

描述 / Descriptions

玻璃钝化结齐纳稳压二极管，薄型 SOD-123FL 封装。

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

特征 / Features

适用于 3.3V 至 330V 的宽范围稳压电路，小型塑料封装适合表面贴装工艺。无卤产品。

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

用途 / Applications

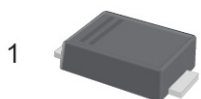
1W 功耗，自动贴片组装。

1W power dissipation, automated assembly processes.

内部等效电路 / Equivalent Circuit

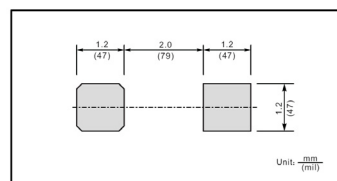


引脚排列 / Pinning



PIN	DESCRIPTION
1	Cathode
2	Anode

The recommended mounting pad size



印章代码 / Marking

见印章说明。See Marking Instructions.

极限参数 / Absolute Maximum Ratings(Ta=25°C)

参数 Parameter	符号 Symbol	数值 Rating	单位 Unit
Power Dissipation at $T_L=75^{\circ}\text{C}$	P_D	1.0	W
Forward Voltage at $I_F = 200\text{ mA}$	V_F	1.2	V
Typical thermal resistance junction to ambient ⁽¹⁾	$R_{\theta JA}$	55	$^{\circ}\text{C/W}$
Operating and Storage Temperature Range	T_J, T_{stg}	-55~150	$^{\circ}\text{C}$

(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

电性能参数 / Electrical Characteristics(Ta=25°C)

Type	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	3.10	3.3	3.50	75	10	100	1	285
MM1W3V6	3.40	3.6	3.80	69	10	100	1	263
MM1W3V9	3.70	3.9	4.10	64	9.0	50	1	243
MM1W4V3	4.06	4.3	4.56	58	9.0	25	1	219
MM1W4V7	4.50	4.7	4.93	53	8.0	10	1	203
MM1W5V1	4.84	5.1	5.36	49	7.0	10	1	186
MM1W5V6	5.32	5.6	5.92	45	5.0	10	2	170
MM1W6V2	5.86	6.2	6.51	41	2.0	10	3	154
MM1W6V8	6.46	6.8	7.18	37	3.5	10	4	140
MM1W7V5	7.12	7.5	7.88	34	4.0	10	5	127
MM1W8V2	7.79	8.2	8.67	31	4.5	10	6	116
MM1W9V1	8.60	9.1	9.59	28	5.0	10	7	104
MM1W10	9.50	10	10.5	25	7.0	10	7	95
MM1W11	10.4	11	11.6	23	8.0	5	8	86
MM1W12	11.4	12	12.6	21	9.0	5	9	79
MM1W13	12.4	13	14.1	19	10	5	10	71

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	Min (V)	Nom (V)	Max (V)	mA	Max (Ω)	Max (μA)	(V)	I _{ZM} (mA)
MM1W15	13.8	15	15.8	17	14	5	11	63
MM1W16	15.2	16	17.1	16	16	5	12	58
MM1W18	16.8	18	19.2	14	20	5	13	52
MM1W20	19.0	20	21.2	13	22	5	15	47
MM1W22	20.8	22	23.3	12	23	5	17	43
MM1W24	22.8	24	26.0	11	25	5	18	38
MM1W27	25.3	27	28.9	9.5	35	5	21	35
MM1W30	28.2	30	32.0	8.5	40	5	23	31
MM1W33	31.3	33	34.9	7.5	45	5	25	28
MM1W36	34.2	36	37.9	7.0	50	5	27	26
MM1W39	37.2	39	41.5	6.5	60	5	30	24
MM1W43	40.9	43	45.6	6.0	70	1	32	22
MM1W47	44.9	47	49.8	5.5	80	1	35	20
MM1W51	48.6	51	54.0	5.0	95	1	38	18
MM1W56	53.6	56	58.8	4.5	110	1	42	17
MM1W62	58.9	62	65.6	4.0	125	1	47	15
MM1W68	64.6	68	71.7	3.7	150	1	52	14
MM1W75	71.2	75	78.8	3.3	175	1	56	12
MM1W82	77.9	82	87.0	3.0	200	1	62	11
MM1W91	86.0	91	96.0	2.8	250	1	69	10
MM1W100	95.0	100	105	2.5	350	1	76	9.5
MM1W110	104	110	116	2.3	450	1	84	8.6
MM1W120	114	120	127	2.0	550	1	91	7.8
MM1W135	125	135	142	1.9	700	1	100	7.0

