



MMSZ4687-V SERIES

SURFACE MOUNT SILICON ZENER DIODES

VOLTAGE 4.3 to 43 Volts

POWER 500 mWatts

SOD-123

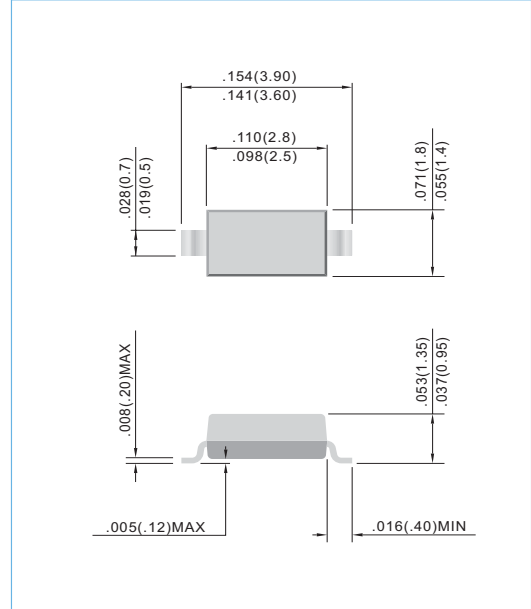
Unit: inch (mm)

FEATURES

- Planar Die construction
- 500mW Power Dissipation
- Ideally Suited for Automated Assembly Processes
- In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

- Case: SOD-123, Molded Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: See Diagram Below
- Approx. Weight: 0.01grams
- Mounting Position: Any



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Value	Units
Maximum Power Dissipation @ $T_A=25^{\circ}\text{C}$ (Notes A)	P_D	500	mW
Operating Junction and Storage Temperature Range	T_J	-50 to +150	$^{\circ}\text{C}$

NOTES:

A. Mounted on 5.0mm² (.013mm thick) land areas.

B. Measured on 8.3ms, single half sine-wave or equivalent square wave, duty cycle = 4 pulses per minute maximum.



MMSZ4687-V SERIES

Part Number	Nominal Zener Voltage			Max. Zener Impedance				Max Reverse Leakage Current		Marking Code
	V _Z @ I _{ZT}			Z _{ZT} @I _{ZT}		Z _{ZK} @I _{ZK}		I _R @ V _R		
	Nom. V	Min. V	Max. V	Ω	mA	Ω	mA	μA	V	
MMSZ4687-V	4.3	4.09	4.52	-	0.05	-	-	4	2	CP
MMSZ4688-V	4.7	4.47	4.94	-	0.05	-	-	10	3	CT
MMSZ4689-V	5.1	4.85	5.36	-	0.05	-	-	10	3	CU
MMSZ4690-V	5.6	5.32	5.88	-	0.05	-	-	10	4	CV
MMSZ4691-V	6.2	5.89	6.51	-	0.05	-	-	10	5	CA
MMSZ4692-V	6.8	6.46	7.14	-	0.05	-	-	10	5.1	CX
MMSZ4693-V	7.5	7.13	7.88	-	0.05	-	-	10	5.7	CY
MMSZ4694-V	8.2	7.79	8.61	-	0.05	-	-	1	6.2	CZ
MMSZ4695-V	8.7	8.27	9.14	-	0.05	-	-	1	6.6	DC
MMSZ4696-V	9.1	8.65	9.56	-	0.05	-	-	1	6.9	DD
MMSZ4697-V	10	9.50	10.50	-	0.05	-	-	1	7.6	DE
MMSZ4698-V	11	10.50	11.60	-	0.05	-	-	0.05	8.4	DF
MMSZ4699-V	12	11.40	12.60	-	0.05	-	-	0.05	9.1	DH
MMSZ4700-V	13	12.40	13.70	-	0.05	-	-	0.05	9.8	DJ
MMSZ4701-V	14	13.30	14.70	-	0.05	-	-	0.05	10.6	DK
MMSZ4702-V	15	14.30	15.80	-	0.05	-	-	0.05	11.4	DM
MMSZ4703-V	16	15.20	16.80	-	0.05	-	-	0.05	12.1	DN
MMSZ4704-V	17	16.20	17.90	-	0.05	-	-	0.05	12.9	DP
MMSZ4705-V	18	17.10	18.90	-	0.05	-	-	0.05	13.6	DT
MMSZ4706-V	19	18.10	20.00	-	0.05	-	-	0.05	14.4	DU
MMSZ4707-V	20	19.00	21.00	-	0.05	-	-	0.01	15.2	DV
MMSZ4708-V	22	20.90	23.10	-	0.05	-	-	0.01	16.7	DA
MMSZ4709-V	24	22.80	25.20	-	0.05	-	-	0.01	18.2	DZ
MMSZ4710-V	25	23.80	26.30	-	0.05	-	-	0.01	19	DY
MMSZ4711-V	27	25.70	28.40	-	0.05	-	-	0.01	20.4	EA
MMSZ4712-V	28	26.60	29.40	-	0.05	-	-	0.01	21.2	EC
MMSZ4713-V	30	28.50	31.50	-	0.05	-	-	0.01	22.8	ED
MMSZ4714-V	33	31.40	34.70	-	0.05	-	-	0.01	25	EE
MMSZ4715-V	36	34.20	37.80	-	0.05	-	-	0.01	27.3	EF
MMSZ4716-V	39	37.10	41.00	-	0.05	-	-	0.01	29.6	EH
MMSZ4717-V	43	40.90	45.20	-	0.05	-	-	0.01	32.6	EJ



