



# MMSZ4687-V-AU ~ MSZ4717-V-AU

## SURFACE MOUNT SILICON ZENER DIODES

**VOLTAGE** 4.3 ~ 43Volt **POWER** 500 mWatt

**SOD-123**

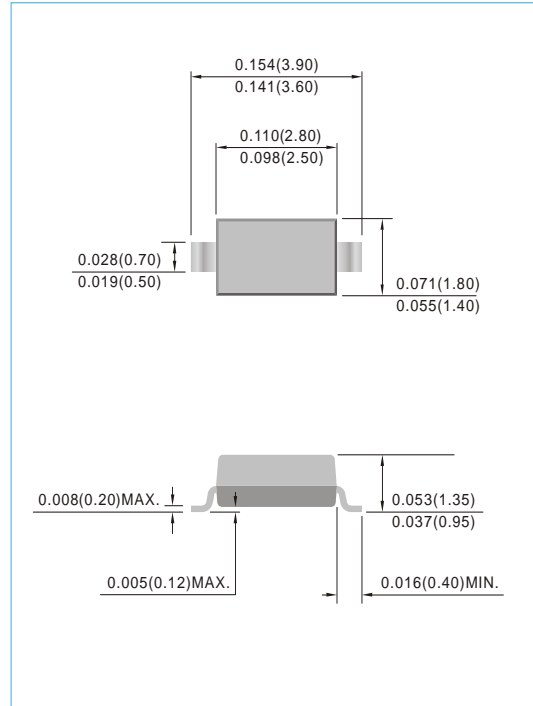
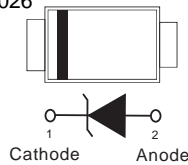
Unit : inch(mm)

### FEATURES

- Planar Die construction
- 500mW Power Dissipation
- Ideally Suited for Automated Assembly Processes
- Acquire quality system certificate : TS16949
- AEC-Q101 qualified
- Lead free in compliance with EU RoHS2.0 (2011/65/EU & 2015/865/EU directive)
- Green molding compound as per IEC61249 Std. . (Halogen Free)

### MECHANICAL DATA

- Case: SOD-123, Molded Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0003 ounce, 0.0103 gram



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Value	Units
Maximum Power Dissipation (NOTES 1) at $T_C=65^\circ\text{C}$	$P_D$	500	mW
Typical Thermal Resistance (NOTES 2) (NOTES 1)	$R_{\theta JA}$ $R_{\theta JC}$	540 170	$^\circ\text{C/W}$
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150	$^\circ\text{C}$

