



DESCRIPTION

The MMSZ4678~MMSZ4717 is available in SOD-123 package.

ORDERING INFORMATION

Package Type	Part Number	
SOD-123	MMSZ4678	MMSZ4698
	MMSZ4679	MMSZ4699
	MMSZ4680	MMSZ4700
	MMSZ4681	MMSZ4701
	MMSZ4682	MMSZ4702
	MMSZ4683	MMSZ4703
	MMSZ4684	MMSZ4704
	MMSZ4685	MMSZ4705
	MMSZ4686	MMSZ4706
	MMSZ4687	MMSZ4707
	MMSZ4688	MMSZ4708
	MMSZ4689	MMSZ4709
	MMSZ4690	MMSZ4710
	MMSZ4691	MMSZ4711
	MMSZ4692	MMSZ4712
	MMSZ4693	MMSZ4713
	MMSZ4694	MMSZ4714
	MMSZ4695	MMSZ4715
	MMSZ4696	MMSZ4716
	MMSZ4697	MMSZ4717
Note	SPQ: 3,000pcs/Reel	
AiT provides all RoHS Compliant Products		

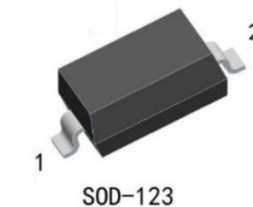
FEATURE

- Pb-Free Packages are Available
- Wide Zener Reverse Voltage Range
- Small Package Size for High Density Applications
- ESD Rating of Class 3 (>16 KV) per Human Body Model

MECHANICAL DATA

- Case: SOD-123
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 16mg/0.00056oz

PIN DESCRIPTION



PIN#	DESCRIPTION
1	Cathode
2	Anode



ABSOLUTE MAXIMUM RATING

TC = 25°C, unless otherwise specified.

V _F , Forward voltage Value @I _F =10mA	0.9V
P _D , Power Dissipation	350mW
R _{θJA} , Thermal Resistance, Junction to Ambient Air	357°C/W
T _J , T _{STG} , Operation Junction and Storage Temperature Range	-55~ +150°C

Stresses above may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other conditions beyond those indicated in the Electrical Characteristics are not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

ELECTRICAL CHARACTERISTICS (TA=25°C UNLESS OTHERWISE NOTED)

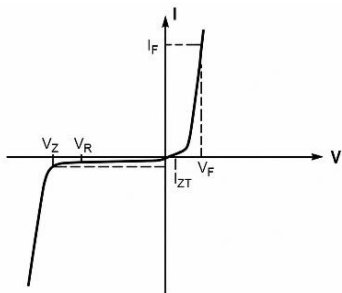
Symbol	Parameter	 Zener Voltage Regulator
V _Z	Reverse Zener voltage @ I _{ZT}	
I _{ZT}	Reverse current	
I _R	Reverse leakage current @ V _R	
V _R	Reverse voltage	
I _F	Forward current	
V _F	Forward voltage @ I _F	

Fig 1. Maximum Continuous Power Derating

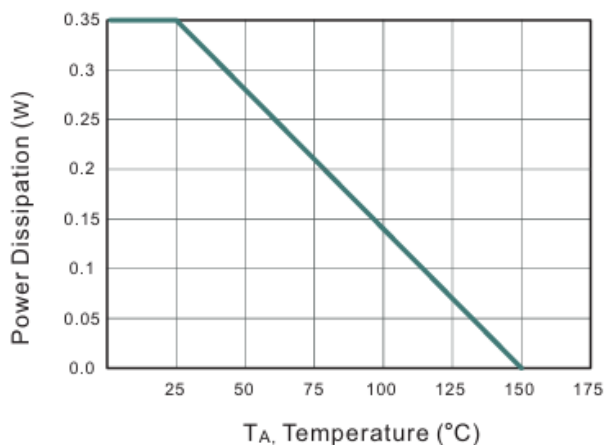
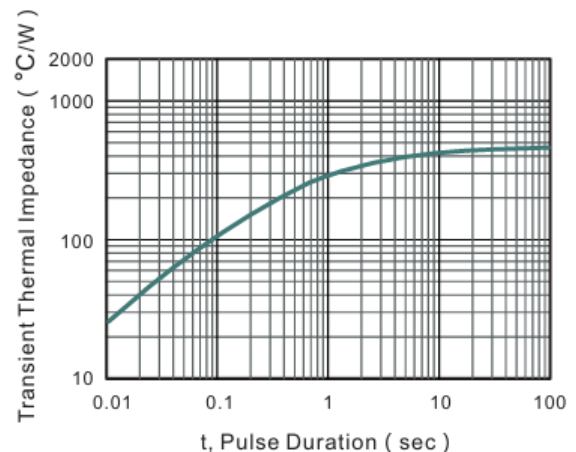


