MMSZ4687-V SERIES

SURFACE MOUNT SILICON ZENER DIODES

VOLTAGE 4.3 to 43 Volts **POWER** 500 mWatts

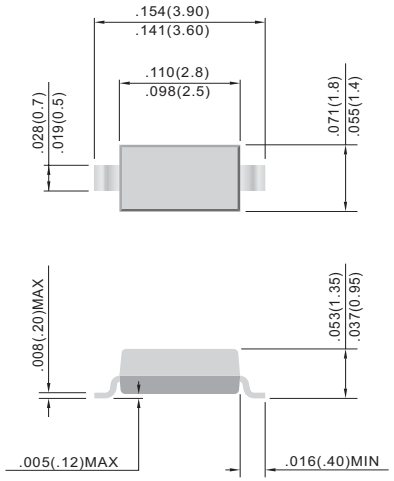
FEATURES

- 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

SOD-123 Unit: inch (mm)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Value	Units
Maximum Power Dissipation @T_A=25°C (Notes A)	P_D	500	mW
Operating Junction and StorageTemperature Range	T_J	-50 to +150	°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.

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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 °C unless otherwise specified

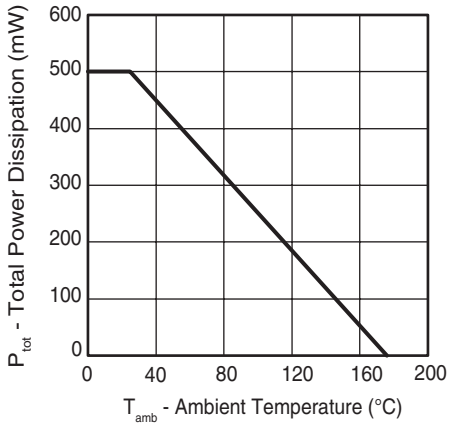

Figure 1. Total Power Dissipation vs. Ambient Temperature

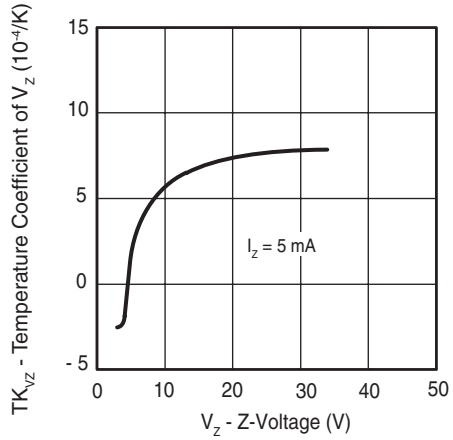

Figure 4. Temperature Coefficient of Vz vs. Z-Voltage

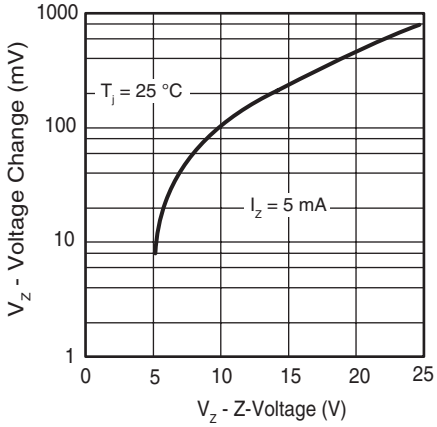

Figure 2. Typical Change of Working Voltage under Operating Conditions at T_{amb}=25°C

