

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Large Selection of Zener Voltages: 1.8V~43V
- Tight Voltage Tolerance: $\pm 5\%$
- MSL Class 1 Compatible
- Ultra-Low Profile Package Well Suited for Automated Assembly

APPLICATIONS

- General Voltage Regulation
- Mobile & Handheld Systems

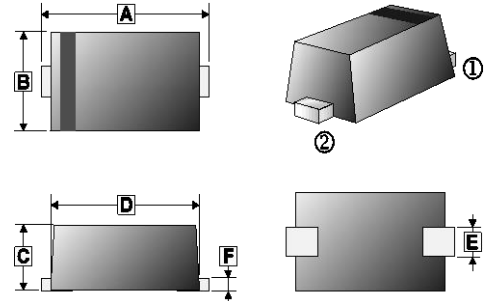
PACKAGE INFORMATION

Package	MPQ	Leader Size
SOD-523	3K	7 inch

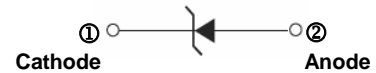
ORDER INFORMATION

Part Number	Type
MM5Z46xx-C	Lead (Pb)-free and Halogen-free

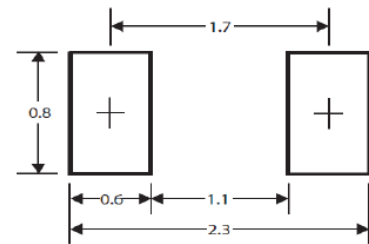
SOD-523



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.50	1.70	D	1.10	1.30
B	0.70	0.90	E	0.25	0.40
C	0.50	0.77	F	-	0.20



Mounting Pad Layout



*Dimensions in millimeters

ABSOLUTE MAXIMUM RATINGS (T_A=25°C unless otherwise specified)

Parameter	Symbol	Rating	Unit
Forward Voltage @ I _F =10mA	V _F	0.9	V
Power Dissipation	P _D	150	mW
Thermal Resistance Junction-Ambient	R _{θJA}	834	°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-55 ~ 150	°C

ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise specified)

Type Number	Marking	Zener Voltage Range				Maximum Reverse Leakage Current	
		$V_Z @ I_{ZT}$			I_{ZT}	$I_R @ V_R$	
		Min. (V)	Nom. (V)	Max. (V)	μA	μA	V
MM5Z4678-C	CC	1.71	1.8	1.89	50	7.5	1
MM5Z4679-C	CD	1.9	2	2.1	50	5	1
MM5Z4680-C	CE	2.09	2.2	2.31	50	4	1
MM5Z4681-C	CF	2.28	2.4	2.52	50	2	1
MM5Z4682-C	CH	2.57	2.7	2.84	50	1	1
MM5Z4683-C	CJ	2.85	3	3.15	50	0.8	1
MM5Z4684-C	CK	3.14	3.3	3.47	50	7.5	1.5
MM5Z4685-C	CM	3.42	3.6	3.78	50	7.5	2
MM5Z4686-C	CN	3.71	3.9	4.1	50	5	2
MM5Z4687-C	CP	4.09	4.3	4.52	50	4	2
MM5Z4688-C	CT	4.47	4.7	4.94	50	10	3
MM5Z4689-C	CU	4.85	5.1	5.36	50	10	3
MM5Z4690-C	CV	5.32	5.6	5.88	50	10	4
MM5Z4691-C	CA	5.89	6.2	6.51	50	10	5
MM5Z4692-C	CX	6.46	6.8	7.14	50	10	5.1
MM5Z4693-C	CY	7.13	7.5	7.88	50	10	5.7
MM5Z4694-C	CZ	7.79	8.2	8.61	50	1	6.2
MM5Z4695-C	DC	8.27	8.7	9.14	50	1	6.6
MM5Z4696-C	DD	8.65	9.1	9.56	50	1	6.9
MM5Z4697-C	DE	9.5	10	10.5	50	1	7.6
MM5Z4698-C	DF	10.45	11	11.55	50	0.05	8.4
MM5Z4699-C	DH	11.4	12	12.6	50	0.05	9.1
MM5Z4700-C	DJ	12.35	13	13.65	50	0.05	9.8
MM5Z4701-C	DK	13.3	14	14.7	50	0.05	10.6
MM5Z4702-C	DM	14.25	15	15.75	50	0.05	11.4
MM5Z4703-C	DN	15.2	16	16.8	50	0.05	12.1
MM5Z4704-C	DP	16.15	17	17.85	50	0.05	12.9
MM5Z4705-C	DT	17.1	18	18.9	50	0.05	13.6
MM5Z4706-C	DU	18.05	19	19.95	50	0.05	14.4
MM5Z4707-C	DV	19	20	21	50	0.01	15.2
MM5Z4708-C	DA	20.9	22	23.1	50	0.01	16.7
MM5Z4709-C	DX	22.8	24	25.2	50	0.01	18.2
MM5Z4710-C	DY	23.75	25	26.25	50	0.01	19
MM5Z4711-C	EA	25.65	27	28.35	50	0.01	20.4
MM5Z4712-C	EC	26.6	28	29.4	50	0.01	21.2
MM5Z4713-C	ED	28.5	30	31.5	50	0.01	22.8
MM5Z4714-C	EE	31.35	33	34.65	50	0.01	25
MM5Z4715-C	EF	34.2	36	37.8	50	0.01	27.3
MM5Z4716-C	EH	37.05	39	40.95	50	0.01	29.6
MM5Z4717-C	EJ	40.85	43	45.15	50	0.01	32.6

