

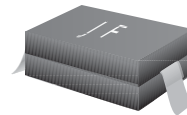
### FEATURES

- Total power dissipation: max. 300 mW
- Small plastic package suitable for surface mounted design
- Tolerance approximately  $\pm 5\%$
- High temperature soldering guaranteed:  $260^{\circ}\text{C}/10$  seconds at terminals
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC

### SOD-323FL



### SOD-323



### MECHANICAL DATA

- Case: SOD-323 plastic case
- Weight: Approx. 0.004 gram

### ABSOLUTE MAXIMUM RATINGS(LIMITING VALUES) ( $T_A=25^{\circ}\text{C}$ )

	Symbols	Value	Units
Zener current see table "Characteristics"			
Power dissipation	$P_{\text{tot}}$	300	mW
Junction temperature	$T_J$	150	$^{\circ}\text{C}$
Storage temperature range	$T_{\text{STG}}$	-55 to +150	$^{\circ}\text{C}$

### ELECTRICAL CHARACTERISTICS ( $T_A=25^{\circ}\text{C}$ )

	Symbols	Min	Typ	Max	Units
Thermal resistance junction to ambient	$R_{\theta\text{JA}}$			300	K/W
Forward voltage at $I_F=10\text{mA}$	$V_F$			0.9	V