MMSZ4687-V SERIES

Typical Characteristics

$T_{amb} = 25^\circ\text{C}$ unless otherwise specified

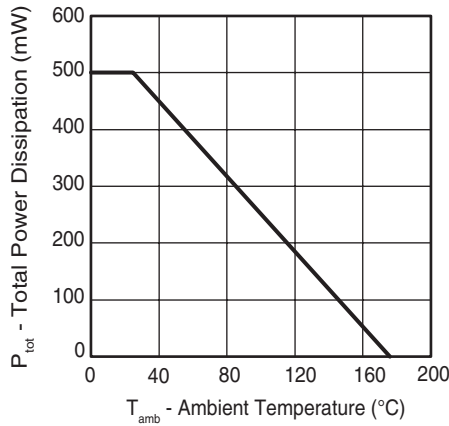


Figure 1. Total Power Dissipation vs. Ambient Temperature

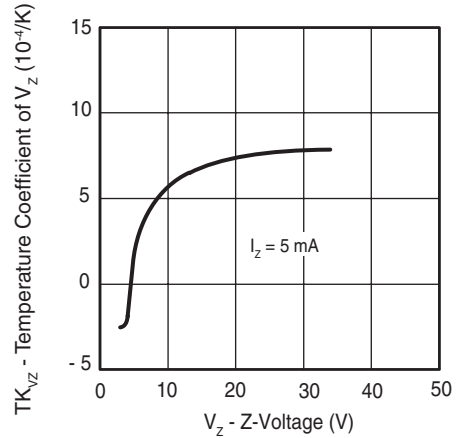


Figure 4. Temperature Coefficient of Vz vs. Z-Voltage

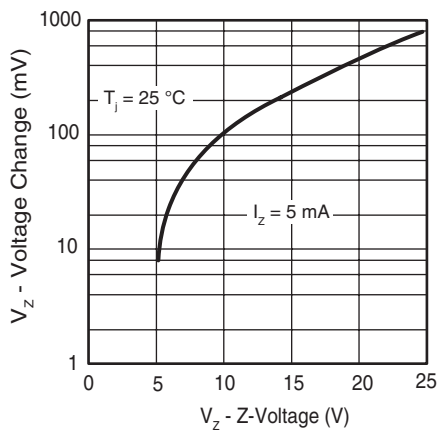


Figure 2. Typical Change of Working Voltage under Operating Conditions at $T_{amb}=25^\circ\text{C}$