#### NOTES:

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

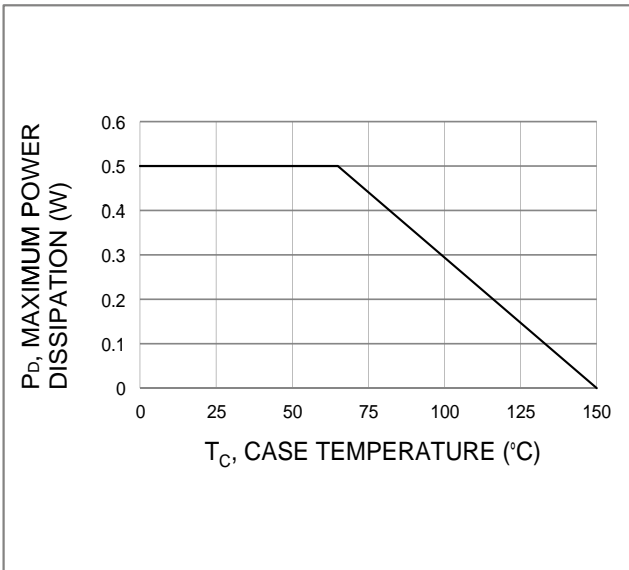


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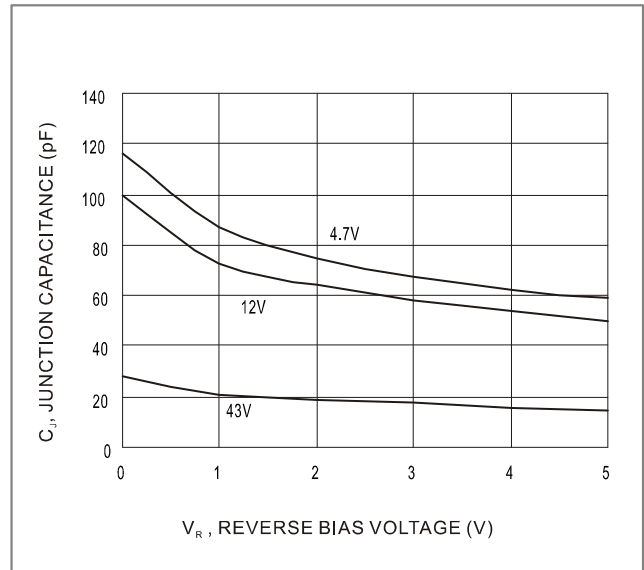
Part Number	Nominal Zener Voltage				Max Reverse Leakage Current		Marking Code
	V <sub>Z</sub> @ I <sub>ZT</sub>				I <sub>R</sub> @ V <sub>R</sub>		
	Nom. V	Min. V	Max. V	mA	μA	V	
MMSZ4687-V-AU	4.3	4.09	4.52	0.05	4	2	CP
MMSZ4688-V-AU	4.7	4.47	4.94	0.05	10	3	CT
MMSZ4689-V-AU	5.1	4.85	5.36	0.05	10	3	CU
MMSZ46895-V-AU	5.3	5.03	5.57	0.05	10	4	CC
MMSZ4690-V-AU	5.6	5.32	5.88	0.05	10	4	CV
MMSZ4691-V-AU	6.2	5.89	6.51	0.05	10	5	CA
MMSZ4692-V-AU	6.8	6.46	7.14	0.05	10	5.1	CX
MMSZ4694-V-AU	8.2	7.79	8.61	0.05	1	6.2	CZ
MMSZ4696-V-AU	9.1	8.65	9.56	0.05	1	6.9	DD
MMSZ4697-V-AU	10	9.5	10.5	0.05	1	7.6	DE
MMSZ4699-V-AU	12	11.40	12.60	0.05	0.05	9.1	DH
MMSZ4700-V-AU	13	12.40	13.70	0.05	0.05	9.8	DJ
MMSZ4701-V-AU	14	13.30	14.70	0.05	0.05	10.6	DK
MMSZ4702-V-AU	15	14.30	15.80	0.05	0.05	11.4	DM
MMSZ4703-V-AU	16	15.20	16.80	0.05	0.05	12.1	DN
MMSZ4704-V-AU	17	16.20	17.90	0.05	0.05	12.9	DP
MMSZ4705-V-AU	18	17.10	18.90	0.05	0.05	13.6	DT
MMSZ4707-V-AU	20	19.00	21.00	0.05	0.01	15.2	DV
MMSZ4708-V-AU	22	20.90	23.10	0.05	0.01	16.7	DA
MMSZ4709-V-AU	24	22.80	25.20	0.05	0.01	18.2	DZ
MMSZ4710-V-AU	25	23.80	26.30	0.05	0.01	19	DY
MMSZ4711-V-AU	27	25.70	28.40	0.05	0.01	20.4	EA
MMSZ4712-V-AU	28	26.60	29.40	0.05	0.01	21.2	EC
MMSZ4713-V-AU	30	28.50	31.50	0.05	0.01	22.8	ED
MMSZ4714-V-AU	33	31.40	34.70	0.05	0.01	25	EE
MMSZ4715-V-AU	36	34.20	37.80	0.05	0.01	27.3	EF
MMSZ4717-V-AU	43	40.90	45.20	0.05	0.01	32.6	EJ



