



SSCZ52XXBD1 Series

Zener Voltage Regulator

● Description

The SSCZ52XXBD1 is packaged in a SOD-123 surface mount package that has a power dissipation of 500mW. They are designed to provide voltage regulation protection and are especially attractive in situations where space is at a premium. It is applicable to mobile phones, hand-held portable devices, high-density PC boards.

● Feature

- ✧ Low profile package
- ✧ Ideal for automated placement
- ✧ Low Zener Impedance
- ✧ Steady state power rating of 500mW
- ✧ RoHS compliant transient

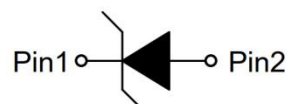
● Applications

- ✧ Hand held portables
- ✧ Cellular phones
- ✧ High density PC boards

● PIN configuration



SOD-123



Circuit diagram

● Mechanical data

- ✧ Package: SOD-123
- ✧ Lead finish: 100% matte Sn(Tin)
- ✧ Mounting position: Any
- ✧ Qualified max reflow temperature: 260°C
- ✧ Device meets MSL 3 requirements
- ✧ Pure tin plating: 7 ~ 17 um
- ✧ Pin flatness: ≤3mil

● Absolute maximum rating @T_A=25°C

Parameter	Symbol	Value	Unit
Total Device Dissipation FR-5 Board	P _D	500	mW
Forward Voltage @ I _F = 10mA	V _F	0.9	V
Thermal Resistance, Junction-to-Ambient	R _{ΘJA}	340	°C/W
Storage Temperature	T _{STG}	-55/+150	°C
Operating Temperature	T _J	-55/+150	°C