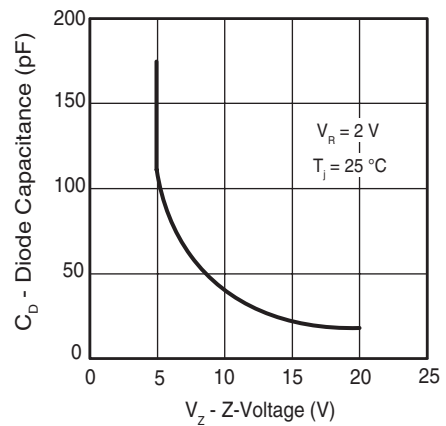


Figure 5. Diode Capacitance vs. Z-Voltage

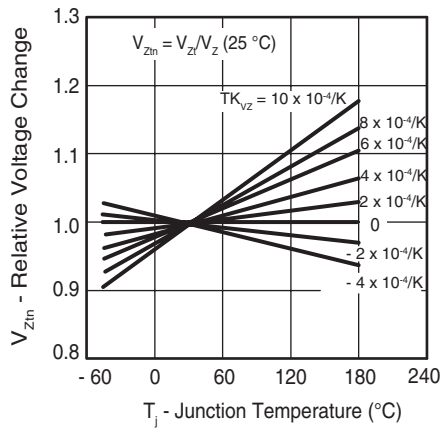


Figure 3. Typical Change of Working Voltage vs. Junction Temperature

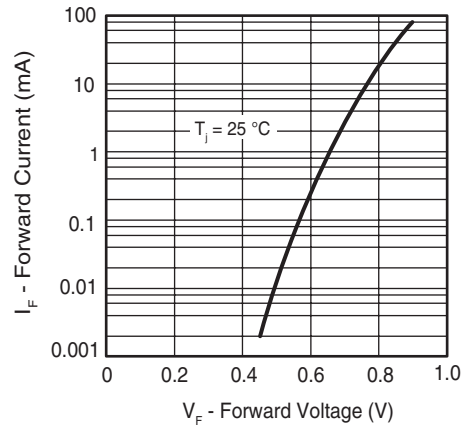


Figure 6. Forward Current vs. Forward Voltage



MMSZ4687-V SERIES

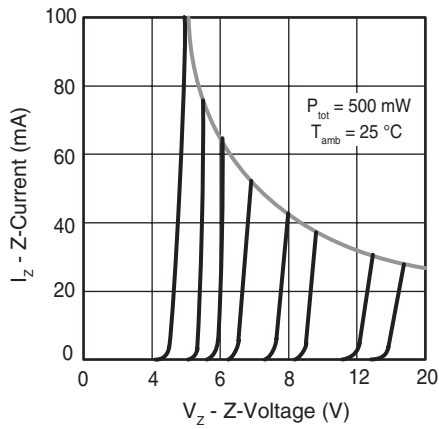


Figure 7. Z-Current vs. Z-Voltage

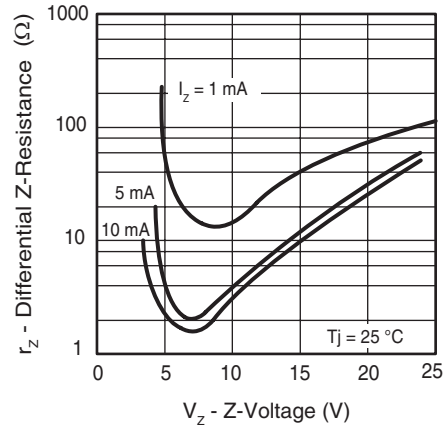


Figure 9. Differential Z-Resistance vs. Z-Voltage

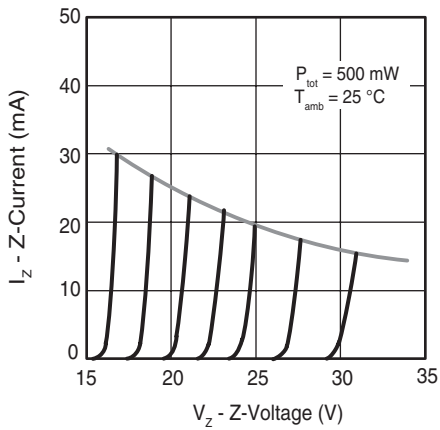


Figure 8. Z-Current vs. Z-Voltage

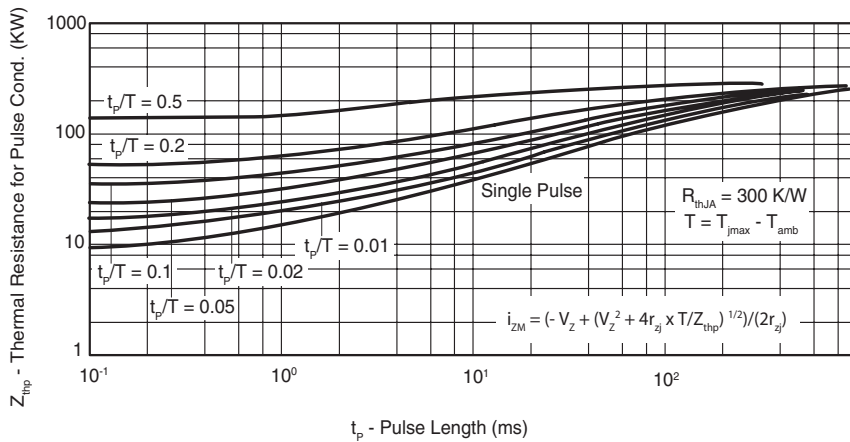


Figure 10. Thermal Response

