

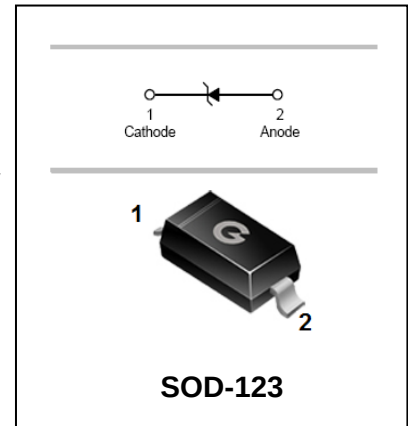
SMT-Type Zener Diode

TMMSZ5221B-TMMSZ5267B

FEATURES

- Large selection of zener voltages: 2.4V ~ 75V
- Tight voltage tolerance: $\pm 5\%$ for B-series
- Ultra low-profile package well suited for automated assembly
- MSL Class 1 compatible
- Halogen free
- Qualified to AEC-Q101 standards for high reliability

HF



Mechanical Data

- Molding compound: UL flammability classification rating 94V-0
- Terminals: Tin-plated; solderability per MIL-STD-202, Method 208

APPLICATIONS

- General voltage regulation
- Mobile & handheld systems

ORDERING INFORMATION

Part Number	Marking	Package
TMMSZ5221B – TMMSZ5267B	See Electrical Characteristics	SOD-123

MAXIMUM RATING (@ $T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Value	Unit
Forward Voltage @ $I_F=10\text{mA}$	V_F	0.9	V
Power Dissipation	P_D	500	mW
Thermal Resistance Junction-to-Air ^{*1}	$R_{\theta JA}$	250	$^\circ\text{C/W}$
Thermal Resistance Junction-to-Case ^{*1}	$R_{\theta JC}$	150	$^\circ\text{C/W}$
Thermal Resistance Junction-to-Lead ^{*1}	$R_{\theta JL}$	180	$^\circ\text{C/W}$
Junction Temperature Range	T_J	-55 ~ +150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65 ~ +150	$^\circ\text{C}$

Note 1: The data tested by surface mounted on a 1 inch² FR-4 board with 20Z copper

SMT-Type Zener Diode

TMMSZ5221B-TMMSZ5267B

ELECTRICAL CHARACTERISTICS (@ T_A = 25°C unless otherwise specified)

Part Number	Marking Code	Zener Voltage V _Z (V)			@ I _{ZT} (mA)	Maximum Zener Impedance			Maximum Reverse Current I _R (μA)	@ V _R (V)
		Min.	Typ.	Max.		Z _{ZT} (Ω) @ I _{ZT}	Z _{ZK} (Ω)	@ I _{ZK} (mA)		
TMMSZ5221B	C1	2.28	2.40	2.52	20	30	1200	0.25	100.000	1.0
TMMSZ5222B	C2	2.38	2.50	2.63	20	30	1250	0.25	100.000	1.0
TMMSZ5223B	C3	2.57	2.70	2.84	20	30	1300	0.25	75.000	1.0
TMMSZ5225B	C5	2.85	3.00	3.15	20	30	1600	0.25	50.000	1.0
TMMSZ5226B	G1	3.14	3.30	3.47	20	28	1600	0.25	25.000	1.0
TMMSZ5227B	G2	3.42	3.60	3.78	20	24	1700	0.25	15.000	1.0
TMMSZ5228B	G3	3.71	3.90	4.10	20	23	1900	0.25	10.000	1.0
TMMSZ5229B	G4	4.09	4.30	4.52	20	22	2000	0.25	5.000	1.0
TMMSZ5230B	G5	4.47	4.70	4.94	20	19	1900	0.25	5.000	2.0
TMMSZ5231B	E1	4.85	5.10	5.36	20	17	1600	0.25	5.000	2.0
TMMSZ5232B	E2	5.32	5.60	5.88	20	11	1600	0.25	5.000	3.0
TMMSZ5233B	E3	5.70	6.00	6.30	20	7	1600	0.25	5.000	3.5
TMMSZ5234B	E4	5.89	6.20	6.51	20	7	1000	0.25	5.000	4.0
TMMSZ5235B	E5	6.46	6.80	7.14	20	5	750	0.25	3.000	5.0
TMMSZ5236B	F1	7.13	7.50	7.88	20	6	500	0.25	3.000	6.0
TMMSZ5237B	F2	7.79	8.20	8.61	20	8	500	0.25	3.000	6.5
TMMSZ5238B	F3	8.27	8.70	9.14	20	8	600	0.25	3.000	6.5
TMMSZ5239B	F4	8.65	9.10	9.56	20	10	600	0.25	3.000	7.0
TMMSZ5240B	F5	9.50	10.00	10.50	20	17	600	0.25	3.000	8.0
TMMSZ5241B	H1	10.45	11.00	11.55	20	22	600	0.25	2.000	8.4
TMMSZ5242B	H2	11.40	12.00	12.60	20	30	600	0.25	1.000	9.1
TMMSZ5243B	H3	12.35	13.00	13.65	9.5	13	600	0.25	0.500	9.9
TMMSZ5244B	H4	13.30	14.00	14.70	9	15	600	0.25	0.100	10.0
TMMSZ5245B	H5	14.25	15.00	15.75	8.5	16	600	0.25	0.100	11.0
TMMSZ5246B	J1	15.20	16.00	16.80	7.8	17	600	0.25	0.100	12.0
TMMSZ5247B	J2	16.15	17.00	17.85	7.5	19	600	0.25	0.100	13.0
TMMSZ5248B	J3	17.10	18.00	18.90	7	21	600	0.25	0.100	14.0
TMMSZ5250B	J5	19.00	20.00	21.00	6.2	25	600	0.25	0.100	15.0
TMMSZ5251B	K1	20.90	22.00	23.10	5.6	29	600	0.25	0.100	17.0
TMMSZ5252B	K2	22.80	24.00	25.20	5.2	33	600	0.25	0.100	18.0
TMMSZ5253B	K3	23.75	25.00	26.25	5	35	600	0.25	0.100	19.0
TMMSZ5254B	K4	25.65	27.00	28.35	5	41	600	0.25	0.100	21.0
TMMSZ5255B	K5	26.60	28.00	29.40	4.5	44	600	0.25	0.100	21.0
TMMSZ5256B	M1	28.50	30.00	31.50	4.2	49	600	0.25	0.100	23.0
TMMSZ5257B	M2	31.35	33.00	34.65	3.8	58	700	0.25	0.100	25.0
TMMSZ5258B	M3	34.20	36.00	37.80	3.4	70	700	0.25	0.100	27.0
TMMSZ5259B	M4	37.05	39.00	40.95	3.2	80	800	0.25	0.100	30.0
TMMSZ5260B	M5	40.85	43.00	45.15	3	93	900	0.25	0.100	33.0
TMMSZ5261B	N1	44.65	47.00	49.35	2.7	105	1000	0.25	0.100	36.0
TMMSZ5262B	N2	48.45	51.00	53.55	2.5	125	1100	0.25	0.100	39.0
TMMSZ5263B	M8	53.20	56.00	58.80	2.2	150	1300	0.25	0.100	43.0
TMMSZ5265B	N5	58.90	62.00	65.10	2	185	1400	0.25	0.100	47.0
TMMSZ5267B	P2	71.25	75.00	78.75	1.7	270	1700	0.25	0.100	56.0