SSCZ52XXBD1

● Electrical Characteristics @T_A=25°C

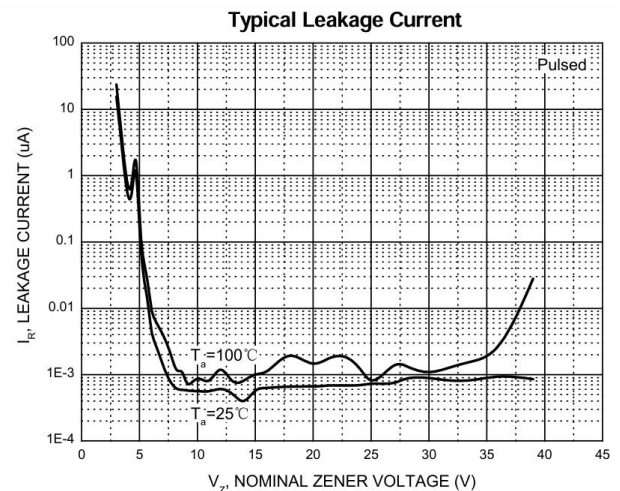
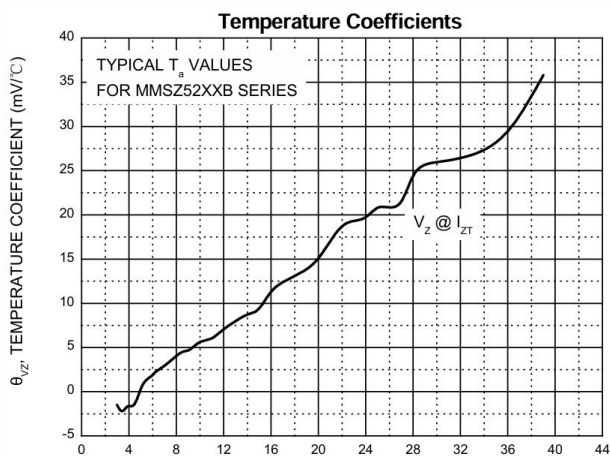
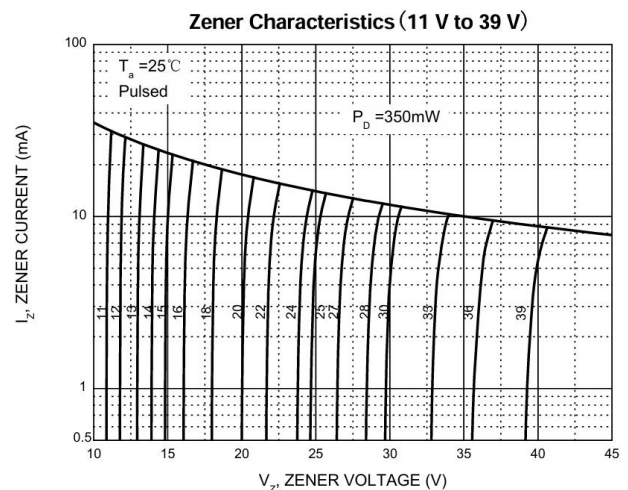
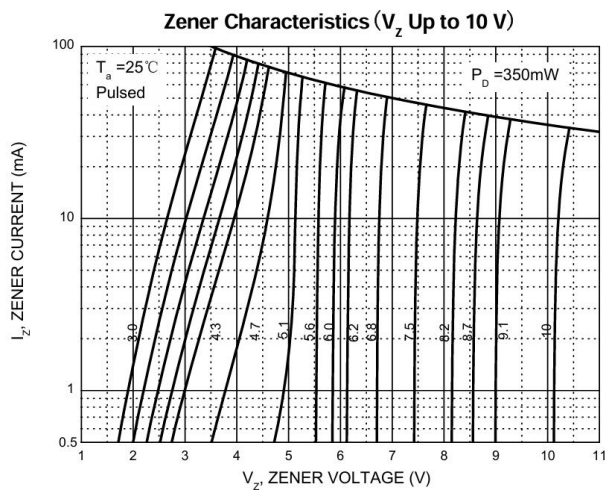
Device	Marking	Zener Voltage Range				Maximum Zener Impedance			Maximum Reverse Current	
		V _Z @ I _{ZT}			I _{ZT}	Z _{YT} @I _{ZT}	Z _{ZK} @I _{ZK}	I _{ZK}	I _R	V _R
		Nom(V)	Min(V)	Max(V)	mA	Ω		mA	μA	V
SSCZ5221BD1	C1	2.4	2.28	2.52	20	30	1200	0.25	100	1.0
SSCZ5222BD1	C2	2.5	2.38	2.63	20	30	1250	0.25	100	1.0
SSCZ5223BD1	C3	2.7	2.57	2.84	20	30	1300	0.25	75	1.0
SSCZ5224BD1	C4	2.8	2.66	2.94	20	30	1400	0.25	75	1.0
SSCZ5225BD1	C5	3.0	2.85	3.15	20	30	1600	0.25	50	1.0
SSCZ5226BD1	G1	3.3	3.14	3.47	20	28	1600	0.25	25	1.0
SSCZ5227BD1	G2	3.6	3.42	3.78	20	24	1700	0.25	15	1.0
SSCZ5228BD1	G3	3.9	3.71	4.10	20	23	1900	0.25	10	1.0
SSCZ5229BD1	G4	4.3	4.09	4.52	20	22	2000	0.25	5.0	1.0
SSCZ5230BD1	G5	4.7	4.47	4.94	20	19	1900	0.25	5.0	2.0
SSCZ5231BD1	E1	5.1	4.85	5.36	20	17	1600	0.25	5.0	2.0
SSCZ5232BD1	E2	5.6	5.32	5.88	20	11	1600	0.25	5.0	3.0
SSCZ5233BD1	E3	6.0	5.70	6.30	20	7	1600	0.25	5.0	3.5
SSCZ5234BD1	E4	6.2	5.89	6.51	20	7	1000	0.25	5.0	4.0
SSCZ5235BD1	E5	6.8	6.46	7.14	20	5	750	0.25	3	5.0
SSCZ5236BD1	F1	7.5	7.13	7.88	20	6	500	0.25	3	6.0
SSCZ5237BD1	F2	8.2	7.79	8.61	20	8	500	0.25	3	6.5
SSCZ5238BD1	F3	8.7	8.27	9.14	20	8	600	0.25	3	6.5
SSCZ5239BD1	F4	9.1	8.65	9.56	20	10	600	0.25	3	7.0
SSCZ5240BD1	F5	10	9.50	10.50	20	17	600	0.25	3	8.0
SSCZ5241BD1	H1	11	10.45	11.55	20	22	600	0.25	2.0	8.4
SSCZ5242BD1	H2	12	11.40	12.60	20	30	600	0.25	1.0	9.1
SSCZ5243BD1	H3	13	12.35	13.65	9.5	13	600	0.25	0.5	9.9
SSCZ5244BD1	H4	14	13.30	14.70	9.0	15	600	0.25	0.1	10
SSCZ5245BD1	H5	15	14.25	15.75	8.5	16	600	0.25	0.1	11
SSCZ5246BD1	J1	16	15.20	16.80	7.8	17	600	0.25	0.1	12
SSCZ5247BD1	J2	17	16.15	17.85	7.5	19	600	0.25	0.1	13
SSCZ5248BD1	J3	18	17.10	18.90	7.0	21	600	0.25	0.1	14
SSCZ5249BD1	J4	19	18.05	19.95	6.6	23	600	0.25	0.1	14
SSCZ5250BD1	J5	20	19.00	21.00	6.2	25	600	0.25	0.1	15
SSCZ5251BD1	K1	22	20.90	23.10	5.6	29	600	0.25	0.1	17
SSCZ5252BD1	K2	24	22.80	25.20	5.2	33	600	0.25	0.1	18
SSCZ5253BD1	K3	25	23.75	26.25	5.0	35	600	0.25	0.1	19
SSCZ5254BD1	K4	27	25.65	28.35	5.0	41	600	0.25	0.1	21
SSCZ5255BD1	K5	28	26.60	29.40	4.5	44	600	0.25	0.1	21
SSCZ5256BD1	M1	30	28.50	31.50	4.2	49	600	0.25	0.1	23