# MM3Z... SILICON PLANAR ZENER DIODES

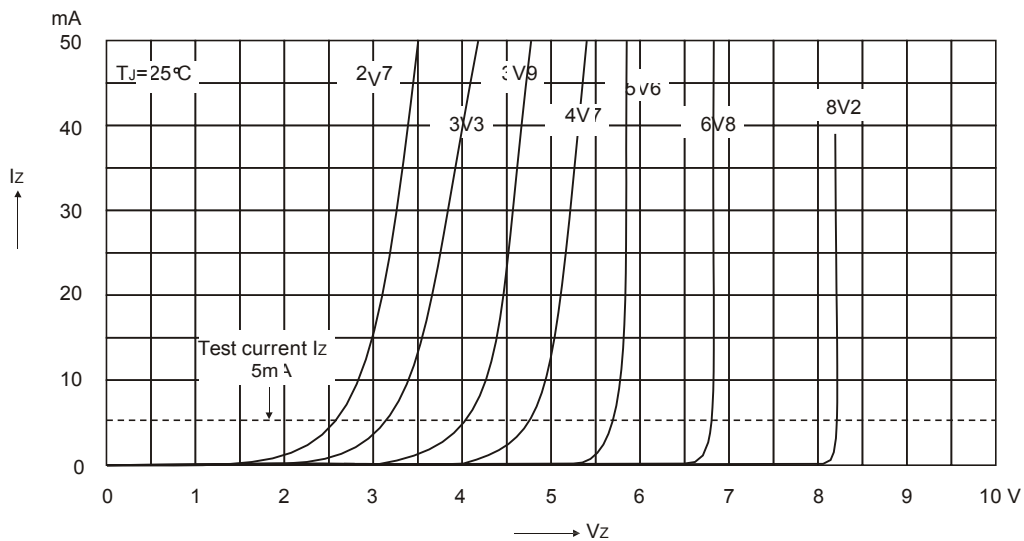
Type	Zener Voltage range <sup>1)</sup>			Dynamic resistance <sup>2)</sup>		Reverse leakage current		Temp Coefficient of zener voltage
	V <sub>ZNOM</sub>	I <sub>ZT</sub> for V <sub>ZT</sub>		r <sub>ZK</sub> and r <sub>ZJK</sub> at I <sub>ZK</sub>		I <sub>R</sub> and I <sub>R</sub> at V <sub>R</sub>		TK <sub>VZ</sub>
	V	mA	V	Ω	mA	μA	V	%/K
MM3Z2V0	2.0	5	1.80...2.15	100	5	120	0.5	-0.09...-0.06
MM3Z2V2	2.2	5	2.08...2.33	100	5	120	0.7	-0.09...-0.06
MM3Z2V4	2.4	5	2.28...2.56	100	5	120	1	-0.09...-0.06
MM3Z2V7	2.7	5	2.5...2.9	110	5	120	1	-0.09...-0.06
MM3Z3V0	3.0	5	2.8...3.2	120	5	50	1	-0.08...-0.05
MM3Z3V3	3.3	5	3.1...3.5	130	5	20	1	-0.08...-0.05
MM3Z3V6	3.6	5	3.4...3.8	130	5	10	1	-0.08...-0.05
MM3Z3V9	3.9	5	3.7...4.1	130	5	5	1	-0.08...-0.05
MM3Z4V3	4.3	5	4...4.6	130	5	5	1	-0.06...-0.03
MM3Z4V7	4.7	5	4.4...5	130	5	2	1	-0.05...+0.02
MM3Z5V1	5.1	5	4.8...5.4	130	5	2	1.5	-0.02...+0.02
MM3Z5V6	5.6	5	5.2...6	80	5	1	2.5	-0.05...+0.05
MM3Z6V2	6.2	5	5.8...6.6	50	5	1	3	0.03...0.06
MM3Z6V8	6.8	5	6.4...7.2	30	5	0.5	3.5	0.03...0.07
MM3Z7V5	7.5	5	7...7.9	30	5	0.5	4	0.03...0.07
MM3Z8V2	8.2	5	7.7...8.7	30	5	0.5	5	0.03...0.08
MM3Z9V1	9.1	5	8.5...9.6	30	5	0.5	6	0.03...0.09
MM3Z10	10	5	9.4...10.6	30	5	0.1	7	0.03...0.1
MM3Z11	11	5	10.4...11.6	30	5	0.1	8	0.03...0.11
MM3Z12	12	5	11.4...12.7	35	5	0.1	9	0.03...0.11
MM3Z13	13	5	12.4...14.1	35	5	0.1	10	0.03...0.11
MM3Z15	15	5	13.8...15.6	40	5	0.1	11	0.03...0.11
MM3Z16	16	5	15.3...17.1	40	5	0.1	12	0.03...0.11
MM3Z18	18	5	16.8...19.1	45	5	0.1	13	0.03...0.11
MM3Z20	20	5	18.8...21.2	50	5	0.1	15	0.03...0.11
MM3Z22	22	5	20.8...23.3	55	5	0.1	17	0.04...0.12
MM3Z24	24	5	22.8...25.6	60	5	0.1	19	0.04...0.12
MM3Z27	27	5	25.1...28.9	70	2	0.1	21	0.04...0.12
MM3Z30	30	5	28...32	80	2	0.1	23	0.04...0.12
MM3Z33	33	5	31...35	80	2	0.1	25	0.04...0.12
MM3Z36	36	5	34...38	90	2	0.1	27	0.04...0.12
MM3Z39	39	2.5	37...41	100	2	2	30	0.04...0.12
MM3Z43	43	2.5	40...46	130	2	2	33	0.04...0.12
MM3Z47	47	2.5	44...50	150	2	2	36	0.04...0.12
MM3Z51	51	2.5	48...54	180	2	1	39	0.04...0.12
MM3Z56	56	2.5	52...60	180	2	1	43	0.04...0.12
MM3Z62	62	2.5	58...66	200	2	0.2	47	0.04...0.12
MM3Z68	68	2.5	64...72	250	2	0.2	52	0.04...0.12
MM3Z75	75	2.5	70...79	300	2	0.2	57	0.04...0.12
MM3Z82	82	2.5	77...87	300	2	0.2	63	0.05...0.12
MM3Z91	91	1	85...96	700	1	0.2	69	0.05...0.12
MM3Z100	100	1	94...106	700	1	0.2	76	0.05...0.12
MM3Z110	110	1	104...116	800	1	0.2	84	0.05...0.12
MM3Z120	120	1	114...127	900	1	0.2	91	0.05...0.12

1) Vz is tested with pulses tp=20ms.