SMT-Type Zener Diode

TMMSZ5221B-TMMSZ5267B

TYPICAL CHARACTERISTICS (@ $T_A = 25^\circ\text{C}$ unless otherwise specified)

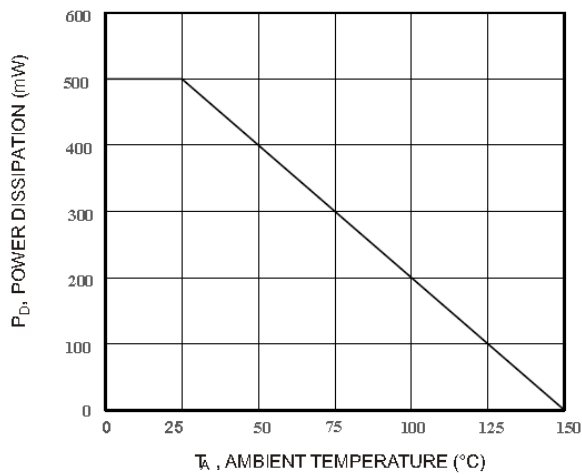


Fig. 1 Power Dissipation vs Ambient Temperature

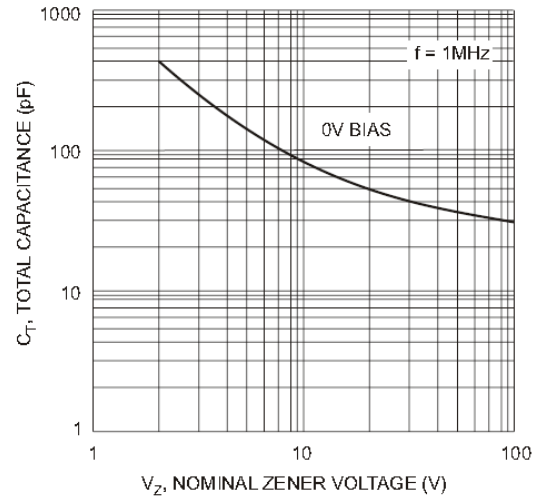


Fig. 2 Typical Capacitance

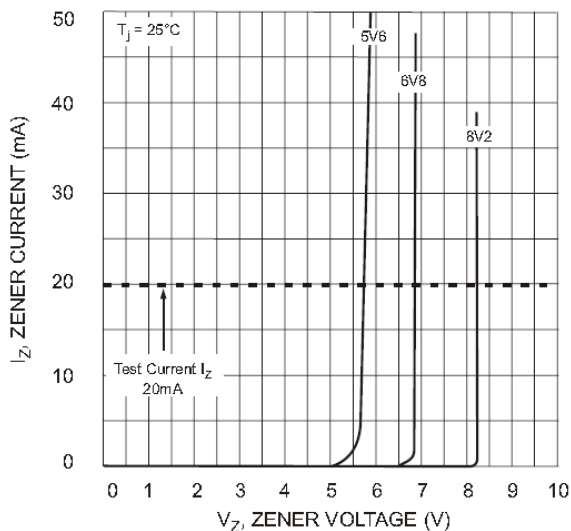


Fig. 3 Zener Breakdown Characteristics

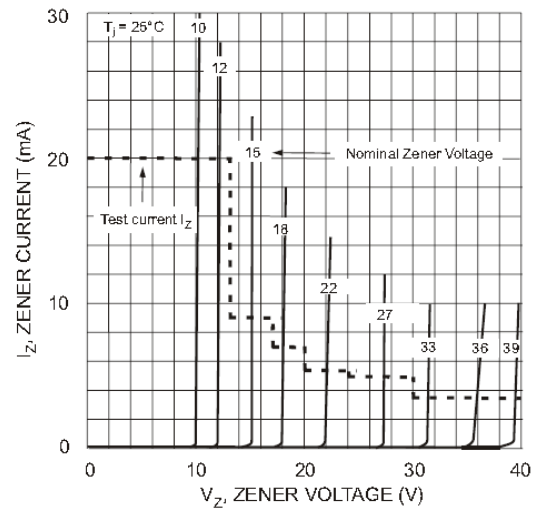


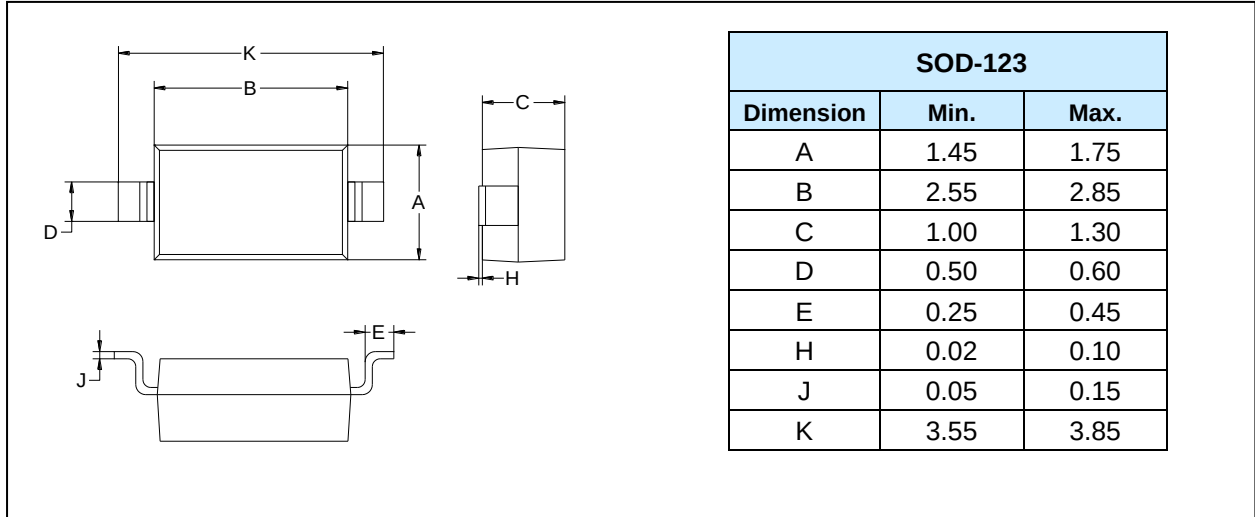
Fig. 4 Zener Breakdown Characteristics

SMT-Type Zener Diode

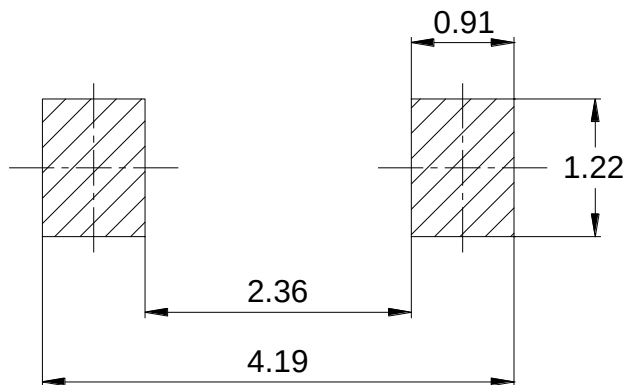
TMMSZ5221B-TMMSZ5267B

PACKAGE OUTLINE (Unit: mm)

Plastic surface mounted package



MOUNTING PAD LAYOUT (Unit: mm)



PACKAGE INFORMATION

Part Number	Package	Shipping Quantity
TMMSZ5221B – TMMSZ5267B	SOD-123	3000pcs / Tape & Reel

IMPORTANT NOTICE

Changzhou Galaxy Century Microelectronics (GME) reserves the right to make changes without further notice to any product information (copyrighted) herein to make corrections, modifications, improvements, or other changes. GME does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others.