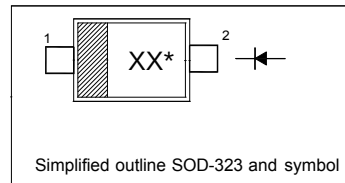


Surface Mount Zener Diodes

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Features

- Total power dissipation : max. 300 mW
- Small plastic package suitable for surface mounted design

Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Power Dissipation	P_{tot}	300	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

Characteristics at $T_a = 25^\circ\text{C}$

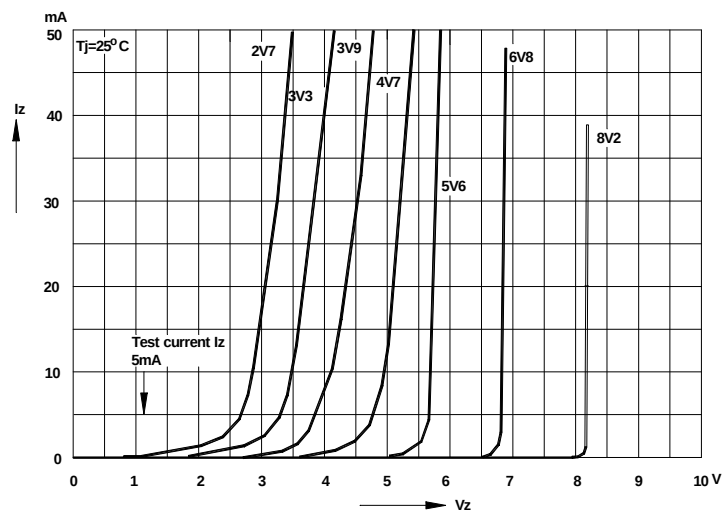
Parameter	Symbol	Max.	Unit
Thermal Resistance Junction to Ambient Air	$R_{\theta\text{JA}}$	417	$^\circ\text{C/W}$
Forward Voltage at $I_F = 10\text{ mA}$	V_F	0.9	V

$T_a=25^{\circ}\text{C}$ unless otherwise specified

Device*	Device Marking	Zener Voltage (Note 2)				Zener Impedance			Leakage Current		θV _Z (mV/k) @ I _{ZT}		C @ V _R = 0 f = 1 MHz
		V _Z (Volts)			@ I _{ZT}	Z _{ZT} @ I _{ZT}	Z _{ZK} @ I _{ZK}		I _R @ V _R				
		Min	Nom	Max	mA	Ω	Ω	mA	μA	Volts	Min	Max	pF
MM3Z2V4	00	2.2	2.4	2.6	5	100	1000	0.5	50	1.0	−3.5	0	450
MM3Z2V7	01	2.5	2.7	2.9	5	100	1000	0.5	20	1.0	−3.5	0	450
MM3Z3V0	02	2.8	3.0	3.2	5	100	1000	0.5	10	1.0	−3.5	0	450
MM3Z3V3	05	3.1	3.3	3.5	5	95	1000	0.5	5	1.0	−3.5	0	450
MM3Z3V6	06	3.4	3.6	3.8	5	90	1000	0.5	5	1.0	−3.5	0	450
MM3Z3V9	07	3.7	3.9	4.1	5	90	1000	0.5	3	1.0	−3.5	−2.5	450
MM3Z4V3	08	4.0	4.3	4.6	5	90	1000	0.5	3	1.0	−3.5	0	450
MM3Z4V7	09	4.4	4.7	5.0	5	80	800	0.5	3	2.0	−3.5	0.2	260
MM3Z5V1	0A	4.8	5.1	5.4	5	60	500	0.5	2	2.0	−2.7	1.2	225
MM3Z5V6	0C	5.2	5.6	6.0	5	40	200	0.5	1	2.0	−2.0	2.5	200
MM3Z6V2	0E	5.8	6.2	6.6	5	10	100	0.5	3	4.0	0.4	3.7	185
MM3Z6V8	0F	6.4	6.8	7.2	5	15	160	0.5	2	4.0	1.2	4.5	155
MM3Z7V5	0G	7.0	7.5	7.9	5	15	160	0.5	1	5.0	2.5	5.3	140
MM3Z8V2	0H	7.7	8.2	8.7	5	15	160	0.5	0.7	5.0	3.2	6.2	135
MM3Z9V1	0K	8.5	9.1	9.6	5	15	160	0.5	0.2	7.0	3.8	7.0	130
MM3Z10V	0L	9.4	10	10.6	5	20	160	0.5	0.1	8.0	4.5	8.0	130
MM3Z11V	0M	10.4	11	11.6	5	20	160	0.5	0.1	8.0	5.4	9.0	130
MM3Z12V	0N	11.4	12	12.7	5	25	80	0.5	0.1	8.0	6.0	10	130
MM3Z13V	0P	12.4	13.25	14.1	5	30	80	0.5	0.1	8.0	7.0	11	120
MM3Z15V	0T	14.3	15	15.8	5	30	80	0.5	0.05	10.5	9.2	13	110
MM3Z16V	0U	15.3	16.2	17.1	5	40	80	0.5	0.05	11.2	10.4	14	105
MM3Z18V	0W	16.8	18	19.1	5	45	80	0.5	0.05	12.6	12.4	16	100
MM3Z20V	0Z	18.8	20	21.2	5	55	100	0.5	0.05	14.0	14.4	18	85
MM3Z22V	10	20.8	22	23.3	5	55	100	0.5	0.05	15.4	16.4	20	85
MM3Z24V	11	22.8	24.2	25.6	5	70	120	0.5	0.05	16.8	18.4	22	80
MM3Z27V	12	25.1	27	28.9	2	80	300	0.5	0.05	18.9	21.4	25.3	70
MM3Z30V	14	28	30	32	2	80	300	0.5	0.05	21.0	24.4	29.4	70
MM3Z33V	18	31	33	35	2	80	300	0.5	0.05	23.2	27.4	33.4	70
MM3Z36V	19	34	36	38	2	90	500	0.5	0.05	25.2	30.4	37.4	70
MM3Z39V	20	37	39	41	2	130	500	0.5	0.05	27.3	33.4	41.2	45
MM3Z43V	21	40	43	46	2	150	500	0.5	0.05	30.1	37.6	46.6	40
MM3Z47V	1A	44	47	50	2	170	500	0.5	0.05	32.9	42.0	51.8	40
MM3Z51V	1C	48	51	54	2	180	500	0.5	0.05	35.7	46.6	57.2	40
MM3Z56V	1D	52	56	60	2	200	500	0.5	0.05	39.2	52.2	63.8	40
MM3Z62V	2A	58	62	66	2	215	500	0.5	0.05	43.4	58.9	71.8	35
MM3Z68V	1F	64	68	72	2	240	500	0.5	0.05	47.6	65.6	79.8	35
MM3Z75V	1G	70	75	79	2	255	500	0.5	0.05	52.5	73.4	88.6	35

