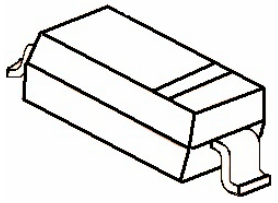
SOD-123 贴片塑封稳压二极管

SOD-123

SOD-123 Plastic-Encapsulate Zener Diode



特征 Features

- 齐纳击穿阻抗低; Low Zener Impedance
- 最大功率耗散 500mW; Power Dissipation of 500mW
- 高稳定性和可靠性。High Stability and High Reliability

机械数据 Mechanical Data

- 封装: SOD-123 封装 SOD-123 Small Outline Plastic Package
- 极性: 色环端为负极 Polarity: Color band denotes cathode end
- 环氧树脂 UL 易燃等级 Epoxy UL: 94V-0
- 安装位置: 任意 Mounting Position: Any

极限值和温度特性(TA = 25℃ 除非另有规定)

Maximum Ratings & Thermal Characteristics (Ratings at 25℃ ambient temperature unless otherwise specified.)

参数 Parameters	符号 Symbol	数值 Value	单位 Unit
功率消耗 Power Dissipation	Pd	500 1)	mW
正向压降 Forward Voltage @IF=10mA	Vf	0.9 2)	V
热阻 Thermal Resistance, Junction-to-Ambient	$R_{\theta JA}$	340 3)	℃/W
热阻 Thermal Resistance, Junction-to-Lead	$R_{\theta JL}$	150 3)	℃/W
存储温度 Storage temperature range	Ts	-65-+150	℃

1) Device mounted on ceramic PCB: 7.6mm x 9.4mm x 0.87mm with pad areas 25mm²
2) Short duration test pulse used to minimize self-heating effect
3) Thermal Resistance measurement obtained via infrared Scan Method.
4) f=1KHz

电特性 (TA = 25℃ 除非另有规定)

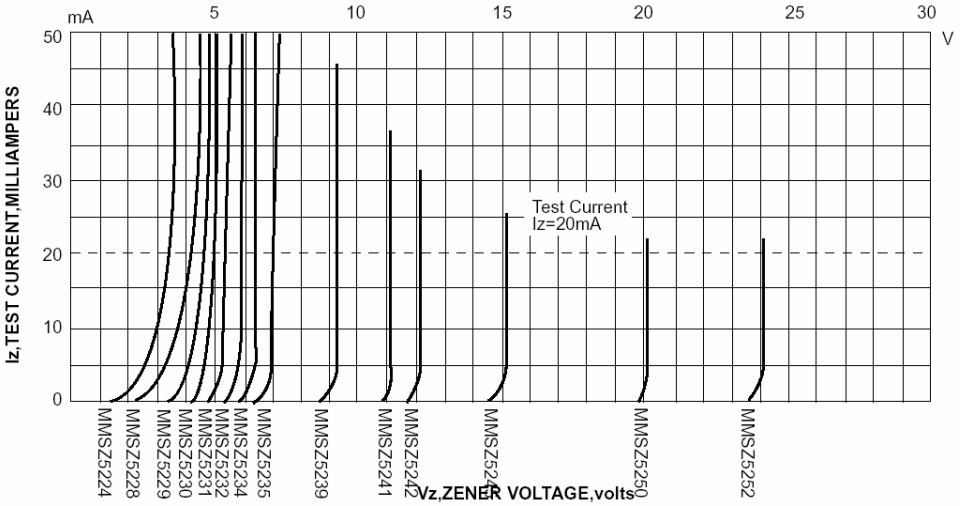
Electrical Characteristics (Ratings at 25℃ ambient temperature unless otherwise specified).