TYPICAL CHARACTERISTICS CURVE

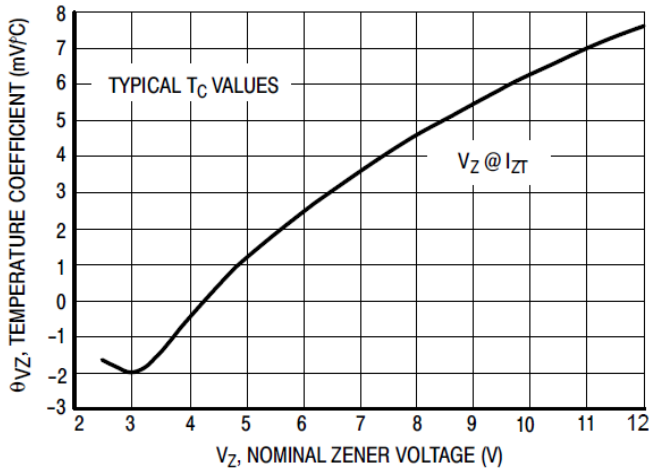


Figure 1. Temperature Coefficients
(Temperature Range -55°C to +150°C)

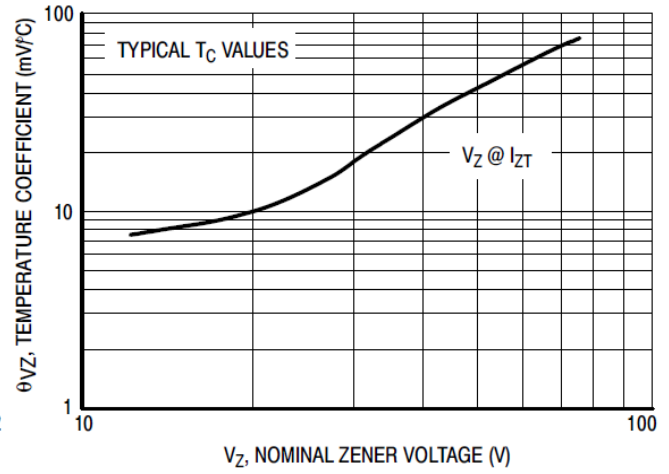


Figure 2. Temperature Coefficients
(Temperature Range -55°C to +150°C)

