MM1W3V3~ MM1W330

Rev.E May.-2017

DATA SHEET

Descriptions

Glass Passivated Junction Zener voltage regulator diodes,SOD-123FL thin package.

Features

3.3V to 330V wide zener voltage range applications, Small plastic package suitable for surface mounted design.Halogen free product.

Applications

1W power dissipation,automated assembly processes.

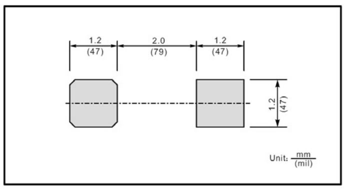
Equivalent Circuit

Pinning

1  2

PIN	DESCRIPTION
1	Cathode
2	Anode

The recommended mounting pad size



Marking

See Marking Instructions.

/ Absolute Maximum Ratings(Ta=25)

v Ѽ Parameter	ㄎ N Symbol	Ѽ Ө Rating	D Ң Unit
Power Dissipation at T_L=75℃	P_D	1.0	W
Forward Voltage at I_F = 200 mA	V_F	1.2	V
Typical thermal resistance junction to ambient (1)	R_{JA}	55	℃/W
Operating and Storage Temperature Range	T_J,T_{stg}	-55~150	℃

(1) Thermal resistance from junction to ambient at P.C.B. mounted with 0.2 X 0.2" (5 X 5 mm) copper areas pads

/ Electrical Characteristics(Ta=25)

Type	Marking	Zener Voltage Range (1)				Dynamic Impedance	Reverse Current		Admissible Zener Current
		V_{ZT} （at I_{ZT}）			I_{ZT}	Z_{ZT} （at I_{ZT}）	I_R	at V_R	
		Min (V)	Nom (V)	Max (V)	mA	Max (Ω)	Max （μA）	（V）	I_{ZM} (mA)
MM1W3V3	FHD	3.10	3.3	3.50	75	10	100	1	285
MM1W3V6	FHE	3.40	3.6	3.80	69	10	100	1	263
MM1W3V9	FHF	3.70	3.9	4.10	64	9.0	50	1	243
MM1W4V3	FHG	4.06	4.3	4.56	58	9.0	25	1	219
MM1W4V7	FHJ	4.50	4.7	4.93	53	8.0	10	1	203
MM1W5V1	FHK	4.84	5.1	5.36	49	7.0	10	1	186
MM1W5V6	FHL	5.32	5.6	5.92	45	5.0	10	2	170
MM1W6V2	FHN	5.86	6.2	6.51	41	2.0	10	3	154
MM1W6V8	FHO	6.46	6.8	7.18	37	3.5	10	4	140
MM1W7V5	FHQ	7.12	7.5	7.88	34	4.0	10	5	127
MM1W8V2	FHR	7.79	8.2	8.67	31	4.5	10	6	116
MM1W9V1	FHT	8.60	9.0	9.59	28	5.0	10	7	104
MM1W10	FHU	9.50	10	10.5	25	7.0	10	7	95
MM1W11	FHV	10.4	11	11.6	23	8.0	5	8	86
MM1W12	FHW	11.4	12	12.6	21	9.0	5	9	79
MM1W13	FHX	12.4	13	14.1	19	10	5	10	71

/ Electrical Characteristics(Ta=25)