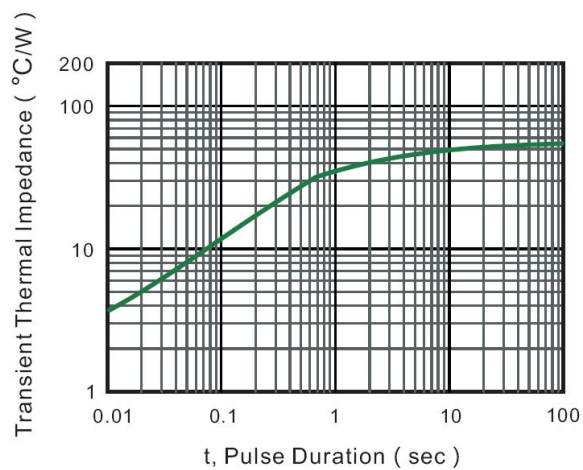
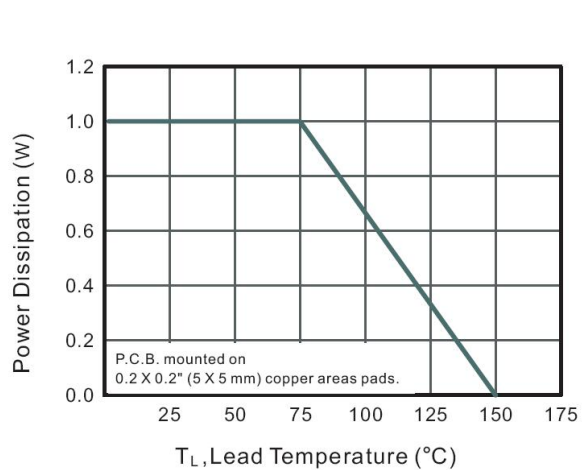
电性能参数 / Electrical Characteristics(Ta=25°C)

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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)
MM1W150	140	150	157	1.7	900	1	110	6.3
MM1W165	155	165	172	1.6	1100	1	120	5.8
MM1W180	170	180	191	1.4	1200	1	135	5.2
MM1W200	189	200	211	1.2	1400	1	150	4.7
MM1W220	209	220	231	1.0	1600	1	165	4.3
MM1W240	229	240	251	1.0	1800	1	180	3.9
MM1W260	249	260	271	1.0	2000	1	190	3.7
MM1W280	269	280	291	1.0	2100	1	205	3.4
MM1W300	289	300	315	1.0	2300	1	230	3.1
MM1W330	313	330	346	1.0	2500	1	250	2.8

Note:

(1) V_{ZT} is tested with pulses (20 ms)

电参数曲线图 / Electrical Characteristic Curve

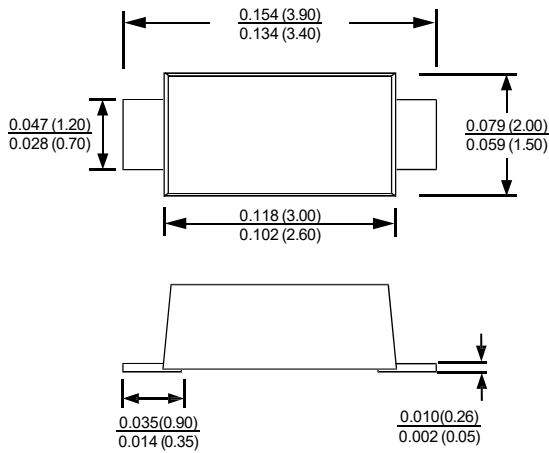


外形尺寸图 / Package Dimensions

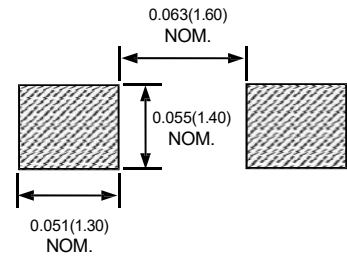
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123FL



Mounting Pad Layout



Ordering Information (Example)

PREFERED P/N	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MM1W3V3~ MM1W330	3000	24000	120000	7" reel

印章说明 / 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
MM1W33	FJR
MM1W36	FJS
MM1W39	FJT
MM1W43	FLG
MM1W47	FLJ
MM1W51	FLK
MM1W56	FLL
MM1W62	FLN
MM1W68	FLO
MM1W75	FLQ
MM1W82	FLR
MM1W91	FLT
MM1W100	FLU
MM1W110	FLV
MM1W120	FLW
MM1W135	FLX
MM1W150	FLZ
MM1W165	FPA
MM1W180	FPF
MM1W200	FPG
MM1W220	FPK
MM1W240	FPL
MM1W260	FPM
MM1W280	FPN
MM1W300	FPQ
MM1W330	FPR