

/ Descriptions

SOD-123

Zener Diode in a SOD-123 Plastic Package.

/ Features

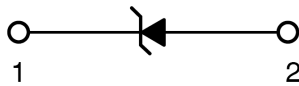
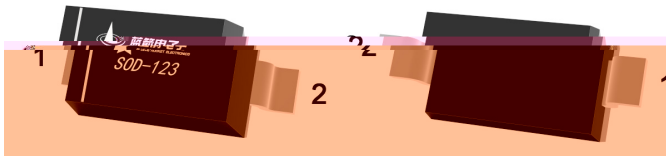
500mW

500mW power dissipation, medium current, automated assembly processes, HF Product.

/ Applications

2.4V-39V

2.4V to 39V wide zener voltage range applications.

/ Equivalent Circuit**/ Pinning**

PIN1:Cathode

PIN2:Anode

/ Marking

See Electrical Characteristics.

Parameter	Symbol	Rating	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	R _{θJA}	305	°C/W

Junction and Storage Temperature
Range J7fBT107.52 . 732 .4.19 Twef258.9 66and 94 716.4203 Tm()Tj5610.5 315.62 651.9803 Tm(F)T

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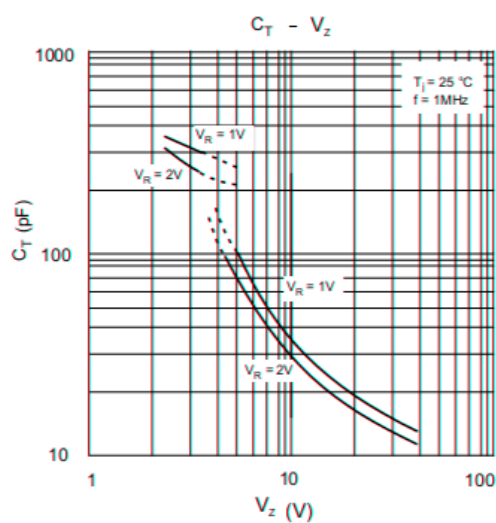
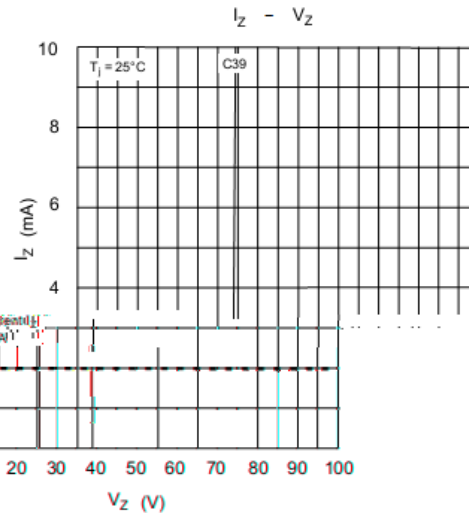
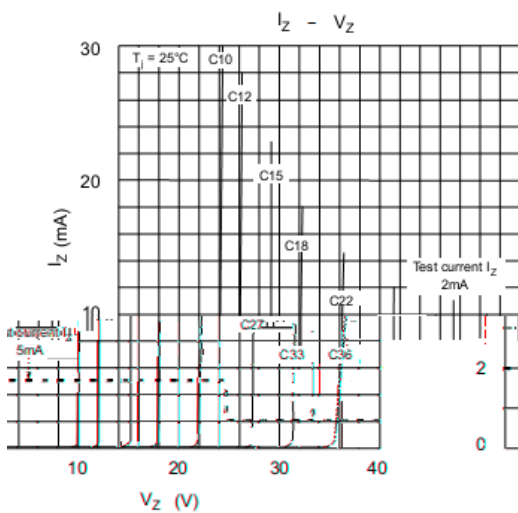
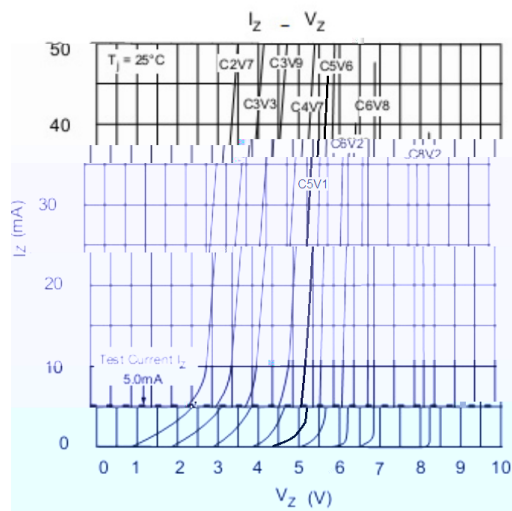
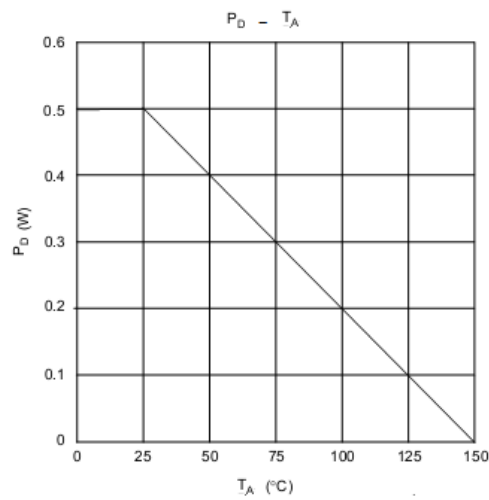
/ Electrical Characteristics(Ta=25)

