

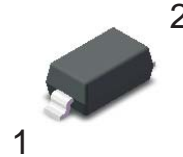
Zener Diodes

1KZ2E2V0C ~ 1KZ2E75C

■ Features

- Total power dissipation: Max. 500mW.
- Wide zener reverse voltage range 2.0V to 75V.
- Small plastic package suitable for surface mounted design.
- Tolerance approximately $\pm 5\%$

SOD-123



Top View

Simplified outline SMA and Symbol

PIN DESCRIPTION

PIN	DESCRIPTION
1	Cathode
2	Anode

■ Absolute Maximum Ratings @ 25°C Unless Otherwise Specified

Parameter	Symbol	Value	Unit
Power Dissipation	P_{tot}	500	mW
Forward Voltage at $I_F = 10\text{ mA}$	V_F	0.9	V
Typical thermal resistance junction to ambient ^{*1}	$R_{\theta JA}$	250	°C/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55 to +150	°C

*1. Thermal resistance from junction to ambient at P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper areas pads.

Fig.1 Maximum Continuous Power Derating

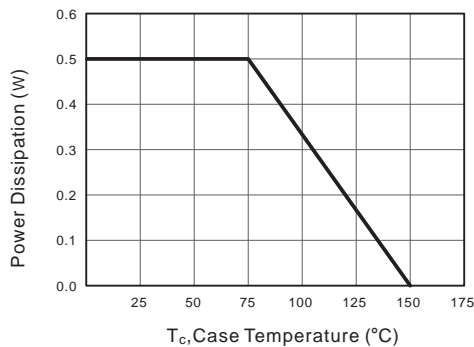
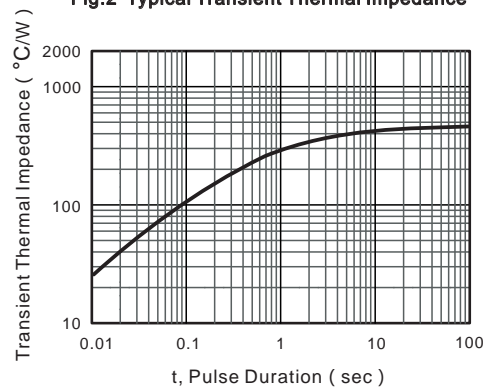


Fig.2 Typical Transient Thermal Impedance



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■ Electrical Characteristics Ta = 25°C

Type	Marking	Zener Voltage Range ^{*1}			I _{ZT} (mA)	Dynamic Impedance Z _{ZT} (at I _{ZT}) Max (Ω)	Reverse Current	
		V _{ZT} (at I _{ZT})					I _R Max (μA)	at V _R (V)
		Min (V)	Nom (V)	Max (V)				
1KZ2E2V0C	2V0Z	1.8	2.0	2.15	5	100	120	0.5
1KZ2E2V2C	2V2Z	2.08	2.2	2.33	5	100	120	0.7
1KZ2E2V4C	2V4Z	2.28	2.4	2.56	5	100	120	1
1KZ2E2V7C	2V7Z	2.5	2.7	2.9	5	110	120	1
1KZ2E3V0C	3V0Z	2.8	3.0	3.2	5	120	50	1
1KZ2E3V3C	3V3Z	3.1	3.3	3.5	5	130	20	1
1KZ2E3V6C	3V6Z	3.4	3.6	3.8	5	130	10	1
1KZ2E3V9C	3V9Z	3.7	3.9	4.1	5	130	5	1
1KZ2E4V3C	4V3Z	4	4.3	4.6	5	130	5	1
1KZ2E4V7C	4V7Z	4.4	4.7	5	5	130	2	1
1KZ2E5V1C	5V1Z	4.8	5.1	5.4	5	130	2	1.5
1KZ2E5V6C	5V6Z	5.2	5.6	6	5	80	1	2.5
1KZ2E6V2C	6V2Z	5.8	6.2	6.6	5	50	1	3
1KZ2E6V8C	6V8Z	6.4	6.8	7.2	5	30	0.5	3.5
1KZ2E7V5C	7V5Z	7	7.5	7.9	5	30	0.5	4
1KZ2E8V2C	8V2Z	7.7	8.2	8.7	5	30	0.5	5
1KZ2E9V1C	9V1Z	8.5	9.1	9.6	5	30	0.5	6
1KZ2E10C	10VZ	9.4	10	10.6	5	30	0.1	7
1KZ2E11C	11VZ	10.4	11	11.6	5	30	0.1	8
1KZ2E12C	12VZ	11.4	12	12.7	5	35	0.1	9
1KZ2E13C	13VZ	12.4	13	14.1	5	35	0.1	10
1KZ2E15C	15VZ	13.8	15	15.6	5	40	0.1	11
1KZ2E16C	16VZ	15.3	16	17.1	5	40	0.1	12
1KZ2E18C	18VZ	16.8	18	19.1	5	45	0.1	13
1KZ2E20C	20VZ	18.8	20	21.2	5	50	0.1	15
1KZ2E22C	22VZ	20.8	22	23.3	5	55	0.1	17
1KZ2E24C	24VZ	22.8	24	25.6	5	60	0.1	19
1KZ2E27C	27VZ	25.1	27	28.9	5	70	0.1	21
1KZ2E30C	30VZ	28	30	32	5	80	0.1	23
1KZ2E33C	33VZ	31	33	35	5	80	0.1	25
1KZ2E36C	36VZ	34	36	38	5	90	0.1	27
1KZ2E39C	39VZ	37	39	41	2.5	100	2	30
1KZ2E43C	43VZ	40	43	46	2.5	130	2	33
1KZ2E47C	47VZ	44	47	50	2.5	150	2	36
1KZ2E51C	51VZ	48	51	54	2.5	180	1	39
1KZ2E56C	56VZ	52	56	60	2.5	180	1	43
1KZ2E62C	62VZ	58	62	66	2.5	200	0.2	47
1KZ2E68C	68VZ	64	68	72	2.5	250	0.2	52
1KZ2E75C	75VZ	70	75	79	2.5	300	0.2	57

