

FEATURES AND BENEFITS

Product Summary		
P_D	200mW	@25 °C
I_Z	3.2 – 20mA	@25 °C
V_{RRM}	2.4 – 39V	@25 °C

SOD-323



- Constant Voltage control
- Wide Voltage Range Selection 2.4V to 39V
- RoHS Compliant / Green EMC UL Flammability Classification Rating 94V-0
- Matte Tin (Sn) Lead finish Solderable per MIL-STD-202, Method 208
- Moisture Sensitivity: Level 1 per J-STD-020
- Weight: 0.004 grams (Approximate)

Maximum Ratings (TA = 25 °C unless otherwise noted)			
PARAMETER	SYMBOL	VALUE	UNIT
Power Dissipation	P_{TM}	200	mW
Junction Temperature	T_J	150	°C
Storage Temperature	T_{STG}	-55 to +150	°C

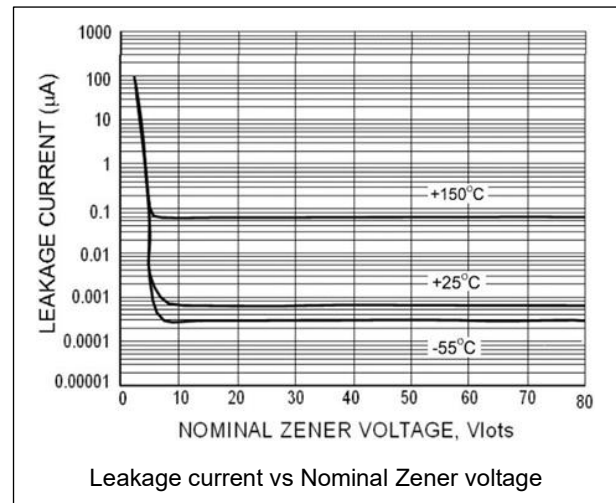
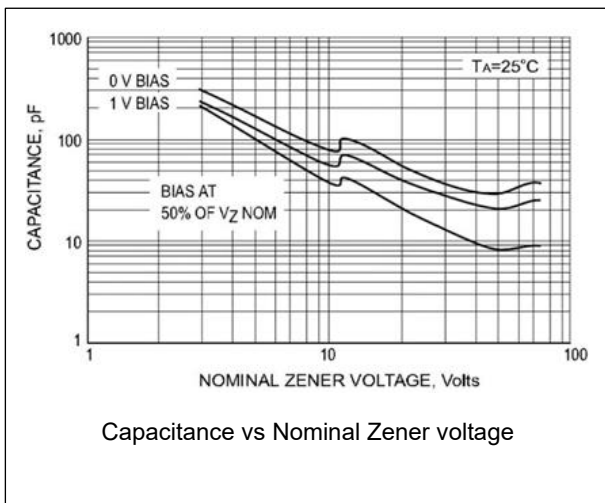
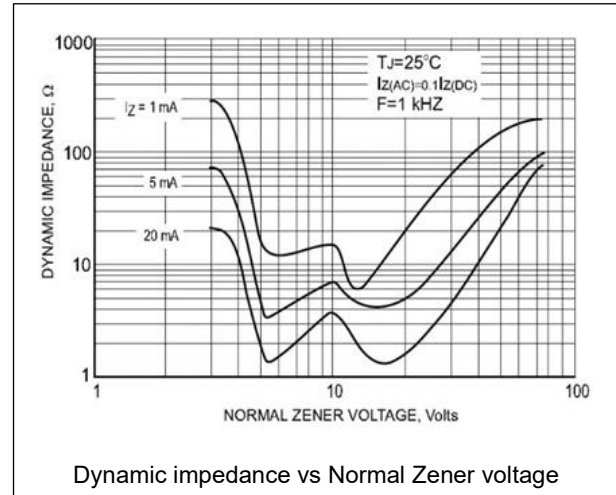
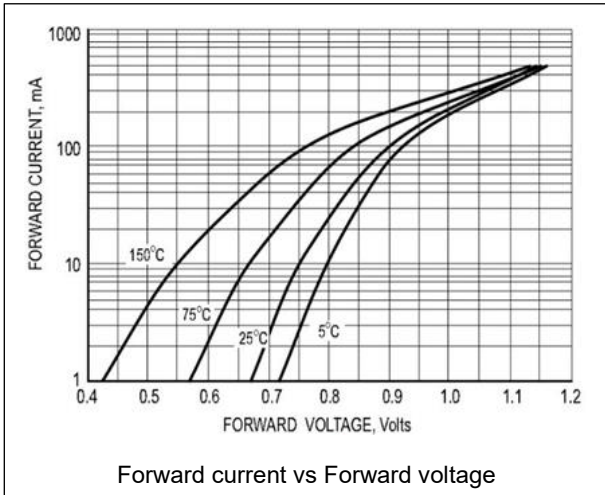
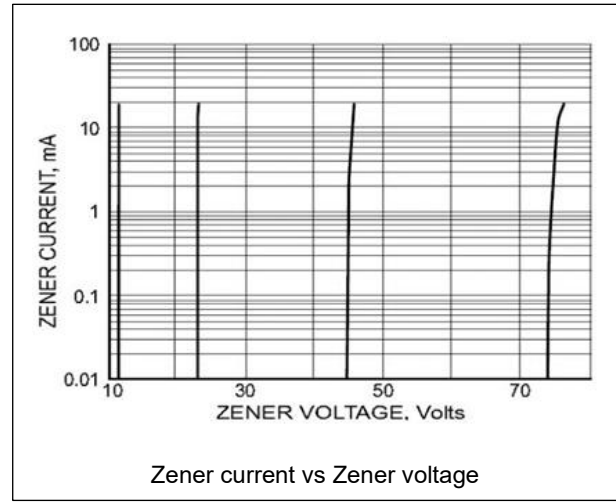
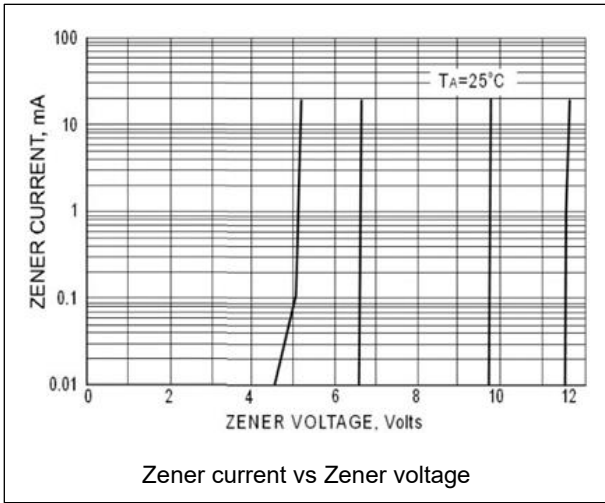
ELECTRICAL CHARACTERISTICS (TA = 25 °C unless otherwise noted)

