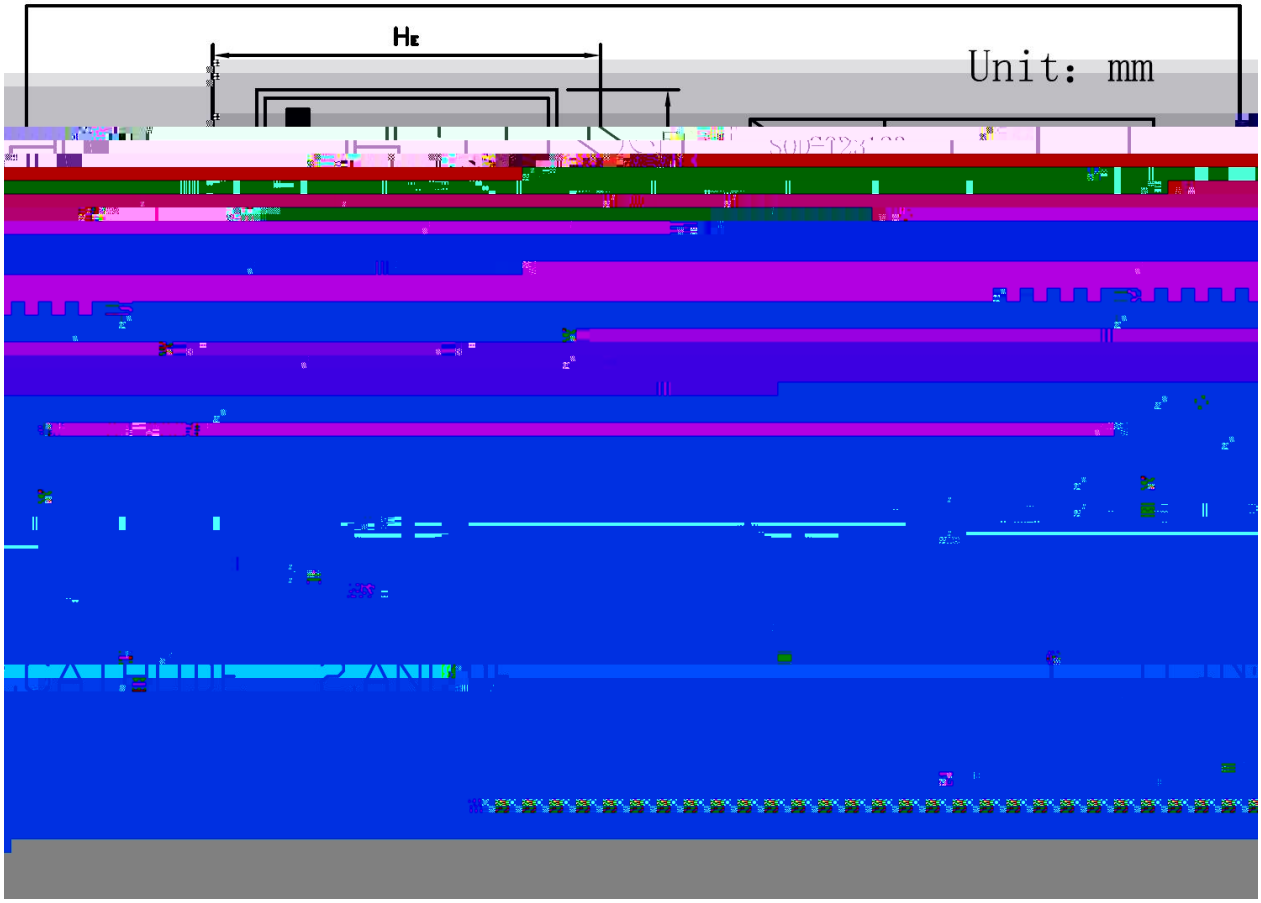
Type Number	Mark-ing Code	Zener Voltage Range				Maximum Zener Impedance			Maximum Reverse Current	
		V_z @I_{ZT}			I_{ZT}	Z_{ZT} @I_{ZT}	Z_{ZK} @I_{ZK}	I_{ZK}	I_R	@V_R
		Nom (V)	Min (V)	Max (V)	mA			mA	A	V
BRBZT52B2V4Q	Q0Z	2.4	2.35	2.45	5	94	564	1	45	1
BRBZT52B2V7Q	Q1Z	2.7	2.65	2.75	5	94	564	1	18	1
BRBZT52B3V0Q	Q2Z	3.0	2.94	3.06	5	89	564	1	9	1
BRBZT52B3V3Q	Q3Z	3.3	3.23	3.37	5	89	564	1	4.5	1
BRBZT52B3V6Q	Q4Z	3.6	3.53	3.67	5	84	564	1	4.5	1
BRBZT52B3V9Q	Q5Z	3.9	3.82	3.96	5	84	564	1	2.7	1
BRBZT52B4V3Q	Q6Z	4.3	4.21	4.39	5	84	564	1	2.7	1
BRBZT52B4V7Q	Q7Z	4.7	4.61	4.79	5	75	564	1	2.7	2
BRBZT52B5V1Q	Q8Z	5.1	5.00	5.20	5	56	470	1	1.8	2
BRBZT52B5V6Q	Q9Z	5.6	5.49	5.71	5	27	451	1	0.9	2
BRBZT52B6V2Q	QAZ	6.2	6.08	6.32	5	9	376	1	2.7	4
BRBZT52B6V8Q	QBZ	6.8	6.66	6.94	5	14	141	1	1.8	4
BRBZT52B7V5Q	QCZ	7.5	7.35	7.65	5	14	75	1	0.9	5
BRBZT52B8V2Q	QDZ	8.2	8.04	8.36	5	14	75	1	0.63	5
BRBZT52B9V1Q	QEZ	9.1	8.92	9.28	5	14	94	1	0.45	6
BRBZT52B10Q	QFZ	10	9.80	10.20	5	18	141	1	0.18	7
BRBZT52B11Q	QGZ	11	10.78	11.22	5	18	141	1	0.09	8

