

MMSZ2V4 - MMSZ75V

500mW Surface Mount Zener Voltage Regulator



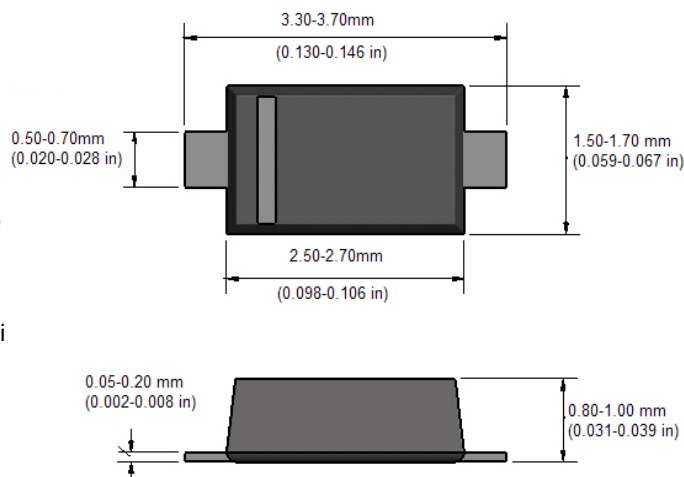
RoHS
COMPLIANCE



SOD-123 Flat lead

Features

- Wide Zener Voltage Range Selection 2.4V to 75V
- VZ Tolerance Selection of $\pm 2\%$ (X series)
- Flat Lead SOD-123 Small Outline Plastic Package
- Surface Device Type Mounting
- Moisture Sensitivity Level 1
- Clip Bonding Construction, Good Thermal Capability
- RoHS Compliant & Matte Tin(Sn) Lead Finish
- Green compound with suffix "G" on packing code & prefix "G" on datecode.



Mechanical Data

- Cases: Molded plastic
- Epoxy: UL 94V-O rate flame retardant
- Lead: Pure tin plated, lead free, solderable per MIL-STD-202, Method 208 guaranteed
- Polarity: Color band denotes cathode.
- High temperature soldering guaranteed: 260°C/10 seconds / 0.375", (9.5mm) lead lengths at 5 lbs., (2.3kg) tension
- Weight: 0.012 gram

Dimensions in inches and (millimeters)



ELECTRICAL SYMBOL

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Type Number	Symbol	Value	Units
Power Dissipation	P_D	500	mW
Operating Temperature Range	T_{OPR}	-65 to +150	°C
Storage Temperature Range	T_{STG}	-65 to +150	°C

Notes: These ratings are limiting values above which the serviceability of the diode may be impaired

Electrical characteristics (TA=25oC unless otherwise note)

Device Typing	Device Marking	V _Z @ I _{ZT}			I _{ZT} (mA)	Z _{ZT} @ I _{ZT}	I _{ZK}	Z _{ZK} @ I _{ZK}	I _R @ V _R	V _R
		(Volts)				(Ω)		(Ω)	(μA)	
		Min	Nom	Max		Max		(mA)	Max	
MMSZ2V4	2V4Z	2.28	2.4	2.52	5	100	1	564	45	1
MMSZ2V7	2V7Z	2.57	2.7	2.84	5	100	1	564	18	1
MMSZ3V0	3V0Z	2.85	3	3.15	5	100	1	564	9	1
MMSZ3V3	3V3Z	3.14	3.3	3.47	5	95	1	564	4.5	1
MMSZ3V6	3V6Z	3.42	3.6	3.78	5	90	1	564	4.5	1
MMSZ3V9	3V9Z	3.71	3.9	4.10	5	90	1	564	2.7	1
MMSZ4V3	4V3Z	4.09	4.3	4.52	5	90	1	564	2.7	1
MMSZ4V7	4V7Z	4.47	4.7	4.94	5	80	1	470	2.7	2
MMSZ5V1	5V1Z	4.85	5.1	5.36	5	60	1	451	1.8	2
MMSZ5V6	5V6Z	5.32	5.6	5.88	5	40	1	376	0.9	2
MMSZ6V2	6V2Z	5.89	6.2	6.51	5	10	1	141	2.7	4
MMSZ6V8	6V8Z	6.46	6.8	7.14	5	15	1	75	1.8	4
MMSZ7V5	7V5Z	7.13	7.5	7.88	5	15	1	75	0.9	5
MMSZ8V2	8V2Z	7.79	8.2	8.61	5	15	1	75	0.63	5
MMSZ9V1	9V1Z	8.65	9.1	9.56	5	15	1	94	0.45	6
MMSZ10V	10VZ	9.50	10	10.50	5	20	1	141	0.18	7
MMSZ11V	11VZ	10.45	11	11.55	5	20	1	141	0.09	8
MMSZ12V	12VZ	11.40	12	12.60	5	25	1	141	0.09	8
MMSZ13V	13VZ	12.35	13	13.65	5	30	1	160	0.09	8
MMSZ15V	15VZ	14.25	15	15.75	5	30	1	188	0.045	10.5
MMSZ16V	16VZ	15.20	16	16.80	5	40	1	188	0.045	11.2
MMSZ18V	18VZ	17.10	18	18.90	5	45	1	212	0.045	12.6
MMSZ20V	20VZ	19.00	20	21.00	5	55	1	212	0.045	14
MMSZ22V	22VZ	20.90	22	23.10	5	55	1	235	0.045	15.4
MMSZ24V	24VZ	22.80	24	25.20	5	70	1	235	0.045	16.8
MMSZ27V	27VZ	25.65	27	28.35	5	80	0.5	282	0.045	18.9
MMSZ30V	30VZ	28.50	30	31.50	5	80	0.5	282	0.045	21
MMSZ33V	33VZ	31.35	33	34.65	5	80	0.5	306	0.045	23
MMSZ36V	36VZ	34.20	36	37.80	5	90	0.5	329	0.045	25.2
MMSZ39V	39VZ	37.05	39	40.95	5	130	0.5	329	0.045	27.3
MMSZ43V	43VZ	40.85	43	45.15	5	150	0.5	353	0.045	30.1
MMSZ47V	47VZ	44.65	47	49.35	5	170	0.5	353	0.045	33
MMSZ51V	51VZ	48.45	51	53.55	5	180	0.5	376	0.045	35.7
MMSZ56V	56VZ	53.20	56	58.80	5	200	0.5	400	0.045	39.2
MMSZ62V	62VZ	58.90	62	65.10	5	215	0.5	423	0.045	43.4
MMSZ68V	68VZ	64.60	68	71.40	5	240	0.5	447	0.045	47.6
MMSZ75V	75VZ	71.25	75	78.75	5	255	0.5	470	0.045	52.5