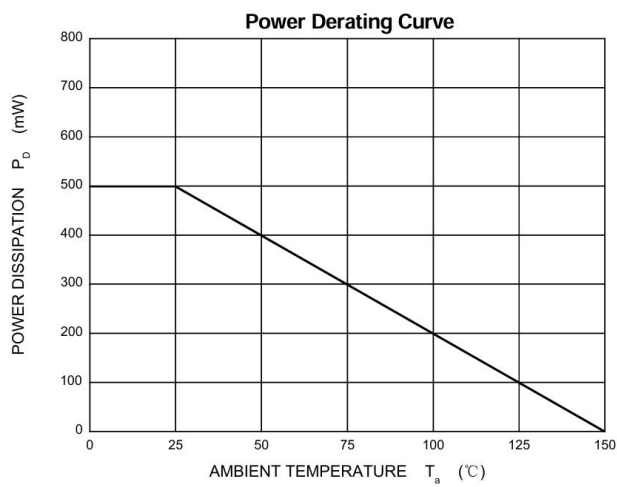
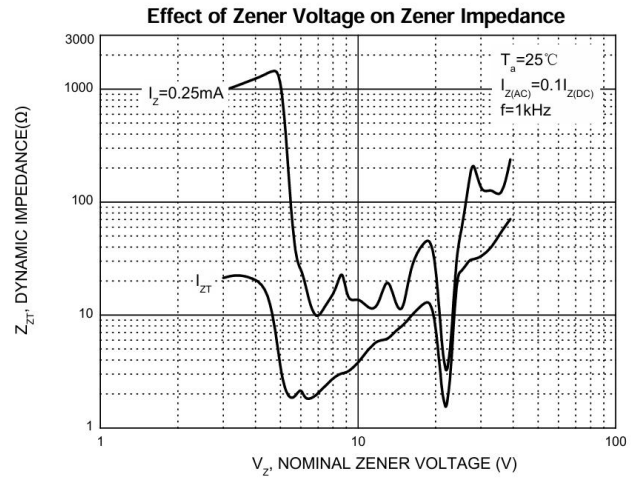
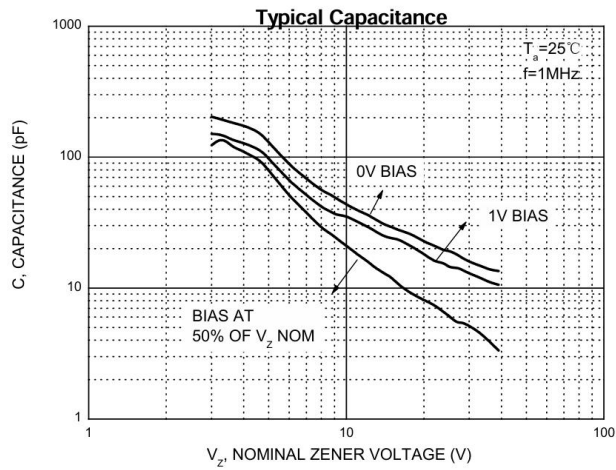