BRBZT52BXXXQ

Ô ? d • Ž ¢ / Electrical Characteristic Curve



Ø ¤ =) ¢ / Package Dimensions



, M y ƒ / Marking Instructions



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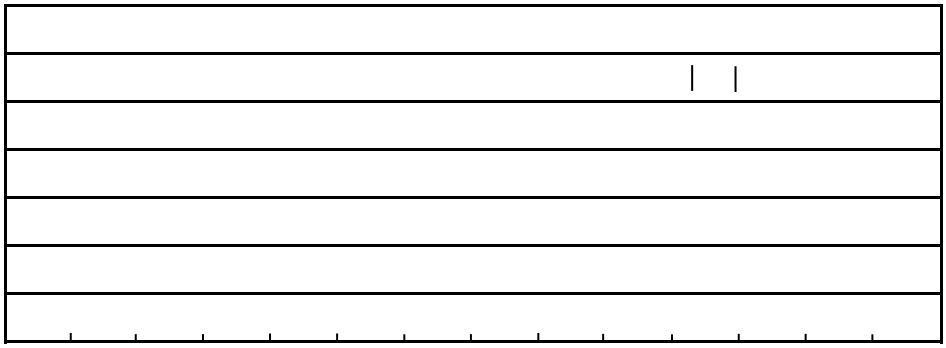
@ y º Z W A

Note:

Q: Automobile halogen-free product Code

0Z: Product Type Code

š WD t … • Ž ¢ (x /) / : K S V K X G Z [X K 6 X U L O R K L U X / 8 8 K L R U] 9 U R J K X O T M 6



ª ¢ y

1o• Ä ½ “ † 150 ½200 - k ž • 60 ½120sec;

2o• Q › “ † 255 r5 - k ž • 4 Ò 5 r0.5sec;

3o•D N ò i Ò 0 , † 2 ½10 - /sec.

Note:

1.Preheating:150~200 - , Time:60~120sec.

2.Peak Temp.:255 r5 - , Duration:5 r0.5sec.

3.Cooling Speed: 2~10 - /sec.

ÂD /Cã p ¯ »] / Resistance to Soldering Heat Test Conditions

“ † y 260 r5 - ž • y 10 r1 sec. Temp.:260 r5 - Time:10 r1 sec

G P á / Packaging SPEC.

2 & x / REEL

Package Type 7>û ˜ E	Units ;>û ¦H					Dimension ;>û p . (unit ÆEmm³)		
	Units/Reel / --	Reels/Inner Box -- /-	Units/Inner Box /-	Inner Boxes/Outer Box - /1ç	Units/Outer Box /1ç	Reel	Inner Box×	Outer Box1ç
SOD-123	3,000	10	30,000	6	180,000	7 s ×8	180×120×180	390×385×205

„ Ð y ƒ / Notices