

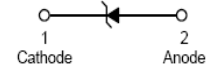
Surface mount zener diode

MMSZ46XX-47XX Series
FEATURES

- Planar die construction.
- 500mW power dissipation.
- Wide zener reverse voltage range.
- Ideally suited for automated assembly processes.



Lead-free


SOD-123
APPLICATIONS

- Zener diode.
- Ultra-small surface mount package.

ORDERING INFORMATION

Type No.	Marking	Package Code
MMSZ46XX series	See table 2	SOD-123

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Forward Voltage @ I _F =10mA	V _F	0.95	V
Power Dissipation	P _d	500	mW
Thermal resistance, junction to ambient air	R _{θjA}	340	°C/W
Junction temperature	T _j	150	°C
Storage temperature range	T _{stg}	-55 to +150	°C



Surface mount zener diode

MMSZ46XX-47XX Series

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Device	Device marking	Zener voltage			Leakage Current		
		V _Z (V)			@I _{ZT}	I _R @V _R	
		Min	Nom	Max	μA	μA	V
MMSZ4690	CV	5.32	5.6	5.88	50	10	4
MMSZ4691	CA	5.89	6.2	6.51	50	10	5
MMSZ4692	CX	6.46	6.8	7.14	50	10	5.1
MMSZ4693	CY	7.13	7.5	7.88	50	10	5.7
MMSZ4694	CZ	7.79	8.2	8.61	50	1	6.2
MMSZ4695	DC	8.27	8.7	9.14	50	1	6.6
MMSZ4696	DD	8.65	9.1	9.56	50	1	6.9
MMSZ4697	DE	9.50	10	10.50	50	1	7.6
MMSZ4698	DF	10.45	11	11.55	50	0.05	8.4
MMSZ4699	DH	11.40	12	12.60	50	0.05	9.1
MMSZ4700	DJ	12.35	13	13.65	50	0.05	9.8
MMSZ4701	DK	13.30	14	14.70	50	0.05	10.6
MMSZ4702	DM	14.25	15	15.75	50	0.05	11.4
MMSZ4703	DN	15.20	16	16.80	50	0.05	12.1
MMSZ4704	DP	16.15	17	17.85	50	0.05	12.9
MMSZ4705	DT	17.10	18	18.90	50	0.05	13.6
MMSZ4706	DU	18.05	19	19.95	50	0.05	14.4
MMSZ4707	DV	19.00	20	21.00	50	0.01	15.2
MMSZ4708	DA	20.90	22	23.10	50	0.01	16.7
MMSZ4709	DX	22.80	24	25.20	50	0.01	18.2
MMSZ4710	DY	23.75	25	26.25	50	0.01	19.0
MMSZ4711	EA	25.65	27	28.35	50	0.01	20.4
MMSZ4712	EC	26.60	28	29.40	50	0.01	21.2
MMSZ4713	ED	28.50	30	31.50	50	0.01	22.8
MMSZ4714	EE	31.35	33	34.65	50	0.01	25.0
MMSZ4715	EF	34.20	36	37.80	50	0.01	27.3
MMSZ4716	EH	37.05	39	40.95	50	0.01	29.6
MMSZ4717	EJ	40.85	43	45.15	50	0.01	32.6



Surface mount zener diode

MMSZ46XX-47XX Series

TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

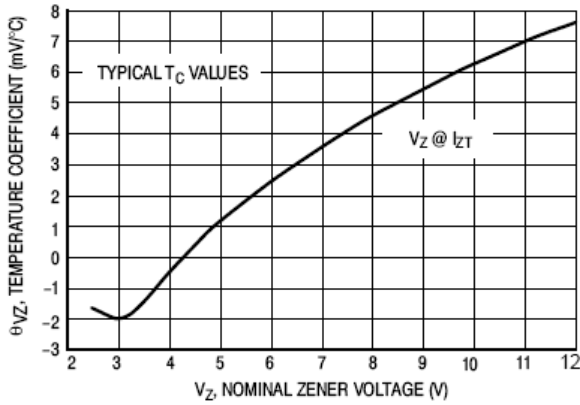


Figure 1. Temperature Coefficients (Temperature Range -55°C to +150°C)