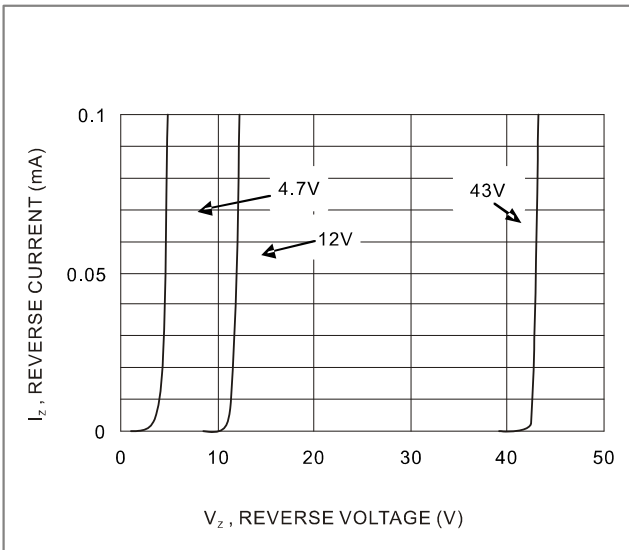
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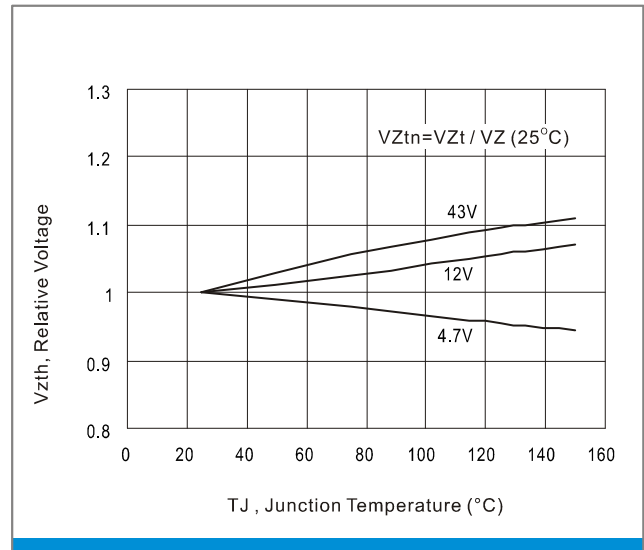
**Fig.1 DERATING CURVE**



**Fig.2 TYPICAL JUNCTION CAPACITANCE**



**Fig.3 TYPICAL REVERSE CHARACTERISTICS**

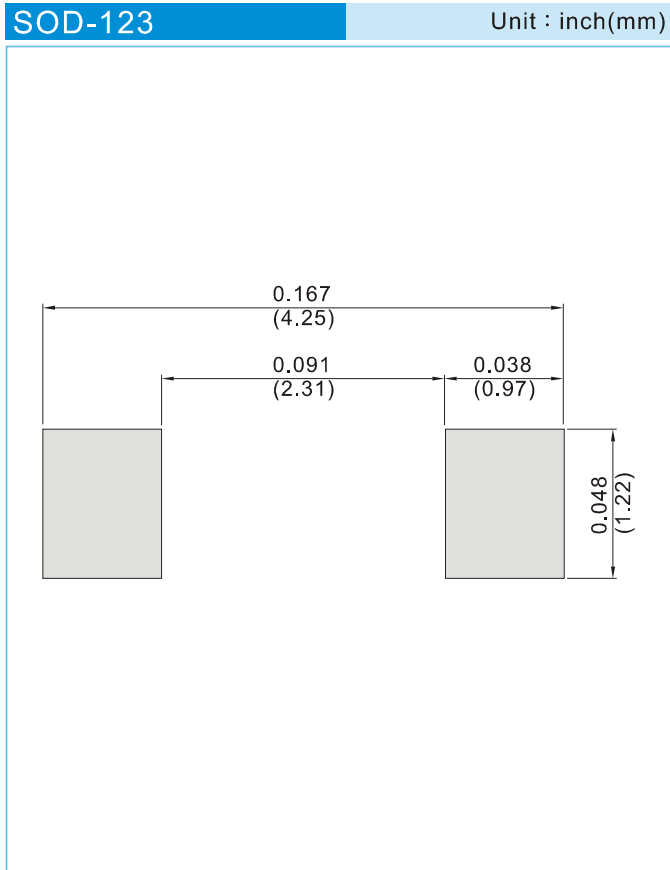


**Fig.4 JUNCTION TEMPERATURE OF WORKING VOLTAGE VS. JUNCTION TEMPERATURE**



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### MOUNTING PAD LAYOUT



### ORDER INFORMATION

- Packing information  
T/R - 10K per 13" plastic Reel  
T/R - 3K per 7" plastic Reel



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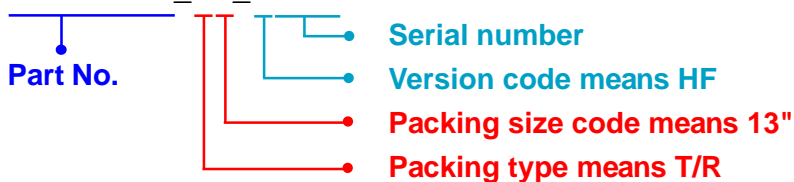
### Part No\_packing code\_Version

MMSZ4687-V-AU\_R1\_000A1

MMSZ4687-V-AU\_R2\_000A1

For example :

**RB500V-40\_R2\_00001**



Packing Code <b>XX</b>				Version Code <b>XXXXX</b>		
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			



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