

FEATURES

- Total power dissipation: max. 500 mW
- Small plastic package suitable for surface mounted design
- Tolerance approximately $\pm 5\%$
- High temperature soldering guaranteed: 260°C/10 seconds at terminals
- Component in accordance to RoHS 2011/65/EU

SOD-123FL



SOD-123



MECHANICAL DATA

- Case: SOD-123 plastic case

ABSOLUTE MAXIMUM RATINGS(LIMITING VALUES) (TA=25°C)

	<i>Symbols</i>	<i>Value</i>	<i>Units</i>
Zener current see table "Characteristics"			
Power dissipation	P _{tot}	500	mW
Junction temperature	T _J	150	°C
Storage temperature range	T _{STG}	-55 to +150	°C

ELECTRICAL CHARACTERISTICS (TA=25°C)

	<i>Symbols</i>	<i>Min</i>	<i>Typ</i>	<i>Max</i>	<i>Units</i>
Thermal resistance junction to ambient	R _{θJA}			340 ¹⁾	K/W
Forward voltage at I _F =10mA	V _F			0.9	V

1) Valid provided that a distance of 8mm from case is kept at ambient temperature

MM1Z... SILICON PLANAR ZENER DIODES

ELECTRICAL CHARACTERISTICS (TA=25°C)

Type	Zener Voltage ¹⁾			Zener Impedance				Leakage Current	
	V _{ZT} (V)			Z _{ZT}	I _{ZT}	Z _{ZK}	I _{ZK}	I _R (μA)	V _R
	Min.	Typ.	Max.	(Ω)	(mA)	(Ω)	(mA)	Max.	(V)
MM1Z2V4	2.28	2.4	2.52	100	5	600	1	50	1.0
MM1Z2V7	2.57	2.7	2.84	100	5	600	1	20	1.0
MM1Z3V0	2.85	3.0	3.15	95	5	600	1	10	1.0
MM1Z3V3	3.14	3.3	3.47	95	5	600	1	5	1.0
MM1Z3V6	3.42	3.6	3.78	90	5	600	1	5	1.0
MM1Z3V9	3.71	3.9	4.10	90	5	600	1	3	1.0
MM1Z4V3	4.09	4.3	4.52	90	5	600	1	3	1.0
MM1Z4V7	4.47	4.7	4.94	80	5	500	1	3	2.0
MM1Z5V1	4.85	5.1	5.36	60	5	480	1	2	2.0
MM1Z5V6	5.32	5.6	5.88	40	5	400	1	1	2.0
MM1Z6V2	5.89	6.2	6.51	10	5	150	1	3	4.0
MM1Z6V8	6.46	6.8	7.14	15	5	80	1	2	4.0
MM1Z7V5	7.13	7.5	7.88	15	5	50	1	1	5.0
MM1Z8V2	7.79	8.2	8.61	15	5	50	1	0.7	5.0
MM1Z9V1	8.65	9.1	9.56	15	5	100	1	0.5	6.0
MM1Z10	9.50	10.0	10.50	20	5	150	1	0.2	7.0
MM1Z11	10.45	11.0	11.55	20	5	150	1	0.1	8.0
MM1Z12	11.40	12.0	12.60	25	5	150	1	0.1	8.0
MM1Z13	12.35	13.0	13.65	30	5	170	1	0.1	8.0
MM1Z15	14.25	15.0	15.75	30	5	200	1	0.1	10.5
MM1Z16	15.20	16.0	16.80	40	5	200	1	0.1	11.2
MM1Z18	17.10	18.0	18.90	45	5	225	1	0.1	12.6
MM1Z20	19.00	20.0	21.00	55	5	225	1	0.1	14.0
MM1Z22	20.90	22.0	23.10	55	5	250	1	0.1	15.4
MM1Z24	22.80	24.0	25.20	70	5	250	1	0.1	16.8
MM1Z27	25.65	27.0	28.35	80	2	300	0.5	0.1	18.9
MM1Z30	28.50	30.0	31.50	80	2	300	0.5	0.1	21.0
MM1Z33	31.35	33.0	34.65	80	2	325	0.5	0.1	23.1
MM1Z36	34.20	36.0	37.80	90	2	350	0.5	0.1	25.2
MM1Z39	37.05	39.0	40.95	130	2.0	350	0.5	0.1	27.3
MM1Z43	40.85	43.0	45.15	130	2.0	350	0.5	0.1	29.4
MM1Z47	44.65	47.0	49.35	170	2.0	1000	0.25	0.1	36
MM1Z51	48.45	51.0	53.55	180	2.0	1300	0.25	0.1	39
MM1Z56	53.20	56.0	58.80	200	2.0	1400	0.25	0.1	43
MM1Z62	58.90	62.0	65.10	225	2.0	1400	0.25	0.1	47
MM1Z68	64.60	68.0	71.40	240	2.0	1600	0.25	0.1	52
MM1Z75	71.25	75.0	78.75	265	2.0	1700	0.25	0.1	56

¹⁾ Tested with pulses tp = 10 ms.

