

Zener Diodes

300mW SOD-323F

MM3ZS Series

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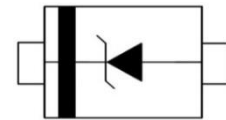
FEATURE

- Zener Voltage Range: 2.4V to 75V
- Power Dissipation: 300mW
- Ideally Suited for Automated Assembly Processes
- Application: Power Management Systems, Voltage Regulation



MECHANICAL DATA

- Case: SOD-323F, Molded Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026



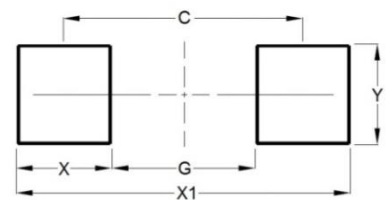
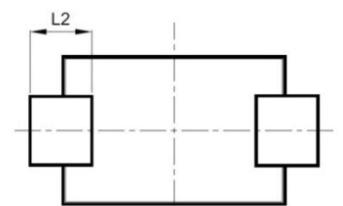
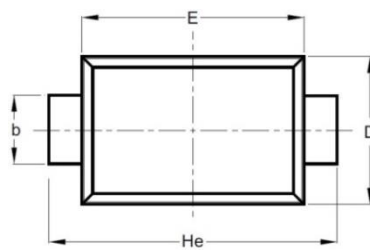
ABSOLUTE MAXIMUM RATINGS

Parameter	Symbols	Value	Unit
Power Dissipation	P_D	300	mW
Forward Voltage at $I_F=10mA$	V_F	0.9	V
Resistance Junction to Ambient	$R_{\theta JA}$	417	$^{\circ}C/W$
Junction Temperature Range	T_J	-55~+150	$^{\circ}C$
Storage Temperature Range	T_{STG}	-55~+150	$^{\circ}C$

Note: $T_A=25^{\circ}C$ unless otherwise noted

DIMENSIONS AND RECOMMENDED LAND PATTERN

Item	Min (mm)	Max (mm)
A	0.70	0.90
b	0.25	0.35
C	0.05	0.15
D	1.15	1.35
E	1.75	1.95
He	2.30	2.70
L2	0.30	-
C	2.17	2.17
G	1.44	1.44
X	0.73	0.73
X1	2.90	2.90
Y	0.50	0.50



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ELECTRICAL CHARACTERISTICS

Part Number	Nominal Zener Voltage V_Z at I_{ZT}			Max Zener Impedance		Max Reverse Leakage Current	
	Nom	Min	Max	Z_{ZT} at I_{ZT}	I_{ZT}	I_R at V_R	
	(V)	(V)	(V)	(Ω)	(mA)	(μ A)	(V)
MM3ZS2V4	2.4	2.28	2.56	100	5	120	1.0
MM3ZS2V7	2.7	2.50	2.90	110	5	120	1.0
MM3ZS3V0	3.0	2.80	3.20	120	5	50	1.0
MM3ZS3V3	3.3	3.10	3.50	130	5	20	1.0
MM3ZS3V6	3.6	3.40	3.80	130	5	10	1.0
MM3ZS3V9	3.9	3.70	4.10	130	5	5.0	1.0
MM3ZS4V3	4.3	4.00	4.60	130	5	5.0	1.0
MM3ZS4V7	4.7	4.40	5.00	130	5	2.0	1.0
MM3ZS5V1	5.1	4.80	5.40	130	5	2.0	1.5
MM3ZS5V6	5.6	5.20	6.00	80	5	1.0	2.5
MM3ZS6V2	6.2	5.80	6.60	50	5	1.0	3.0
MM3ZS6V8	6.8	6.40	7.20	30	5	0.5	3.5
MM3ZS7V5	7.5	7.00	7.90	30	5	0.5	4.0
MM3ZS8V2	8.2	7.70	8.70	30	5	0.5	5.0
MM3ZS9V1	9.1	8.50	9.60	30	5	0.5	6.0
MM3ZS10V	10	9.40	10.6	30	5	0.1	7.0
MM3ZS11V	11	10.4	11.6	30	5	0.1	8.0
MM3ZS12V	12	11.4	12.7	35	5	0.1	9.0
MM3ZS13V	13	12.4	14.1	35	5	0.1	10
MM3ZS15V	15	13.8	15.6	40	5	0.1	11
MM3ZS16V	16	15.3	17.1	40	5	0.1	12
MM3ZS18V	18	16.8	19.1	45	5	0.1	13
MM3ZS20V	20	18.8	21.2	50	5	0.1	15
MM3ZS22V	22	20.8	23.3	55	5	0.1	17
MM3ZS24V	24	22.8	25.6	60	5	0.1	19
MM3ZS27V	27	25.1	28.9	70	2	0.1	21
MM3ZS30V	30	28.0	32.0	80	2	0.1	23
MM3ZS33V	33	31.0	35.0	80	2	0.1	25
MM3ZS36V	36	34.0	38.0	90	2	0.1	27
MM3ZS39V	39	37.0	41.0	100	2	0.1	30
MM3ZS43V	43	40.0	46.0	130	2	0.1	33
MM3ZS47V	47	44.0	50.0	150	2	0.1	36
MM3ZS51V	51	48.0	54.0	180	2	0.1	39
MM3ZS56V	56	52.0	60.0	200	2	0.1	43
MM3ZS62V	62	58.0	66.0	215	2	0.1	47
MM3ZS68VC	68	64.0	72.0	240	2	0.1	52
MM3ZS75VC	75	70.0	79.0	265	2	0.1	56