Fig 2. Typical Transient Thermal Impedance





ELECTRICAL CHARACTERISTICS

T_C = 25°C, unless otherwise specified

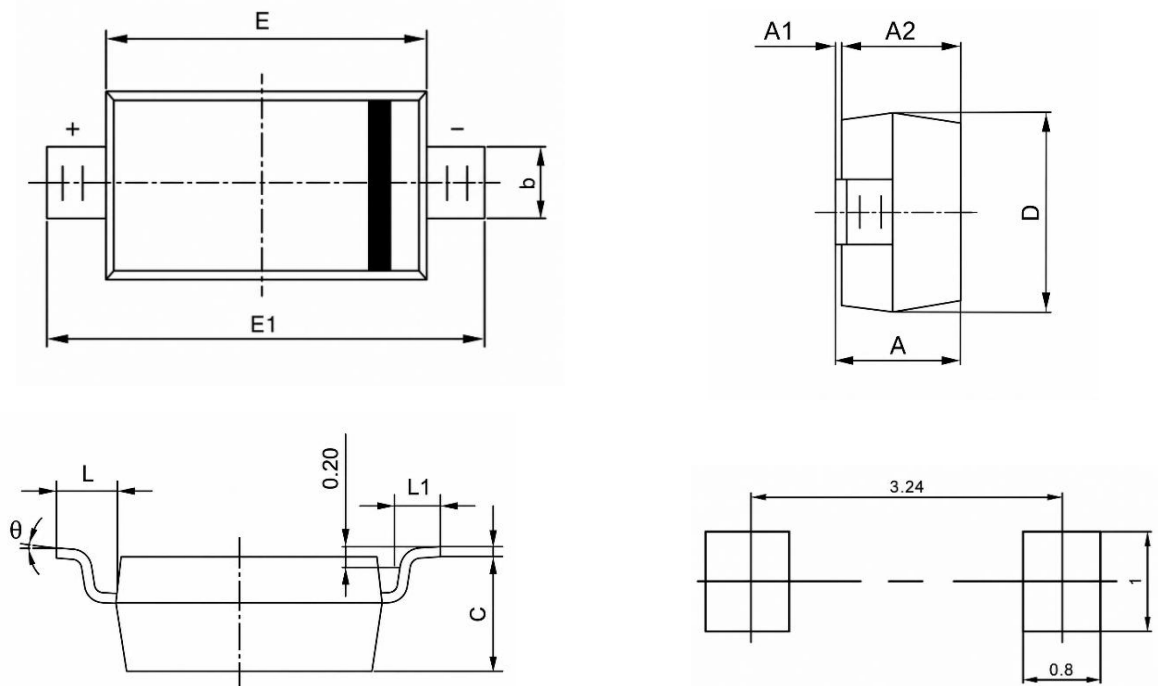
Part Number	Zener Voltage *				Leakage Current	
	VZ (Volts)			@ IZT	IR @VR	
	Min	Nom	Max	uA	uA	Volts
MMSZ4678	1.71	1.8	1.89	50	7.5	1
MMSZ4679	1.90	2.0	2.10	50	5	1
MMSZ4680	2.09	2.2	2.31	50	4	1
MMSZ4681	2.28	2.4	2.52	50	2	1
MMSZ4682	2.565	2.7	2.835	50	1	1
MMSZ4683	2.85	3.0	3.15	50	0.8	1
MMSZ4684	3.13	3.3	3.47	50	7.5	1.5
MMSZ4685	3.42	3.6	3.78	50	7.5	2
MMSZ4686	3.70	3.9	4.10	50	5	2
MMSZ4687	4.09	4.3	4.52	50	4	2
MMSZ4688	4.47	4.7	4.94	50	10	3
MMSZ4689	4.85	5.1	5.36	50	10	3
MMSZ4690	5.32	5.6	5.88	50	10	4
MMSZ4691	5.89	6.2	6.51	50	10	5
MMSZ4692	6.46	6.8	7.14	50	10	5.1
MMSZ4693	7.13	7.5	7.88	50	10	5.7
MMSZ4694	7.79	8.2	8.61	50	1	6.2
MMSZ4695	8.27	8.7	9.14	50	1	6.6
MMSZ4696	8.65	9.1	9.56	50	1	6.9
MMSZ4697	9.50	10	10.50	50	1	7.6
MMSZ4698	10.45	11	11.55	50	0.05	8.4
MMSZ4699	11.40	12	12.60	50	0.05	9.1
MMSZ4700	12.35	13	13.65	50	0.05	9.8
MMSZ4701	13.30	14	14.70	50	0.05	10.6
MMSZ4702	14.25	15	15.75	50	0.05	11.4
MMSZ4703	15.20	16	16.80	50	0.05	12.1
MMSZ4704	16.15	17	17.85	50	0.05	12.9
MMSZ4705	17.10	18	18.90	50	0.05	13.6
MMSZ4706	18.05	19	19.95	50	0.05	14.4
MMSZ4707	19.00	20	21.00	50	0.01	15.2
MMSZ4708	20.90	22	23.10	50	0.01	16.7
MMSZ4709	22.80	24	25.20	50	0.01	18.2
MMSZ4710	23.75	25	26.25	50	0.01	19.0
MMSZ4711	25.65	27	28.35	50	0.01	20.4
MMSZ4712	26.60	28	29.40	50	0.01	21.2
MMSZ4713	28.50	30	31.50	50	0.01	22.8
MMSZ4714	31.35	33	34.65	50	0.01	25.0
MMSZ4715	34.20	36	37.80	50	0.01	27.3
MMSZ4716	37.05	39	40.95	50	0.01	29.6
MMSZ4717	40.85	43	45.15	50	0.01	32.6

*Nominal Zener voltage is measured with the device junction in thermal equilibrium at TL= 30°C+1°C



PACKAGE INFORMATION

Dimension in SOD-123 (Unit: mm)



Recommend Pad Layout

Symbol	MILIMETERS	
	Min	Max
A	1.050	1.250
A1	0.000	0.100
A2	1.050	1.150
b	0.450	0.650
c	0.080	0.150
D	1.500	1.700
E	2.600	2.800
E1	3.550	3.850
L	0.500 REF	
L1	0.250	0.450
θ	0°	8°



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