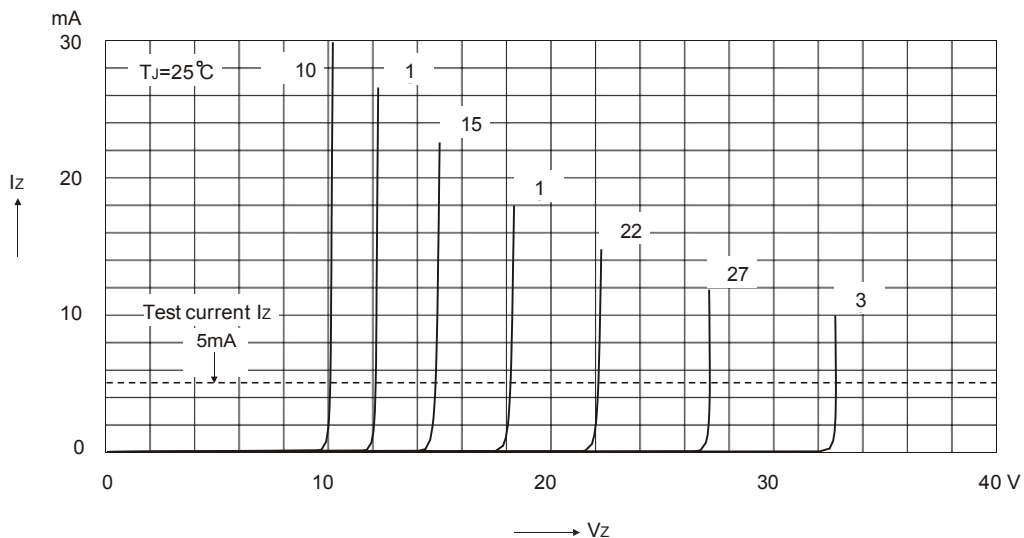
2) Zz is measured at I<sub>Z</sub> by given a very small A. C. current signal.

# MM3Z... SILICON PLANAR ZENER DIODES

## BREAKDOWN CHARACTERISTICS AT $T_J = \text{CONSTANT}$ (PULSED)

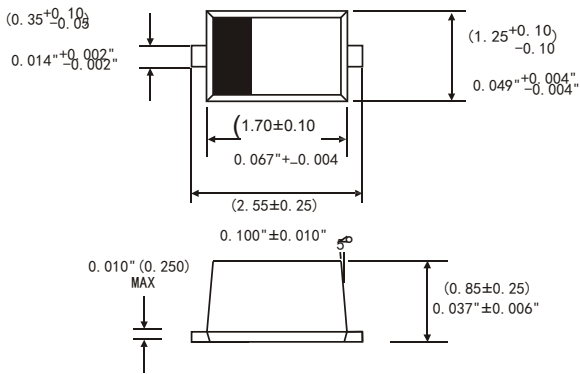


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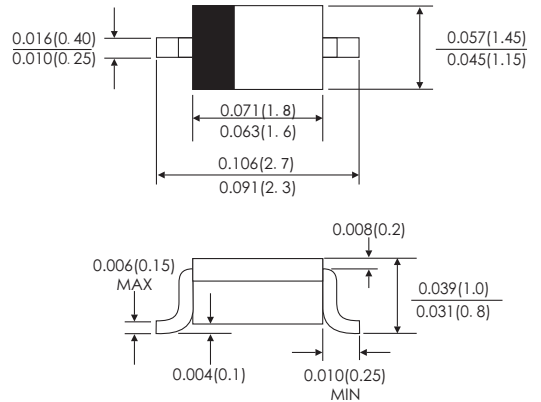
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## SOD-323FL



Dimensions in inches and (millimeters)

## SOD-323



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