Type Number	Marking Code	Zener Voltage Range (Note 2)				Maximum Zener impedance (Note 3)			Maximum Reverse Current (Note 2)		Typical Temperature Coefficient @I _{ZTC} mV/°C		Test Current I _{ZTC}
		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	Ω		mA	uA	V	Min	Max	mA
BZT52C11	HWG	11	10.4	11.6	5	20	150	1	0.1	8	5.4	9	5
BZT52C12	HWH	12	11.4	12.7	5	25	150	1	0.1	8	6	10	5
BZT52C13	HWI	13	12.4	14.1	5	30	170	1	0.1	8	7	11	5
BZT52C15	HWJ	15	13.8	15.6	5	30	200	1	0.1	10.5	9.2	13	5
BZT52C16	HWK	16	15.3	17.1	5	40	200	1	0.1	11.2	10.4	14	5
BZT52C18	HWL	18	16.8	19.1	5	45	225	1	0.1	12.6	12.4	16	5
BZT52C20	HWM	20	18.8	21.2	5	55	225	1	0.1	14	14.4	18	5
BZT52C22	HWN	22	20.8	23.3	5	55	250	1	0.1	15.4	16.4	20	5
BZT52C24	HWO	24	22.8	25.6	5	70	250	1	0.1	16.8	18.4	22	5
BZT52C27	HWP	27	25.1	28.9	2	80	300	0.5	0.1	18.9	21.4	25.3	2
BZT52C30	HWQ	30	28	32	2	80	300	0.5	0.1	21	24.4	29.4	2
BZT52C33	HWR	33	31	35	2	80	325	0.5	0.1	23.1	27.4	33.4	2
BZT52C36	HWS	36	34	38	2	90	350	0.5	0.1	25.2	30.4	37.4	2
BZT52C39	HWT	39	37	41	2	130	350	0.5	0.1	27.3	33.4	41.2	2