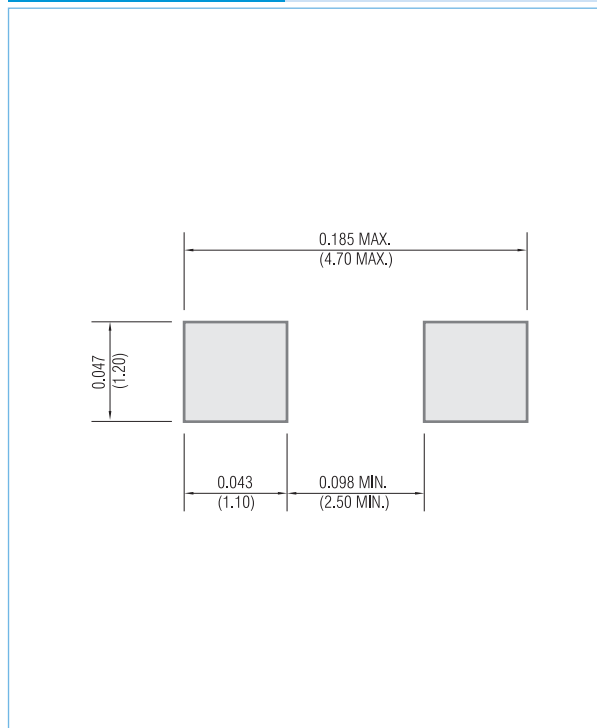


MMSZ4687-V SERIES

MOUNTING PAD LAYOUT

SOD-123

Unit: inch (mm)



ORDER INFORMATION

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

LEGAL STATEMENT

Copyright PanJit International, Inc 2007

The information presented in this document is believed to be accurate and reliable. The specifications and information herein are subject to change without notice. Pan Jit makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose. Pan Jit products are not authorized for use in life support devices or systems. Pan Jit does not convey any license under its patent rights or rights of others.