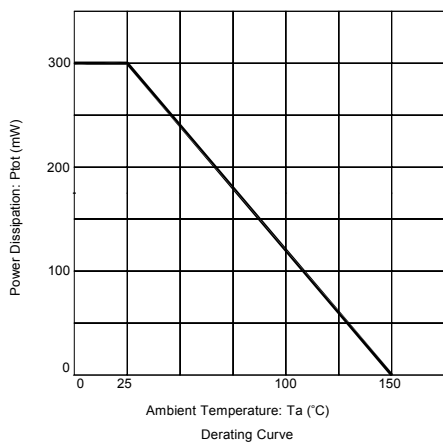
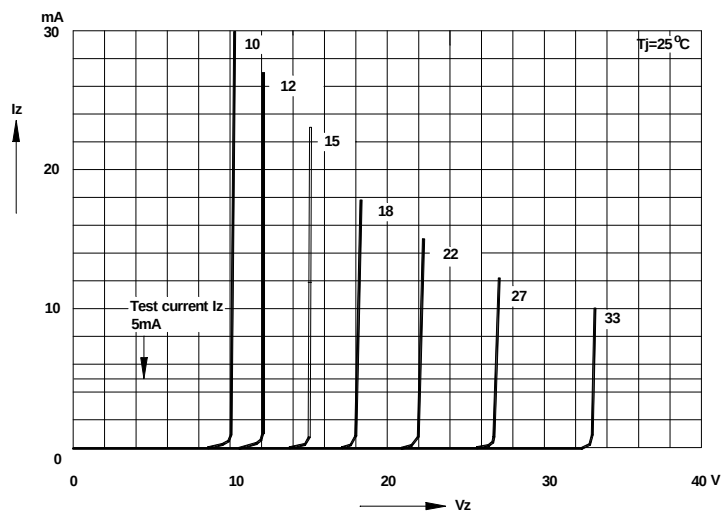
Breakdown characteristics

$T_J = \text{constant (pulsed)}$



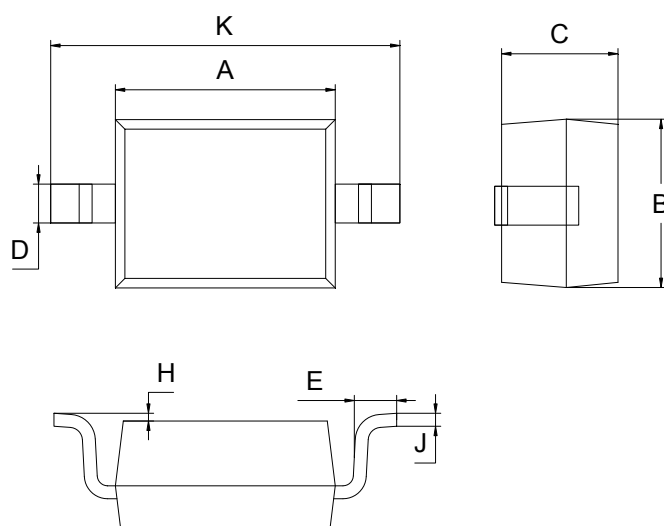
Breakdown characteristics

$T_J = \text{constant (pulsed)}$



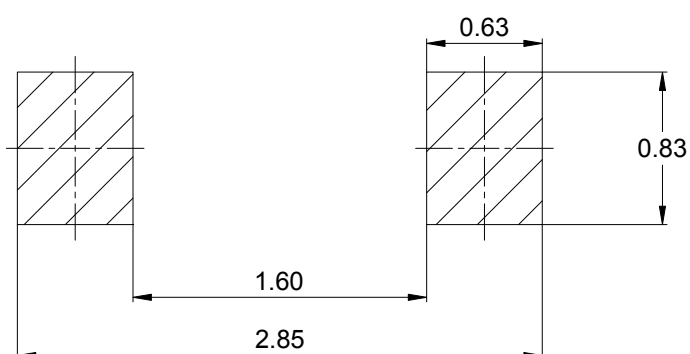
Plastic surface mounted package

SOD-323



SOD-323		
Dim	Min	Max
A	1.60	1.80
B	1.20	1.40
C	0.80	0.90
D	0.25	0.35
E	0.22	0.42
H	0.02	0.1
J	0.05	0.15
K	2.55	2.75
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit : mm