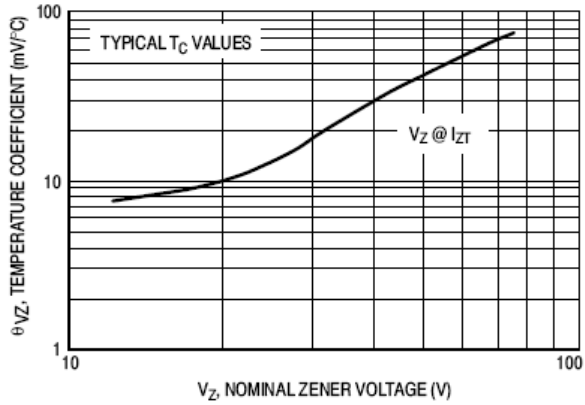


Figure 2. Temperature Coefficients (Temperature Range -55°C to +150°C)

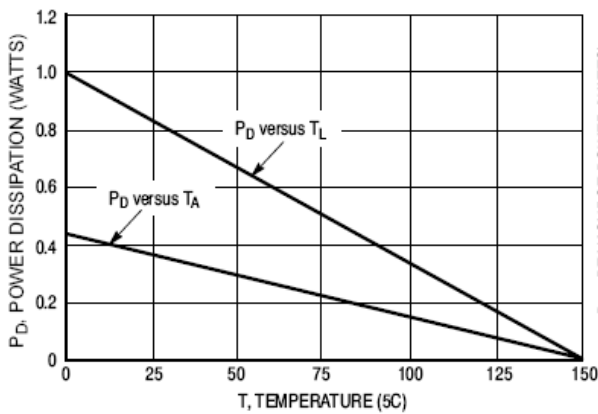


Figure 3. Steady State Power Derating

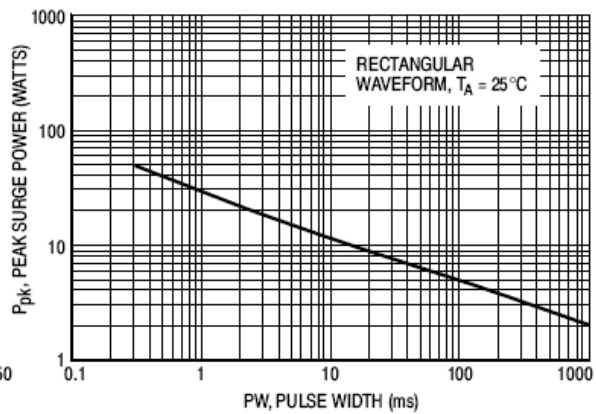


Figure 4. Maximum Nonrepetitive Surge Power

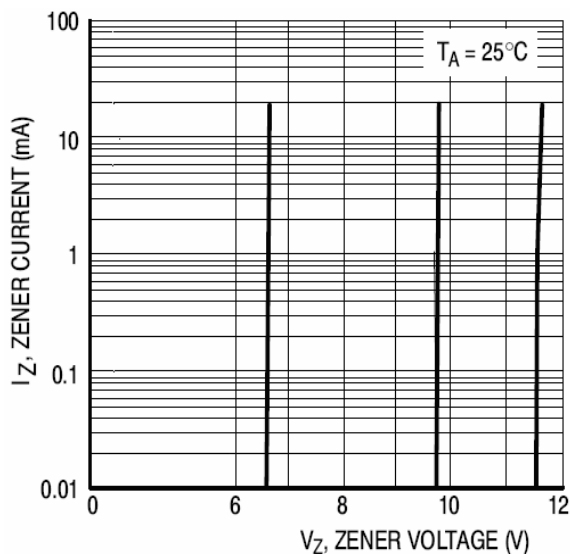


Figure 5. Zener Voltage versus Zener Current (V_Z up to 12 V)