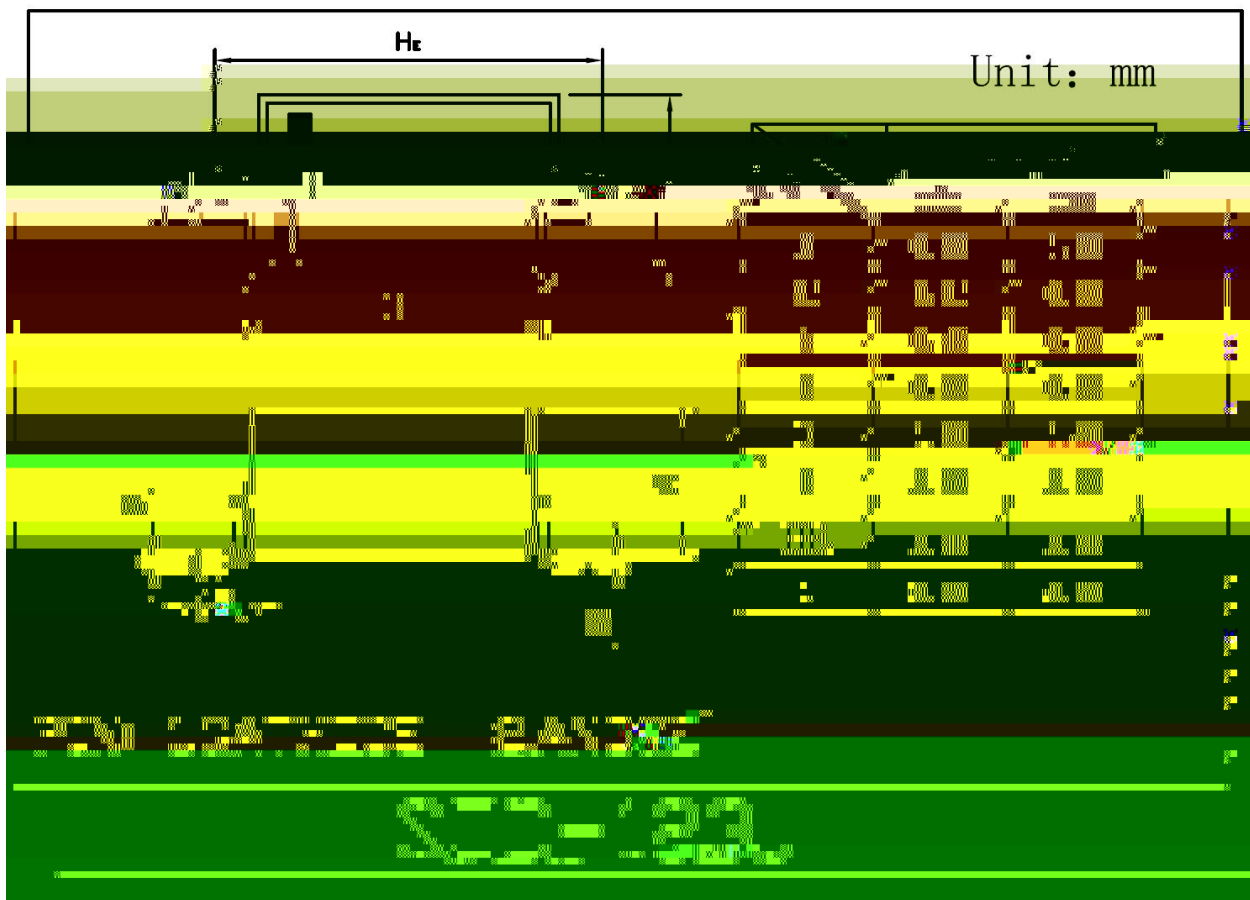
Notes:

1. Device mounted on ceramic PCB; 7.6mm x 9.4mm x 0.87mm with pad areas 25mm².
2. Short duration test pulse used to minimize self-heating effect.
3. f = 1kHz.

/ Electrical Characteristic Curve



/ Package Dimensions





/ Marking Instructions



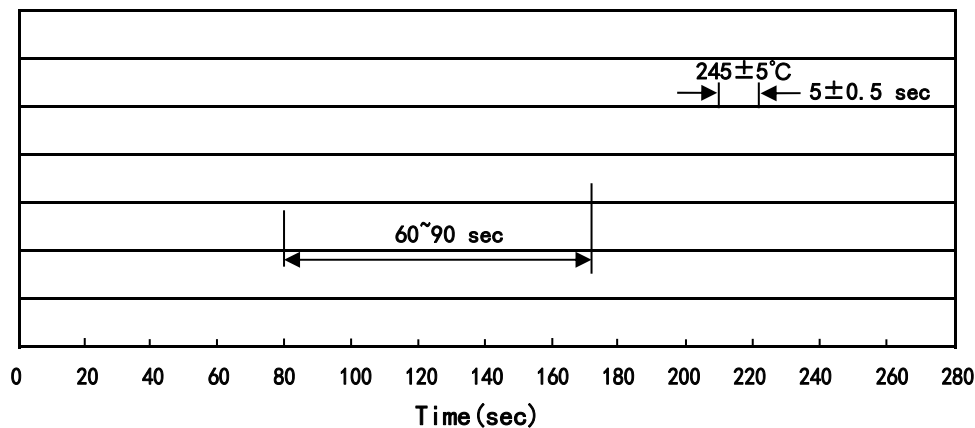
H

WX

Note:

H: Company Code

WX: Product Type Code


() / Temperature Profile for IR Reflow Soldering(Pb-Free)


Note:

- | | | | | | |
|---|-------|-----|-----------|--------|---|
| 1 | 150 | 180 | 60 | 90sec; | 1.Preheating:150~180 , Time:60~90sec. |
| 2 | 245±5 | | 5±0.5sec; | | 2.Peak Temp.:245±5 , Duration:5±0.5sec. |
| 3 | | 2 | 10 | /sec. | 3. Cooling Speed: 2~10 /sec. |

/ Resistance to Soldering Heat Test Conditions

260±5 10±1 sec. Temp.:260±5 Time:10±1 sec

/ Packaging SPEC.

/ REEL

Package Type	Units					Dimension (unit mm ³)		
	Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Reel	Inner Box	Outer Box
SOD-123	3,000	10	30,000	6	180,000	7" ×8	180×120×180	390×385×205

/ Notices