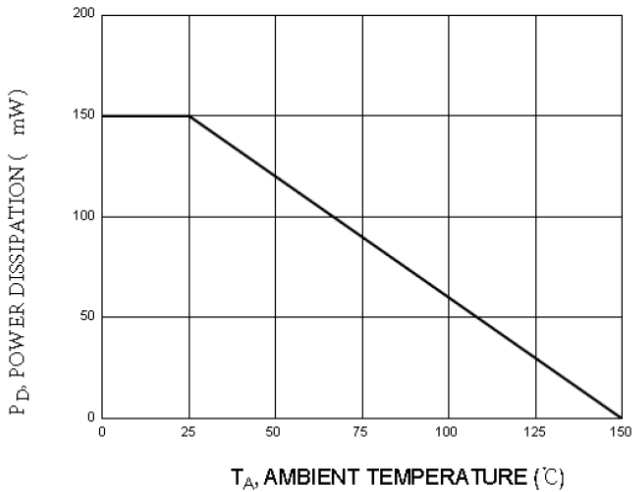


Figure 3 Steady State Power Derating

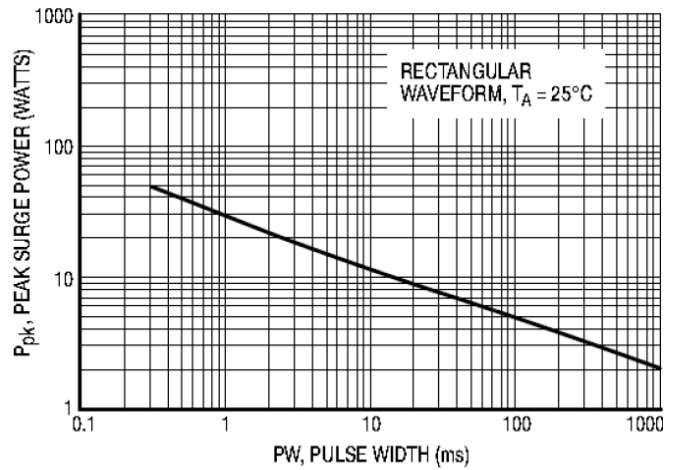


Figure 4 Maximum Nonrepetitive Surge Power

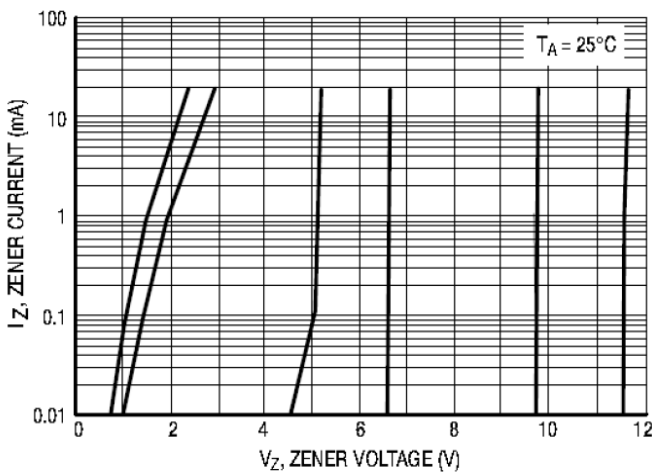


Figure 5 Zener Voltage versus Zener Current
(Vz Up to 12 V)

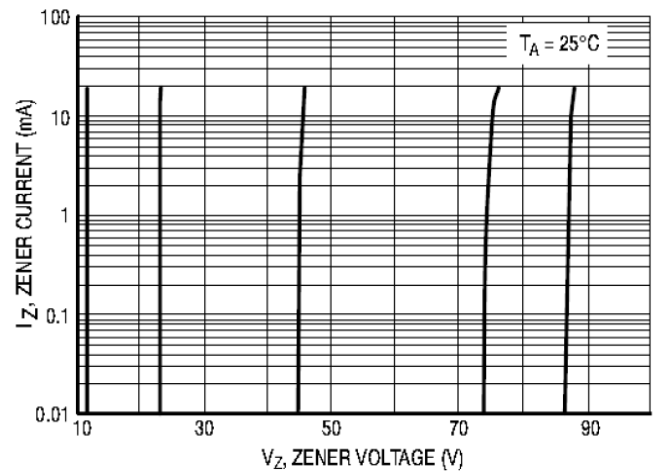


Figure 6 Zener Voltage versus Zener Current
(12 V to 91 V)