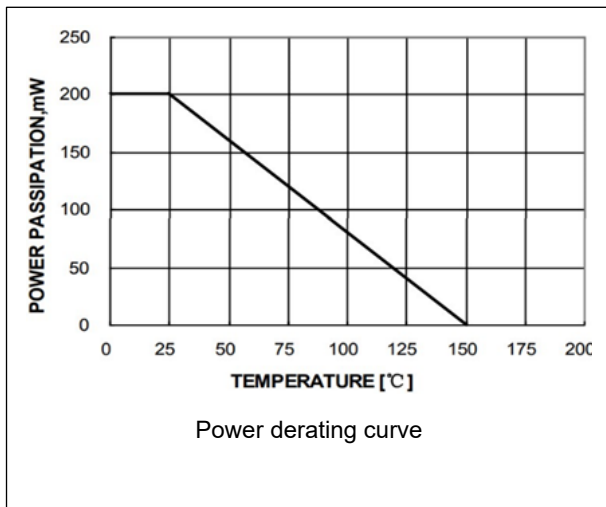
*1 Pulse width = 10 ms

Type Number	Device Marking	V_Z (V) *1			$Z_Z(\Omega)$ max.	I_Z (mA)	$Z_{Zk}(\Omega)$ max.	I_{Zk} (mA)	$I_R(\mu A)$ max.	V_R (V)
		min.	typ.	max.						
MMSZ5221BS	C1	2.28	2.40	2.52	30	20	1200	0.25	100	1.0
MMSZ5223BS	C3	2.57	2.70	2.84	30	20	1300	0.25	75	1.0
MMSZ5225BS	C5	2.85	3.00	3.15	29	20	1600	0.25	50	1.0
MMSZ5226BS	G1	3.14	3.30	3.47	28	20	1600	0.25	25	1.0
MMSZ5227BS	G2	3.42	3.60	3.78	24	20	1700	0.25	15	1.0
MMSZ5228BS	G3	3.70	3.90	4.10	23	20	1900	0.25	10	1.0
MMSZ5229BS	G4	4.09	4.30	4.52	22	20	2000	0.25	5	1.0
MMSZ5230BS	G5	4.47	4.70	4.94	19	20	1900	0.25	5	2.0
MMSZ5231BS	E1	4.85	5.10	5.36	17	20	1600	0.25	5	2.0

Type Number	Device Marking	V _Z (V) *1			Z _{Z1} (Ω)	I _Z (mA)	Z _{Zk} (Ω)	I _{Zk} (mA)	I _R (μA)	V _R (V)
		min.	typ.	max.	max.		max.		Max.	
MMSZ5232BS	E2	5.32	5.60	5.88	11	20	1600	0.25	5	3.0
MMSZ5233BS	E3	5.70	6.00	6.30	7	20	1600	0.25	5	3.5
MMSZ5234BS	E4	5.89	6.20	6.51	7	20	1000	0.25	5	4.0
MMSZ5235BS	E5	6.46	6.80	7.14	5	20	750	0.25	3	5.0
MMSZ5236BS	F1	7.13	7.50	7.88	6	20	500	0.25	3	6.0
MMSZ5237BS	F2	7.79	8.20	8.61	8	20	500	0.25	3	6.5
MMSZ5238BS	F3	8.27	8.70	9.14	8	20	600	0.25	3	6.5
MMSZ5239BS	F4	8.65	9.10	9.56	10	20	600	0.25	3	7.0
MMSZ5240BS	F5	9.50	10.00	10.50	17	20	600	0.25	3	8.0
MMSZ5241BS	H1	10.45	11.00	11.55	22	20	600	0.25	2	8.4
MMSZ5242BS	H2	11.40	12.00	12.60	30	20	600	0.25	1	9.1
MMSZ5243BS	H3	12.35	13.00	13.65	13	9.5	600	0.25	0.5	9.9
MMSZ5244BS	H4	13.30	14.00	14.70	15	9.0	600	0.25	0.1	10.0
MMSZ5245BS	H5	14.25	15.00	15.75	16	8.5	600	0.25	0.1	11.0
MMSZ5246BS	J1	15.20	16.00	16.80	17	7.8	600	0.25	0.1	12.0
MMSZ5248BS	J3	17.10	18.00	18.90	21	7.0	600	0.25	0.1	14.0
MMSZ5250BS	J5	19.00	20.00	21.00	25	6.2	600	0.25	0.1	15.0
MMSZ5251BS	K1	20.90	22.00	23.10	29	5.6	600	0.25	0.1	17.0
MMSZ5252BS	K2	22.80	24.00	25.20	33	5.2	600	0.25	0.1	18.0
MMSZ5253BS	K3	23.75	25.00	26.25	35	5.0	600	0.25	0.1	19.0
MMSZ5254BS	K4	25.65	27.00	28.35	41	4.6	600	0.25	0.1	21.0
MMSZ5255BS	K5	26.60	28.00	29.40	44	4.5	600	0.25	0.1	21.0
MMSZ5256BS	M1	28.50	30.00	31.50	49	4.2	600	0.25	0.1	23.0
MMSZ5257BS	M2	31.35	33.00	34.65	58	3.8	700	0.25	0.1	25.0
MMSZ5258BS	M3	34.20	36.00	37.80	70	3.4	700	0.25	0.1	27.0
MMSZ5259BS	M4	37.05	39.00	40.95	80	3.2	800	0.25	0.1	30.0