Note: $T_A = 25^\circ\text{C}$ unless otherwise noted, The Zener Voltage (V_{ZT}) is tested with pulses (20ms).

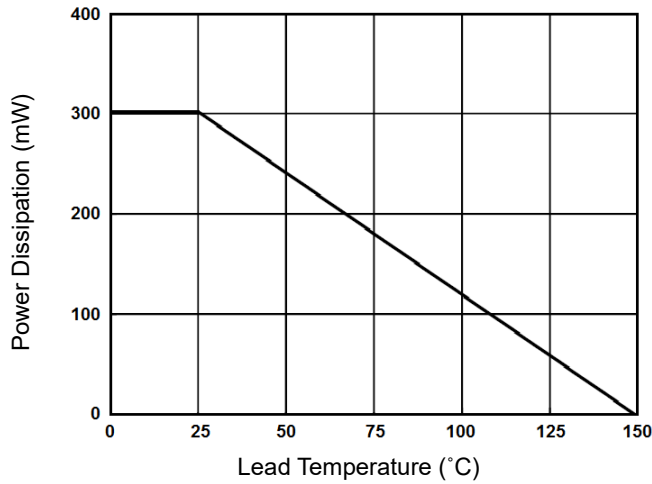
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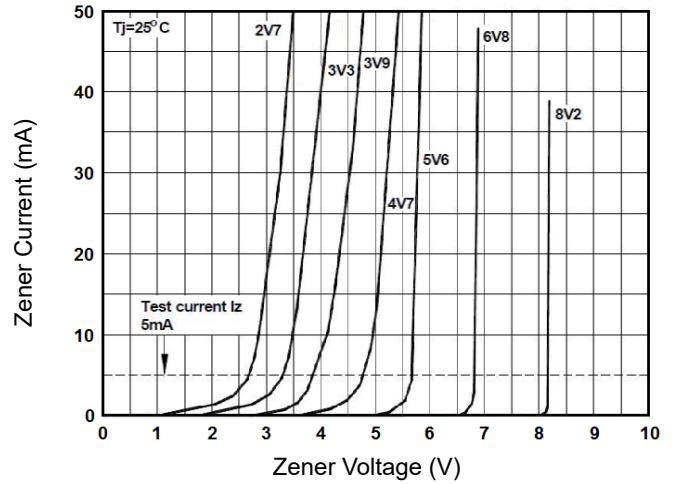
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CHARACTERISTIC CURVES

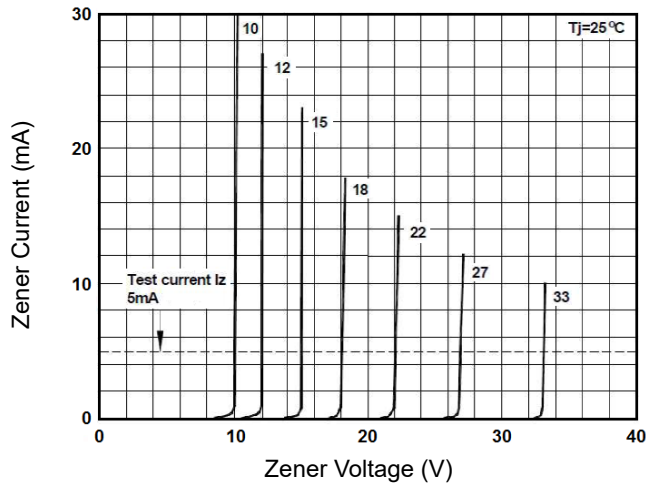
Power Derating



Typical Zener Breakdown Characteristics



Typical Zener Breakdown Characteristics



*Specifications subject to change without notice.