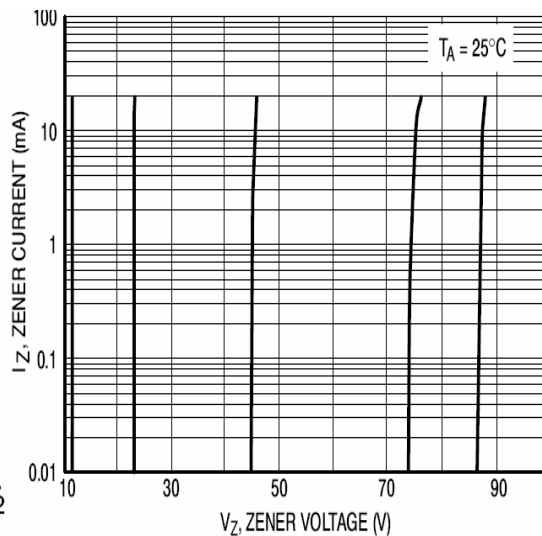
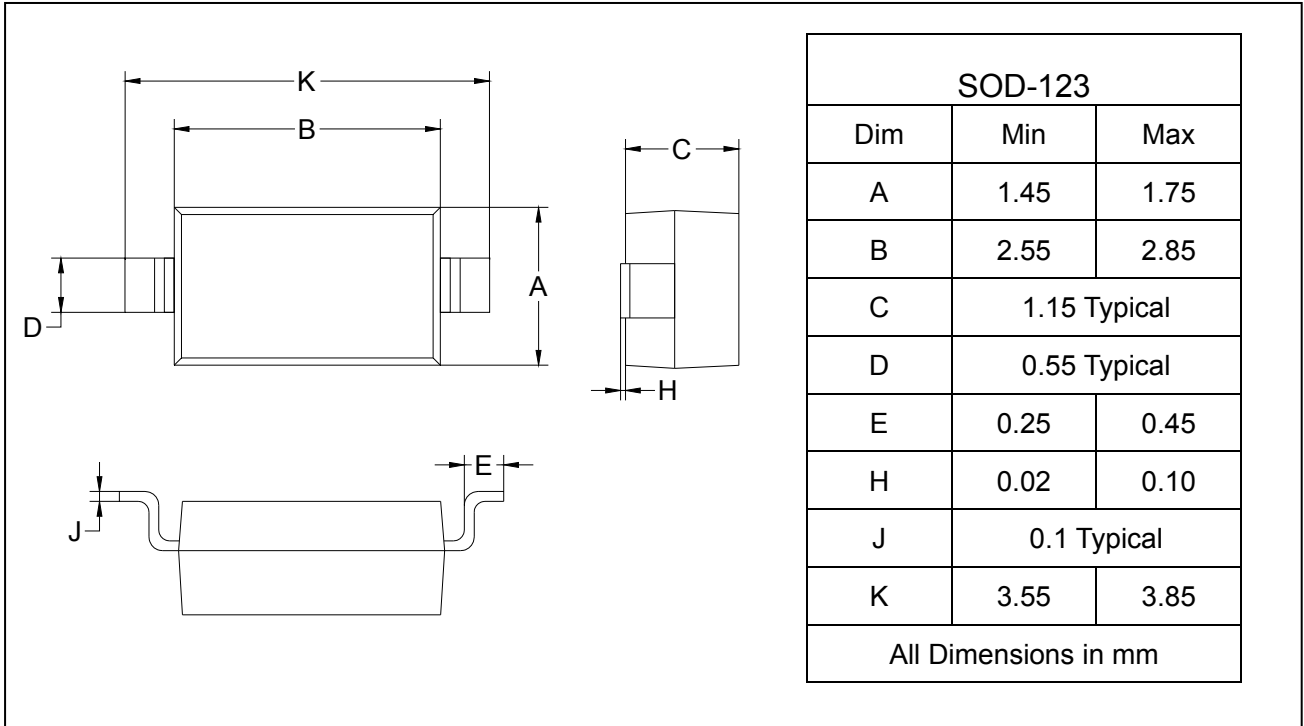
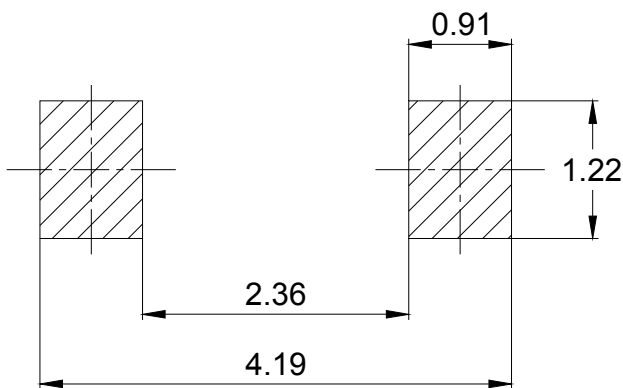


Figure 6. Zener Voltage versus Zener Current (12 V to 91 V)

Surface mount zener diode
MMSZ46XX-47XX Series
PACKAGE OUTLINE

Plastic surface mounted package

SOD-123


SOLDERING FOOTPRINT


Unit: mm

PACKAGE INFORMATION

Device	Package	Shipping
MMSZ46XX/47XX	SOD-123	3000/Tape&Reel