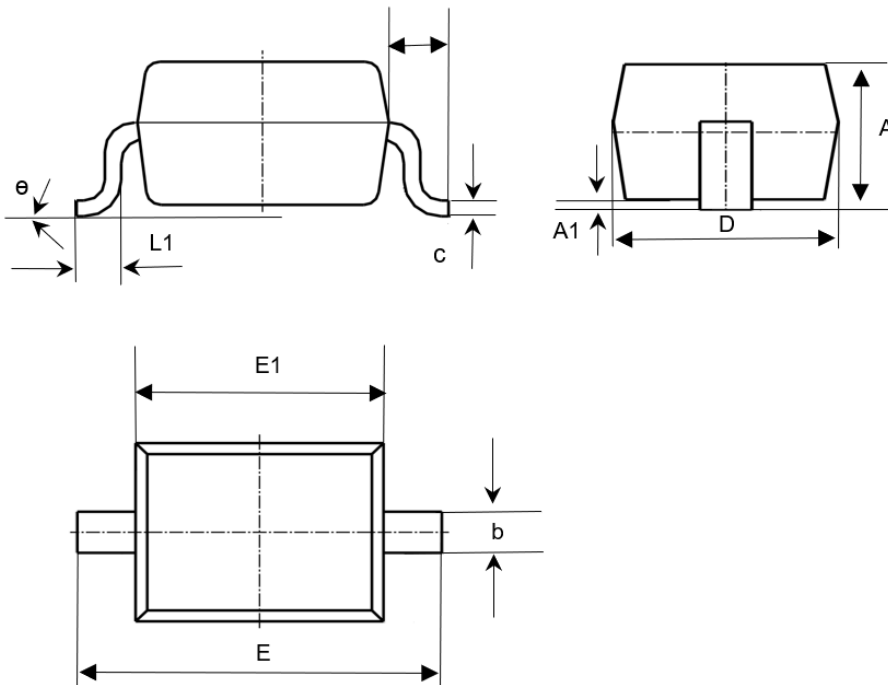
RATING AND CHARACTERISTICS CURVES





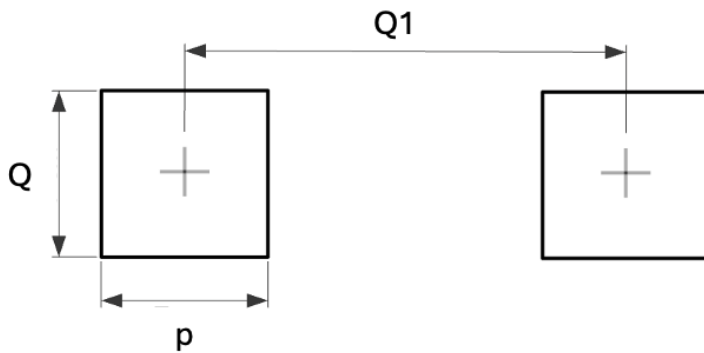
PACKAGE OUTLINE DIMENSIONS

SOD-323



Symbol	MIN	MAX
A	-	1.00
A1	0.00	0.10
b	0.25	0.35
c	0.08	0.15
D	1.20	1.40
E	2.30	2.70
E1	1.60	1.80
L	0.475REF	
L1	0.25	0.4
θ	0°	8°
Unit: mm		

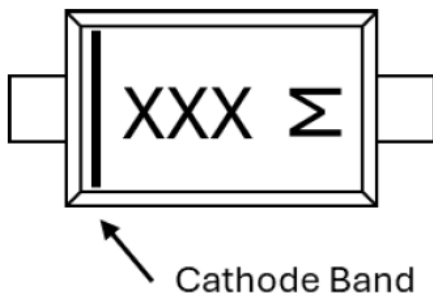
SUGGESTED PAD LAYOUT



Symbol	Typ
Q1	2.15
Q	0.7
p	0.7
Unit: mm	

DEVICE MARKING CODE AND ORDERING INFORMATION

DEVICE	Marking	Quantity	Packing
MMSZ52 series	Refer to Device Marking	3000/7"Reel	Tape & Reel



XXX: Product Marking Code

Σ : Date Code (Rotate 90° counterclockwise)

Odd Year	Even Year
1	E
2	F
3	H
4	J
5	K
6	L
7	N
8	P
9	U
T	X
V	Y
C	Z

NOTICE:

AZUREMOTO'S PRODUCTS ARE NOT AUTHORIZED FOR USE AS COMPONENTS IN ANY LIFE SUPPORT DEVICES OR SYSTEMS. AZUREMOTO RESERVES THE RIGHT TO MAKE CHANGES WITHOUT FURTHER NOTICE TO ANY PRODUCTS HEREIN TO IMPROVE RELIABILITY OR RUGGEDNESS.