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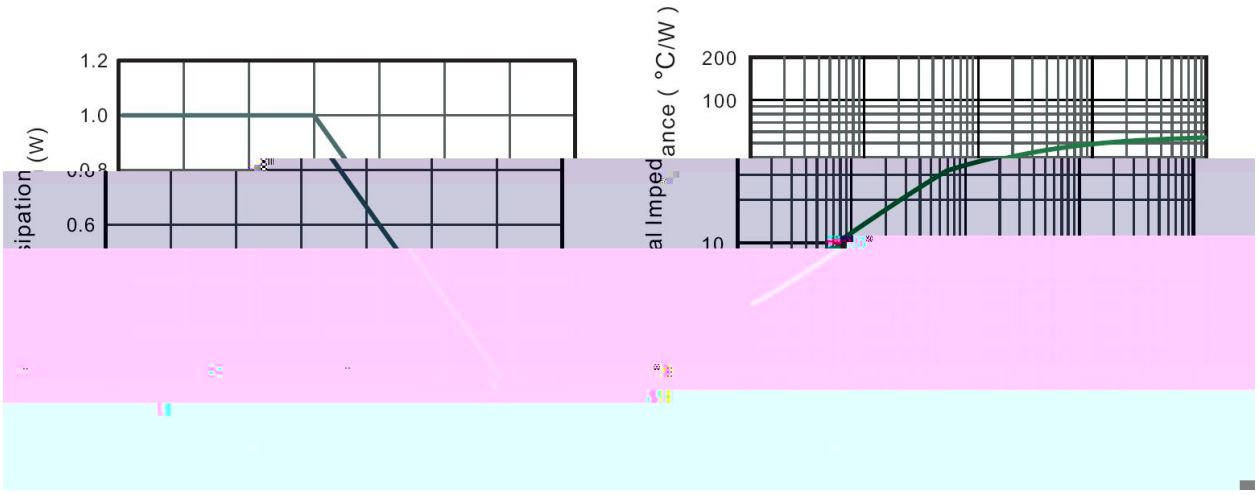
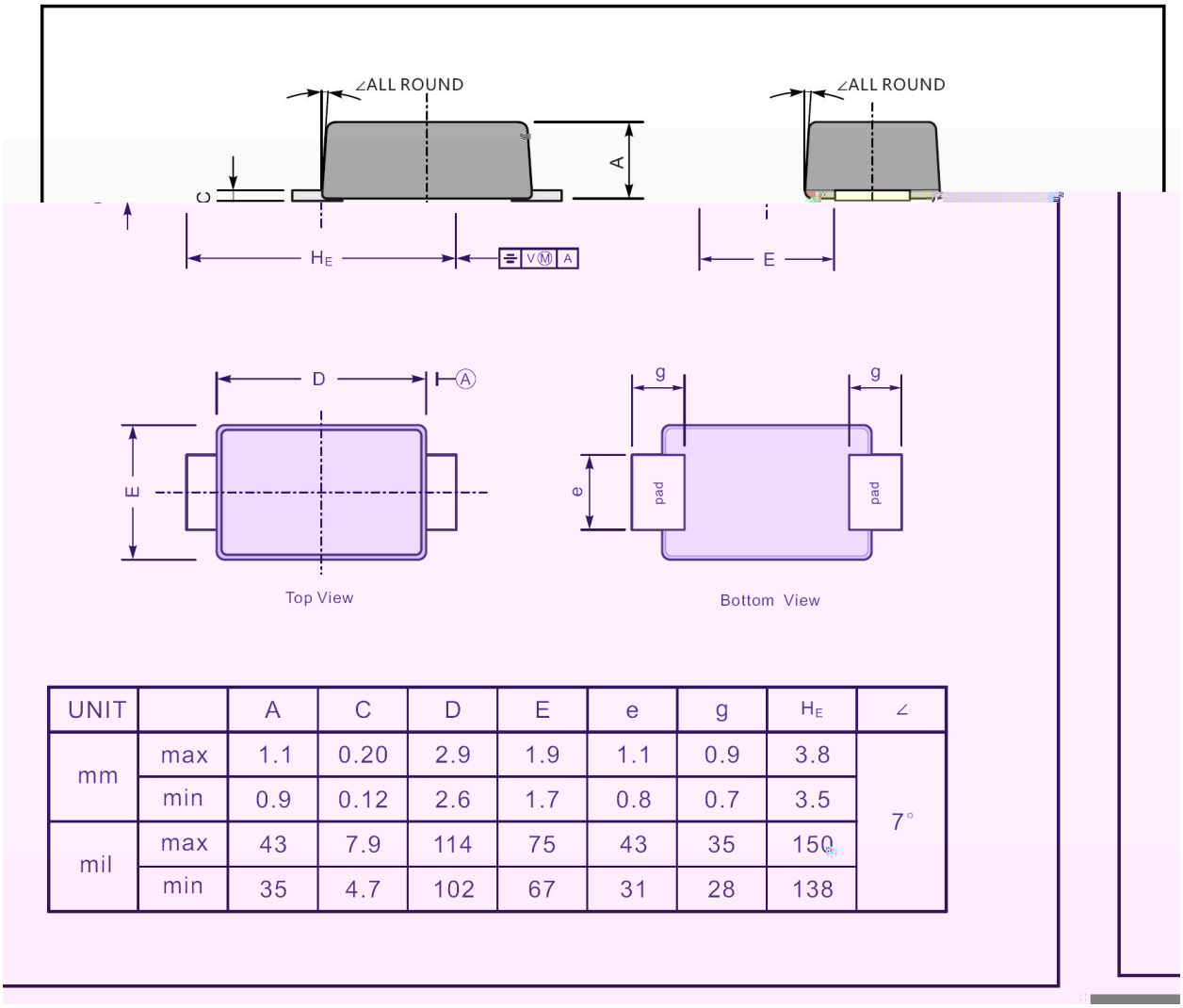
		V_{ZT} （at I_{ZT}）			I_{ZT}	Z_{ZT} （at I_{ZT}）	I_R	at V_R	
		Min (V)	Nom (V)	Max (V)	mA	Max (Ω)	Max （μA）	（V）	I_{ZM} (mA)

