

Zener Diodes

4.3~43V 500mW SOD-123

MMSZ46x~47x

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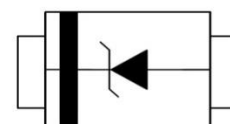
FEATURE

- Zener Voltage Range: 4.3V to 43V
- Power Dissipation: 500mW
- Silicon Planar Zener Diode in SOD-123 package
- Ideally Suited for Automated Assembly Processes
- Application: Power Management Systems, Voltage Regulation



MECHANICAL DATA

- Case: SOD-123, Molded Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: Band Marking denotes cathode end



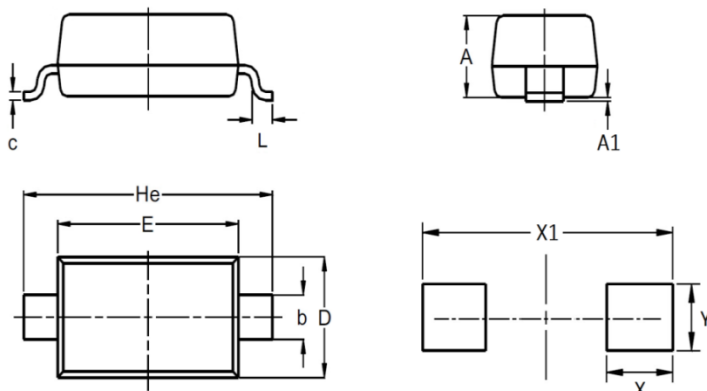
MAXIMUM RATINGS (TA=25 °C unless otherwise noted)



Parameter	Symbols	Value	Unit
Power Dissipation ^(Note 1)	P _D	500	mW
Resistance Junction to Ambient ^(Note 2)	R _{θJA}	540	°C/W
Resistance Junction to Case ^(Note 1)	R _{θJC}	170	°C/W
Junction Temperature	T _J	-55~+150	°C
Storage Temperature Range	T _{STG}	-55~+150	°C

DIMENSIONS AND RECOMMENDED LAND PATTERN

Item	Min (mm)	Max (mm)
A	0.95	1.35
A1	-	0.12
b	0.50	0.70
C	-	0.20
D	1.40	1.80
E	2.50	2.80
He	3.60	3.90
L	0.40	-
X	0.97	0.97
X1	3.60	3.90
Y	1.22	1.22



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ELECTRICAL CHARACTERISTICS (TA=25 °C unless otherwise noted)

Part Number	Nominal Zener Voltage				Reverse Leakage Current	
	V _Z at I _{ZT}			I _{ZT}	I _R max	at V _R
	Nom (V)	Min (V)	Max (V)	(mA)	(μA)	(V)
MMSZ4687	4.3	4.09	4.52	0.05	4.0	2.0
MMSZ4688	4.7	4.47	4.94	0.05	10	3.0
MMSZ4689	5.1	4.85	5.36	0.05	10	3.0
MMSZ46895	5.3	5.03	5.57	0.05	10	4.0
MMSZ4690	5.6	5.32	5.88	0.05	10	4.0
MMSZ4691	6.2	5.89	6.51	0.05	10	5.0
MMSZ4692	6.8	6.46	7.14	0.05	10	5.1
MMSZ4694	8.2	7.79	8.61	0.05	1.0	6.2
MMSZ4696	9.1	8.65	9.56	0.05	1.0	6.9
MMSZ4697	10	9.50	10.50	0.05	1.0	7.6
MMSZ4699	12	11.40	12.60	0.05	0.05	9.1
MMSZ4700	13	12.40	13.70	0.05	0.05	9.8
MMSZ4701	14	13.30	14.70	0.05	0.05	10.6
MMSZ4702	15	14.30	15.80	0.05	0.05	11.4
MMSZ4703	16	15.20	16.80	0.05	0.05	12.1
MMSZ4704	17	16.20	17.90	0.05	0.05	12.9
MMSZ4705	18	17.10	18.90	0.05	0.05	13.6
MMSZ4707	20	19.00	21.00	0.05	0.01	15.2
MMSZ4708	22	20.90	23.10	0.05	0.01	16.7
MMSZ4709	24	22.80	25.20	0.05	0.01	18.2
MMSZ4710	25	23.80	26.30	0.05	0.01	19.0
MMSZ4711	27	25.70	28.40	0.05	0.01	20.4
MMSZ4712	28	26.60	29.40	0.05	0.01	21.2
MMSZ4713	30	28.50	31.50	0.05	0.01	22.8
MMSZ4714	33	31.40	34.70	0.05	0.01	25.0
MMSZ4715	36	34.20	37.80	0.05	0.01	27.3
MMSZ4717	43	40.90	45.20	0.05	0.01	32.6