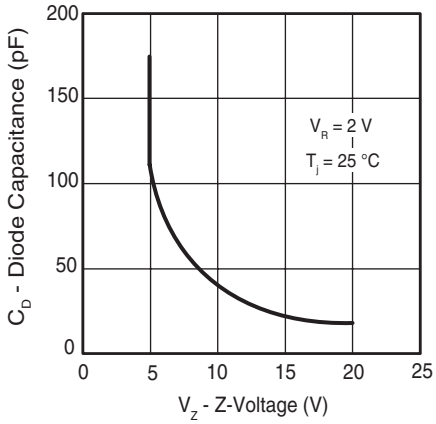

Figure 5. Diode Capacitance vs. Z-Voltage

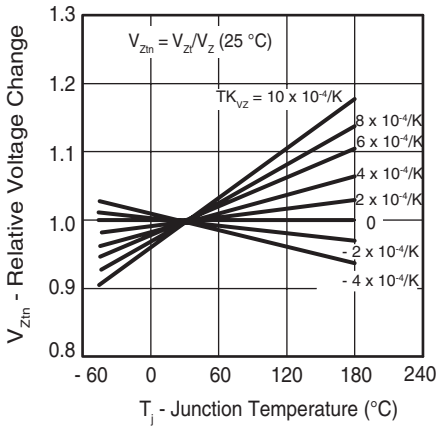

Figure 3. Typical Change of Working Voltage vs. Junction Temperature

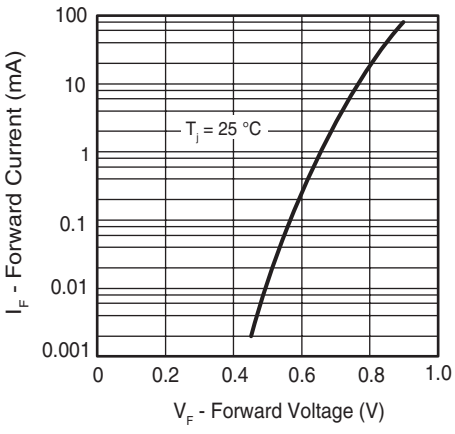

Figure 6. Forward Current vs. Forward Voltage

MMSZ4687-V SERIES

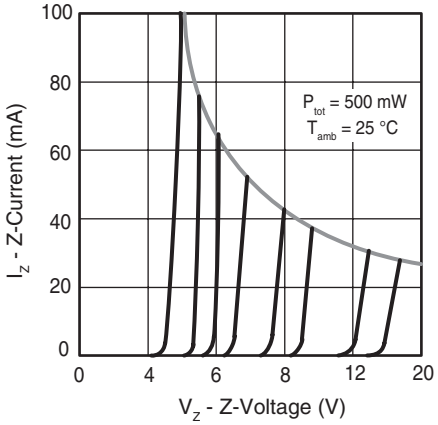

Figure 7. Z-Current vs. Z-Voltage

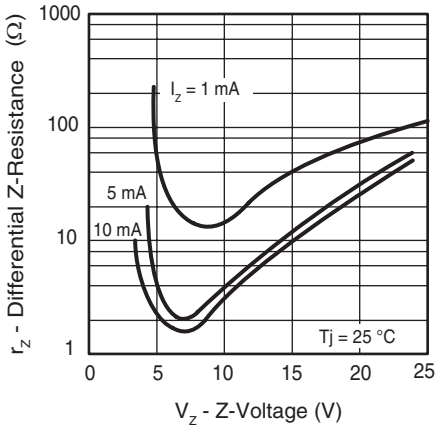

Figure 9. Differential Z-Resistance vs. Z-Voltage

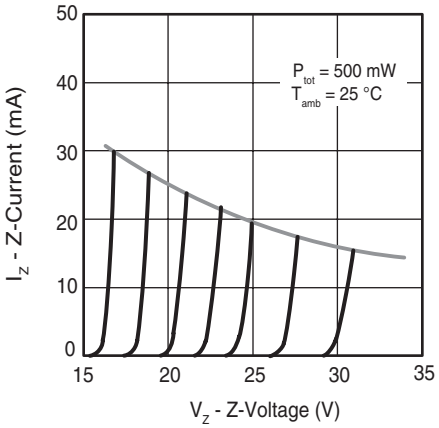

Figure 8. Z-Current vs. Z-Voltage

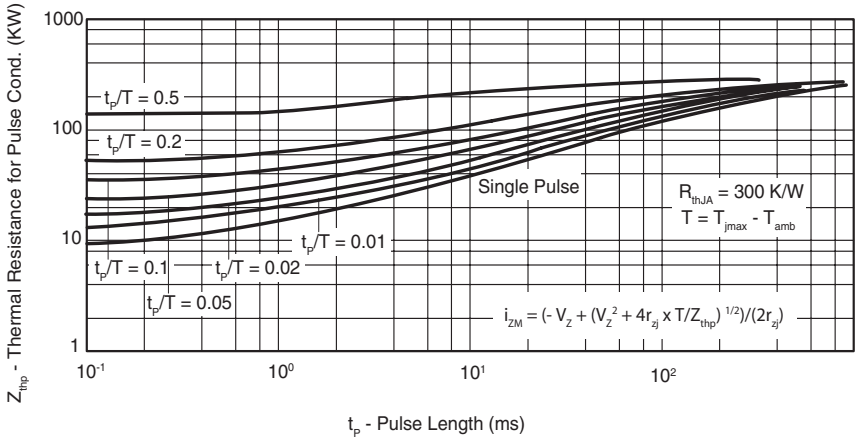

Figure 10. Thermal Response

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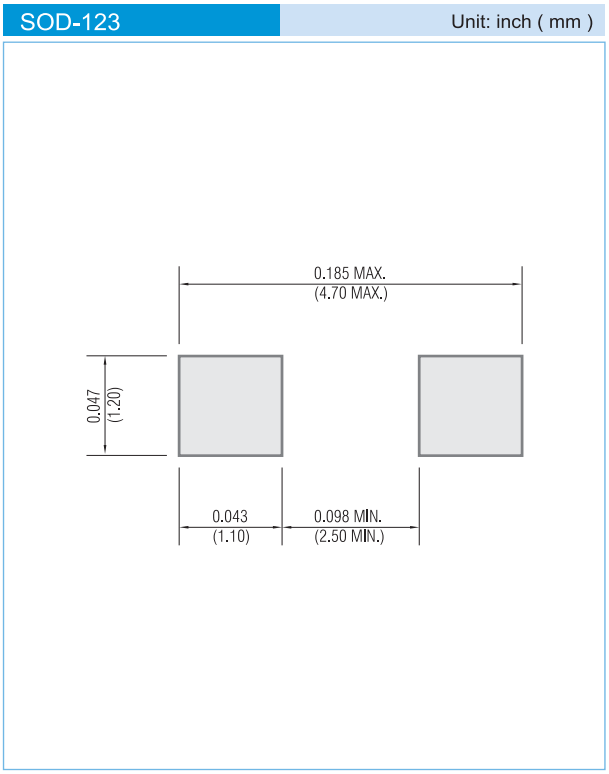
MOUNTING PAD LAYOUT

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

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