MM1Z... SILICON PLANAR ZENER DIODES

RATING AND CHARACTERISTIC CURVES

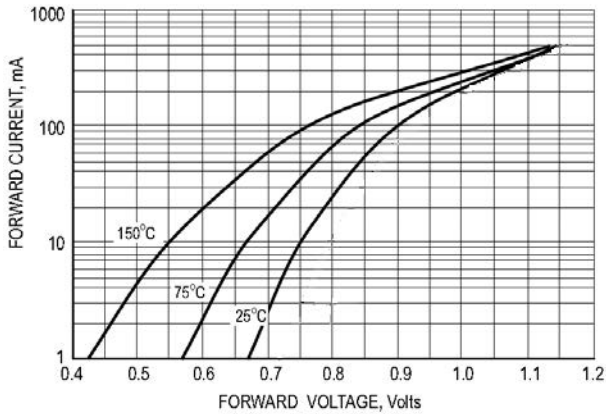


Fig.1 TYPICAL FORWARD VOLTAGE

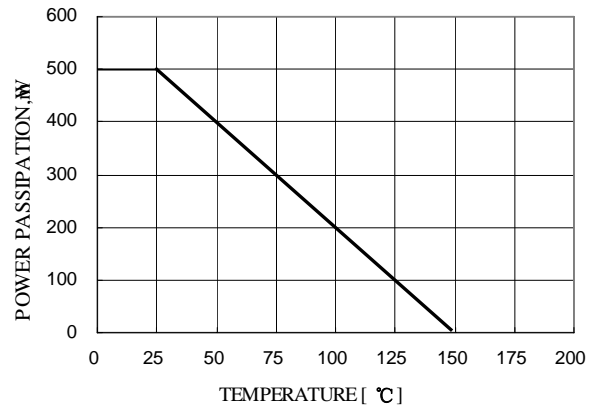


Fig.2 POWER DISSIPATION VS. AMBIENT TEMP.

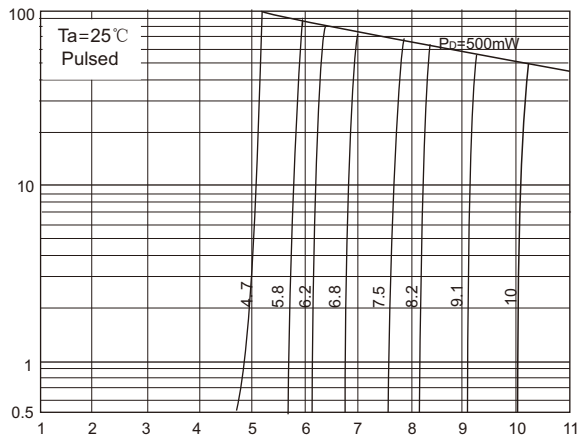


Fig.3 ZENER BREAKDOWN CHARACTERISTICS

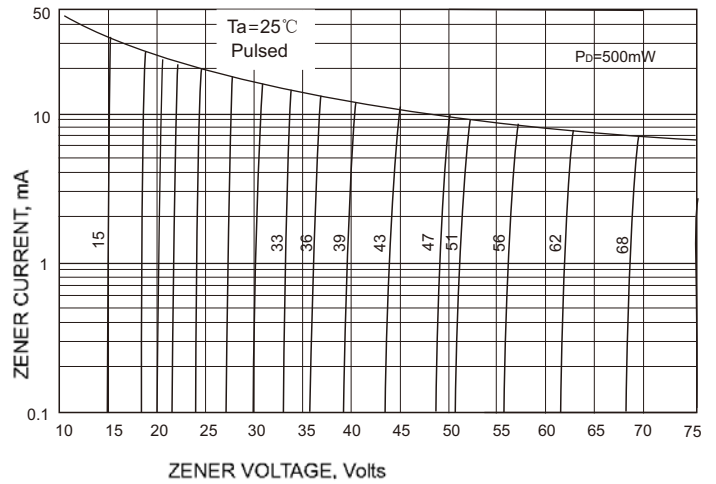
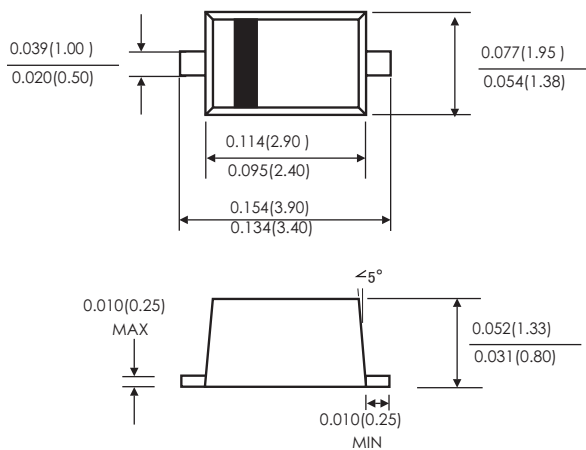


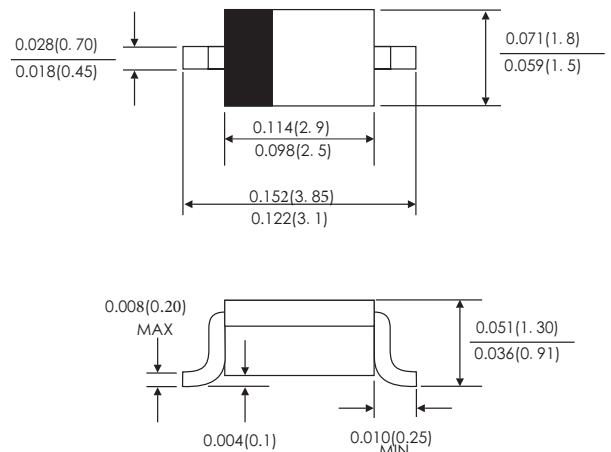
Fig.4 ZENER BREAKDOWN CHARACTERISTICS

SOD-123FL



Dimensions in inches and (millimeters)

SOD-123



Dimensions in inches and (millimeters)

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