Notes:

1. Device mounted on an infinite heatsink.
2. Device mounted on a single-sided copper, mini pad.

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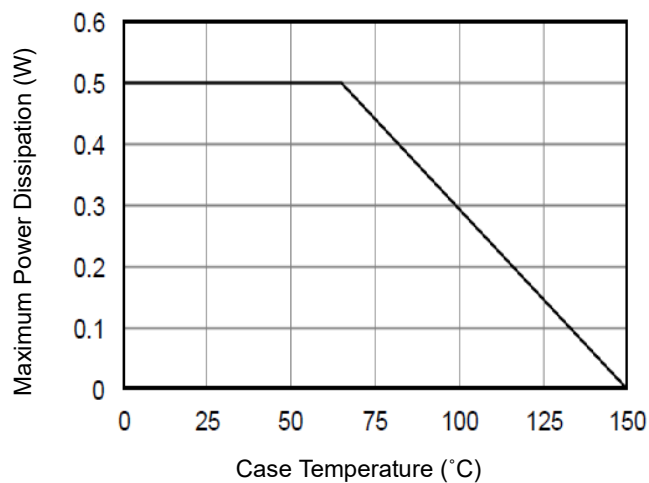
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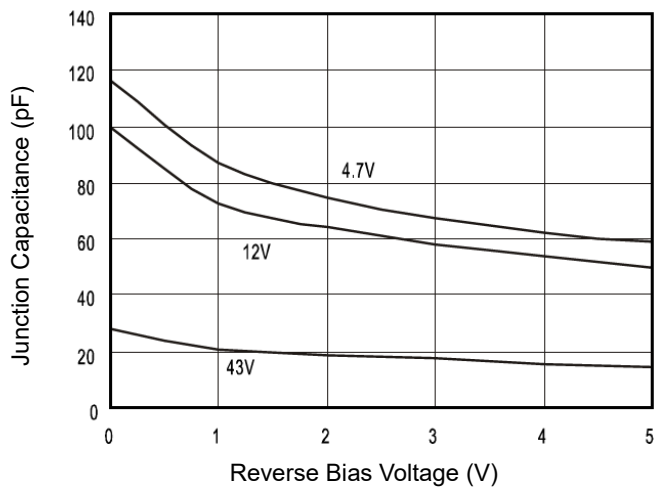
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CHARACTERISTIC CURVES

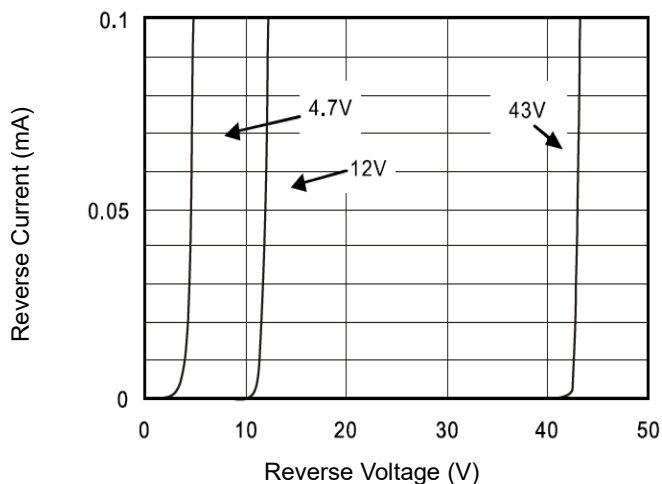
Power Derating



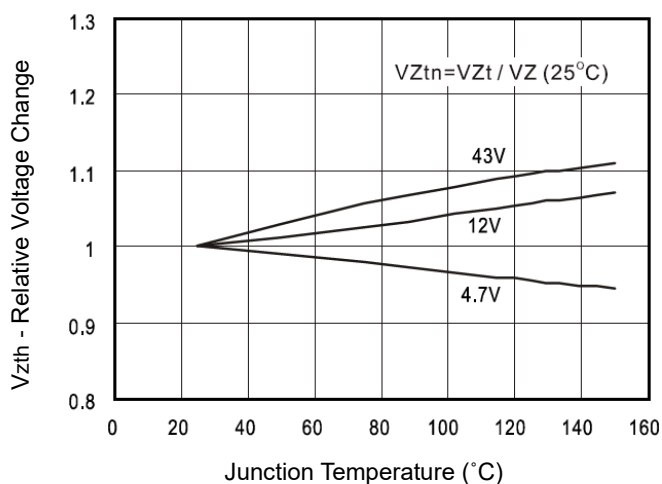
Typical Junction Capacitance



Typical Reverse Characteristics



Zener Voltage Change vs Junction Temperature



*Specifications subject to change without notice.