SSCZ52XXBD1

SSCZ5257BD1	M2	33	31.35	34.65	3.8	58	700	0.25	0.1	25
SSCZ5258BD1	M3	36	34.20	37.80	3.4	70	700	0.25	0.1	27
SSCZ5259BD1	M4	39	37.05	40.95	3.2	80	800	0.25	0.1	30
SSCZ5260BD1	M5	43	40.85	45.15	3.0	93	900	0.25	0.1	33
SSCZ5261BD1	N1	47	44.65	49.35	2.7	105	1000	0.25	0.1	36
SSCZ5262BD1	N2	51	48.45	53.55	2.5	125	1100	0.25	0.1	39
SSCZ5263BD1	N3	56	53.20	58.80	2.2	150	1300	0.25	0.1	43
SSCZ5264BD1	N4	60	57.00	63.00	2.1	170	1400	0.25	0.1	46
SSCZ5265BD1	N5	62	58.90	65.10	2.0	185	1400	0.25	0.1	47
SSCZ5266BD1	P1	68	64.60	71.40	1.8	230	1600	0.25	0.1	52
SSCZ5267BD1	P2	75	71.25	78.75	1.7	270	1700	0.25	0.1	56

Typical Performance Characteristics







● Package Information

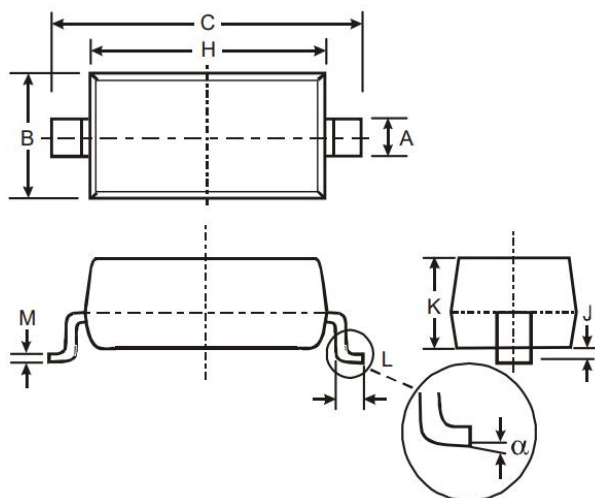
Ordering Information

Device	Package	Qty per Reel	Reel Size
SSCZ52XXBD1	SOD-123	3000	7 Inch

Mechanical Data

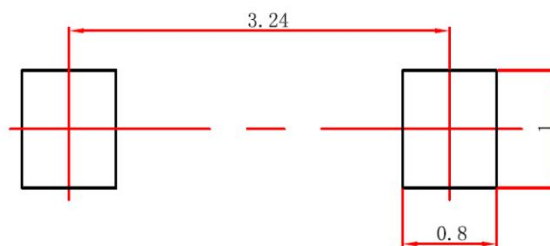
Case:SOD-123

Case Material: Molded Plastic. UL Flammability



DIM	Millimeters	
	Min	Max
A	0.45	0.65
B	1.50	1.70
C	3.55	3.85
H	2.6	2.8
J	0.00	0.10
K	1.05	1.15
L	0.25	0.45
M	0.08	0.15
α	0	8°

Recommended Pad outline (Unit:mm)





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