*1. V_{ZT} is tested with pulses (20 ms)

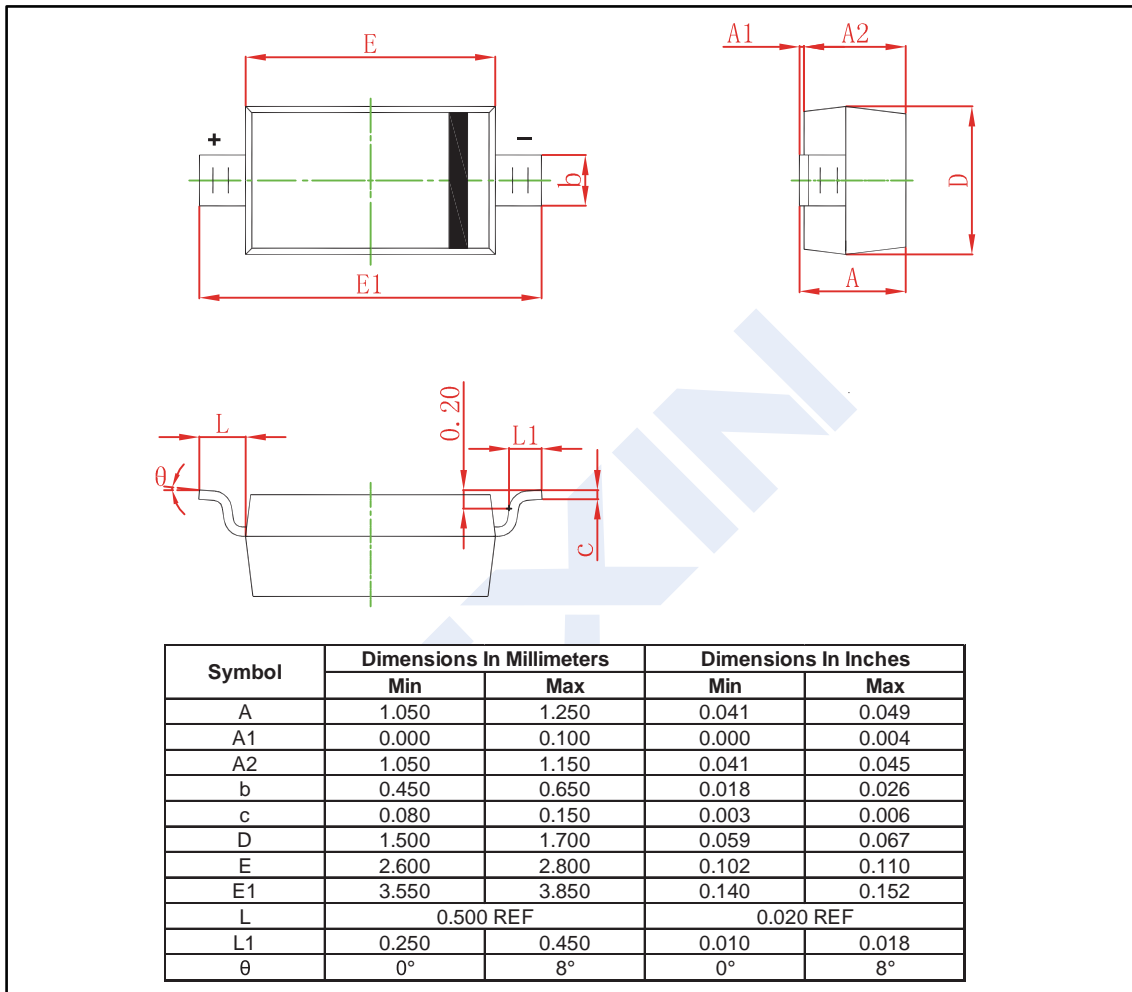
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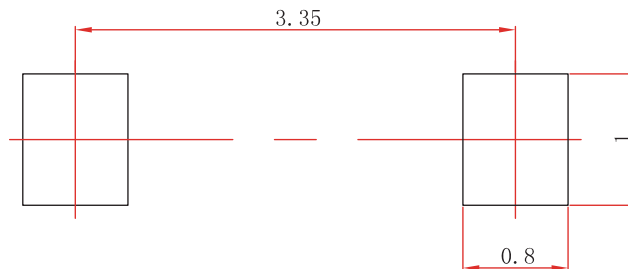
■ Package Outline Dimensions

Plastic surface mounted package; 2 leads

SOD-123



■ The Recommended Mounting Pad Size

**Note:**

1. Controlling dimension in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.