型号	印字 (代码)	Vz1(@Izt)			Zzt@Izt	Zzk		IR	
		Min	Max	Izt	Max	Max	Izk	Max	VR
		(V)	(V)	mA	Ω	Ω	mA	uA	V
MMSZ5221B	**C1**	2.28	2.52	**20**	**30**	**1200**	**0.25**	**100**	**1.0**
MMSZ5222B	**C2**	2.38	2.63	**20**	**30**	**1250**	**0.25**	**100**	**1.0**
MMSZ5223B	**C3**	2.57	2.84	**20**	**30**	**1300**	**0.25**	**75**	**1.0**
MMSZ5224B	**C4**	2.66	2.94	**20**	**30**	**1400**	**0.25**	**75**	**1.0**
MMSZ5225B	**C5**	2.85	3.15	**20**	**30**	**1600**	**0.25**	**50**	**1.0**
MMSZ5226B	**G1**	3.14	3.47	**20**	**28**	**1600**	**0.25**	**25**	**1.0**
MMSZ5227B	**G2**	3.42	3.78	**20**	**24**	**1700**	**0.25**	**15**	**1.0**
MMSZ5228B	**G3**	3.71	4.10	**20**	**23**	**1900**	**0.25**	**10**	**1.0**
MMSZ5229B	**G4**	4.09	4.52	**20**	**22**	**2000**	**0.25**	**5.0**	**1.0**
MMSZ5230B	**G5**	4.47	4.94	**20**	**19**	**1900**	**0.25**	**5.0**	**2.0**
MMSZ5231B	**E1**	4.85	5.36	**20**	**17**	**1600**	**0.25**	**5.0**	**2.0**
MMSZ5232B	**E2**	5.32	5.88	**20**	**11**	**1600**	**0.25**	**5.0**	**3.0**
MMSZ5233B	**E3**	5.70	6.30	**20**	**7**	**1600**	**0.25**	**5.0**	**3.5**
MMSZ5234B	**E4**	5.89	6.51	**20**	**7**	**1000**	**0.25**	**5.0**	**4.0**
MMSZ5235B	**E5**	6.46	7.14	**20**	**5**	**750**	**0.25**	**3**	**5.0**
MMSZ5236B	**F1**	7.13	7.88	**20**	**6**	**500**	**0.25**	**3**	**6.0**
MMSZ5237B	**F2**	7.79	8.61	**20**	**8**	**500**	**0.25**	**3**	**6.5**
MMSZ5238B	**F3**	8.27	9.14	**20**	**8**	**600**	**0.25**	**3**	**6.5**

MMSZ5221B- MMSZ 5265B Series

型号	印字 (代码)	Vz1(@Izt)			Zzt@Izt	Zzk		IR	
		Min	Max	Izt	Max	Max	Izk	Max	VR
		(V)	(V)	mA	Ω	Ω	mA	uA	V
MMSZ5239B	**F4**	8.65	9.56	**20**	**10**	**600**	**0.25**	**3**	**7.0**
MMSZ5240B	**F5**	9.50	10.50	**20**	**17**	**600**	**0.25**	**3**	**8.0**
MMSZ5241B	**H1**	10.45	11.55	**20**	**22**	**600**	**0.25**	**2.0**	**8.4**
MMSZ5242B	**H2**	11.40	12.60	**20**	**30**	**600**	**0.25**	**1.0**	**9.1**
MMSZ5243B	**H3**	12.35	13.65	**9.5**	**13**	**600**	**0.25**	**0.5**	**9.9**
MMSZ5244B	**H4**	13.30	14.70	**9.0**	**15**	**600**	**0.25**	**0.1**	**10**
MMSZ5245B	**H5**	14.25	15.75	**8.5**	**16**	**600**	**0.25**	**0.1**	**11**
MMSZ5246B	**J1**	15.20	16.80	**7.8**	**17**	**600**	**0.25**	**0.1**	**12**
MMSZ5247B	**J2**	16.15	17.85	**7.5**	**19**	**600**	**0.25**	**0.1**	**13**
MMSZ5248B	**J3**	17.10	18.90	**7.0**	**21**	**600**	**0.25**	**0.1**	**14**
MMSZ5249B	**J4**	18.05	19.95	**6.6**	**23**	**600**	**0.25**	**0.1**	**14**
MMSZ5250B	**J5**	19.00	21.00	**6.2**	**25**	**600**	**0.25**	**0.1**	**15**
MMSZ5251B	**K1**	20.90	23.10	**5.6**	**29**	**600**	**0.25**	**0.1**	**17**
MMSZ5252B	**K2**	22.80	25.20	**5.2**	**33**	**600**	**0.25**	**0.1**	**18**
MMSZ5253B	**K3**	23.75	26.25	**5.0**	**35**	**600**	**0.25**	**0.1**	**19**
MMSZ5254B	**K4**	25.65	28.35	**5.0**	**41**	**600**	**0.25**	**0.1**	**21**
MMSZ5255B	**K5**	26.60	29.40	**4.5**	**44**	**600**	**0.25**	**0.1**	**21**
MMSZ5256B	**M1**	28.50	31.50	**4.2**	**49**	**600**	**0.25**	**0.1**	**23**
MMSZ5257B	**M2**	31.35	34.65	**3.8**	**58**	**700**	**0.25**	**0.1**	**25**
MMSZ5258B	**M3**	34.20	37.80	**3.4**	**70**	**700**	**0.25**	**0.1**	**27**
MMSZ5259B	**M4**	37.05	40.95	**3.2**	**80**	**800**	**0.25**	**0.1**	**30**
MMSZ5260B	**M5**	40.85	45.15	**3.0**	**93**	**900**	**0.25**	**0.1**	**33**
MMSZ5261B	**N1**	44.65	49.35	**2.7**	**105**	**1000**	**0.25**	**0.1**	**36**
MMSZ5262B	**N2**	48.45	53.55	**2.5**	**125**	**1100**	**0.25**	**0.1**	**39**
MMSZ5263B	**N3**	53.20	58.80	**2.2**	**150**	**1300**	**0.25**	**0.1**	**43**
MMSZ5264B	**N4**	57.00	63.00	**2.1**	**170**	**1400**	**0.25**	**0.1**	**46**
MMSZ5265B	**N5**	58.90	65.10	**2.0**	**185**	**1400**	**0.25**	**0.1**	**47**
MMSZ5266B	**P1**	64.60	71.40	**1.8**	**230**	**1600**	**0.25**	**0.1**	**52**
MMSZ5267B	**P2**	71.25	78.75	**1.7**	**270**	**1700**	**0.25**	**0.1**	**56**