/ Electrical Characteristic Curve



/ Package Dimensions

SOD-123FL



UNIT		A	C	D	E	e	g	H_E	∠
mm	max	1.1	0.20	2.9	1.9	1.1	0.9	3.8	7°
	min	0.9	0.12	2.6	1.7	0.8	0.7	3.5	
mil	max	43	7.9	114	75	43	35	150	
	min	35	4.7	102	67	31	28	138	

/ Marking Instructions

Type number	Marking
MM1W3V3	FHD
MM1W3V6	FHE
MM1W3V9	FHF
MM1W4V3	FHG
MM1W4V7	FHJ
MM1W5V1	FHK
MM1W5V6	FHL
MM1W6V2	FHN
MM1W6V8	FHO
MM1W7V5	FHQ
MM1W8V2	FHR
MM1W9V1	FHT
MM1W10	FHU
MM1W11	FHV
MM1W12	FHW
MM1W13	FHX
MM1W15	FHZ
MM1W16	FJA
MM1W18	FJF
MM1W20	FJG
MM1W22	FJK
MM1W24	FJL
MM1W27	FJN
MM1W30	FJQ

/ Marking Instructions

ب ˝ χ

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Note:

IKR χ   Product Type Code

**** χ   Lot No. Code ıThe 1st means:YM Code ıThe last 3 means:little Lot No Code

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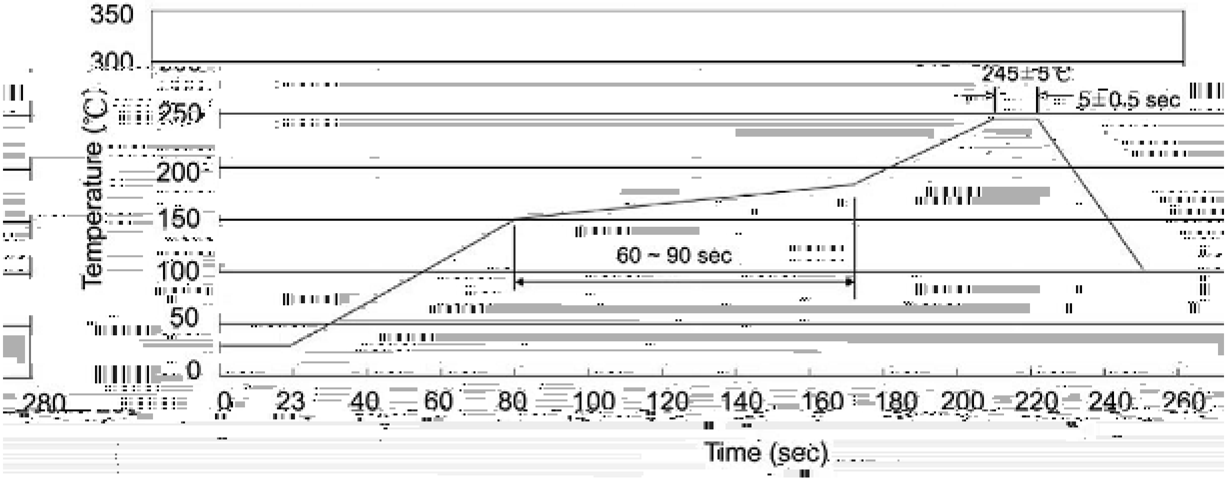

ب ˝ χ
1 ĺ ♬ □ ŷ 25 Ḱ 150 ƚ ı `H ڗ 60 Ḱ 90sec;
2 Š Ӫ □ ŷ 245 ° 5 ƚ ı `H ڗ `Y ⲁ ㎛ 5 ° 0.5sec;
3 ì ˙ ˥ ˛ ɔ ௬ ŷ ㎛ 2 Ḱ 10 ƚ /sec.

Note:
1.Preheating:25~150 ƚ , Time:60~90sec.
2.Peak Temp.:245 ° 5 ƚ , Duration:5 ° 0.5sec.
3. Cooling Speed: 2~10 ƚ /sec.

/ Resistance to Soldering Heat Test Conditions

□ ŷ χ 260 ° 5 ƚ   `H ڗ χ 10 ° 1 sec.

Temp.:260 ° 5 ƚ   Time:10 ° 1 sec

/ Packaging SPEC.

ɑ ˋ ɣ ɫ / REEL

Package Type	Units					Dimension (unit mm^3)		
SOD-123FL	3000	8	24000	5	120000	7″ ×11	185X180X105	390X385X205