Breakdown characteristics



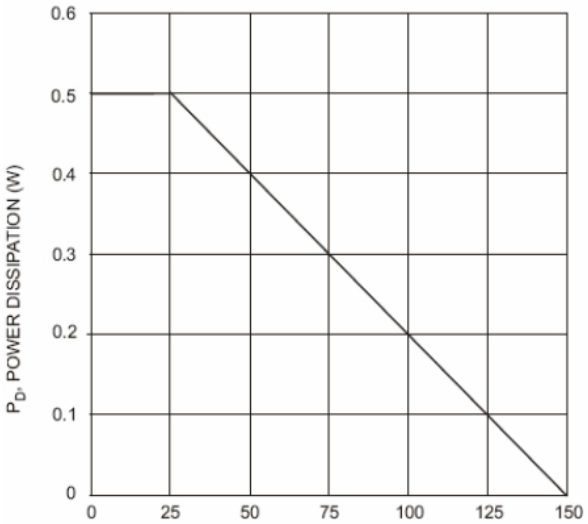


Fig. 1 Power Dissipation vs Ambient Temperature

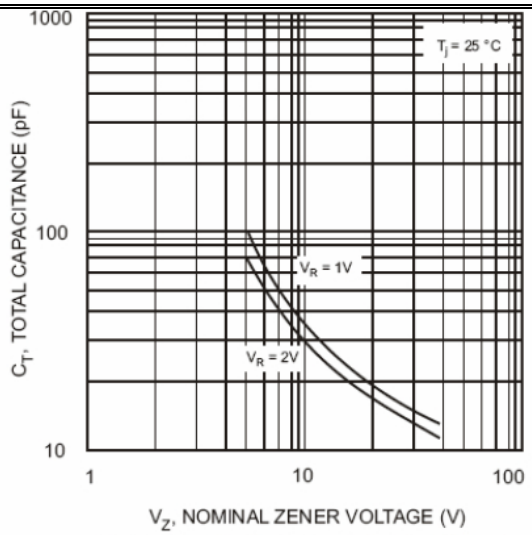


Fig. 2 Total Capacitance vs Nominal Zener Voltage

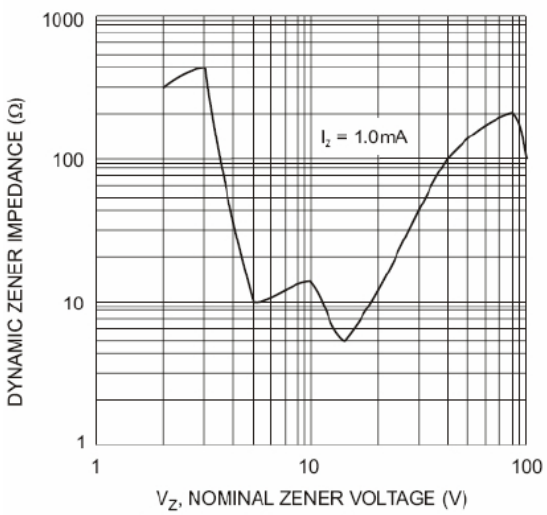
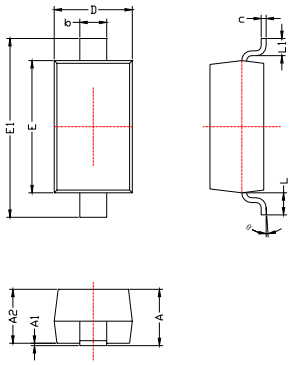


Fig. 3 Zener Voltage vs. Zener Impedence

SOD-123 PACKAGE OUTLINE

Plastic surface mounted package



SYMBOL	DIMENSIONS	
	MIN.	MAX.
A	1.050	1.250
A1	0.000	0.100
A2	1.050	1.150
b	0.450	0.650
c	0.080	0.150
D	1.500	1.700
E	2.600	2.800
E1	3.550	3.850
L	0.500REF	
L1	0.250	0.450
θ	0°	8°