



Silicon Planar Zener Diodes

FEATURES

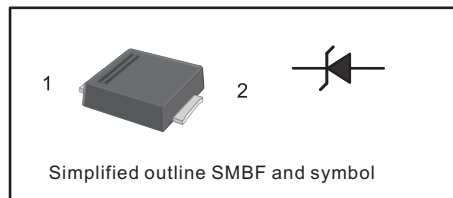
- Total power dissipation: Max. 2 W.
- Wide zener reverse voltage range 6.8V to 200V.
- Small plastic package suitable for surface mounted design.

MECHANICAL DATA

- Case: SMBF
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 57mg (0.002oz)

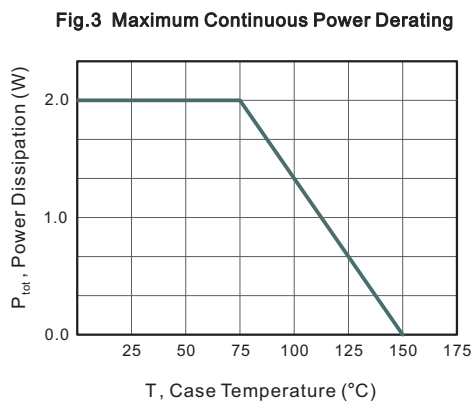
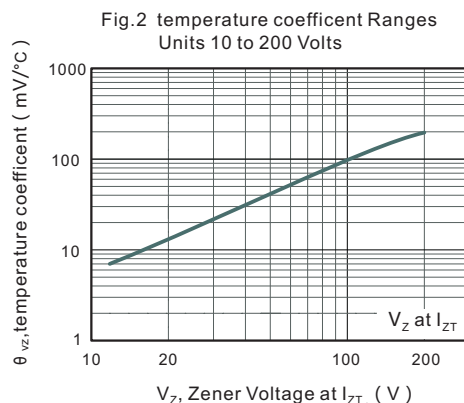
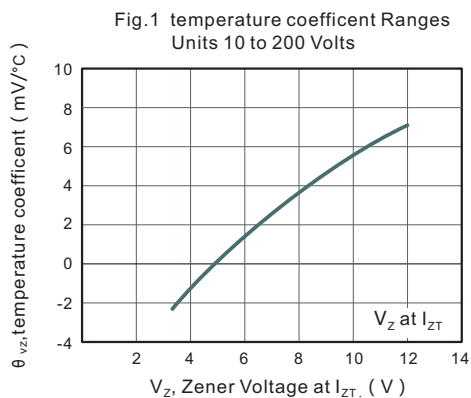
PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Absolute Maximum Ratings And Characteristics (Ta = 25 °C)

Parameter	Symbol	Value	Unit
Maximum Steady State Power Dissipation at T _c =75°C	P _{tot}	2	W
Typical Thermal Resistance Junction to Case	R _{θJC}	30	°C/W
Forward Voltage at I _F = 200 mA	V _F	1.2	V
Junction Temperature Range	T _j	-55 to +150	°C
Storage Temperature Range	T _{stg}	-55 to +150	°C





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

Type (note1)	Marking (note1)	Zener Voltage Range (note2)			at I_{ZT} (mA)	Dynamic Impedance Z_{ZT} (at I_{ZT}) Max (Ω)	Reverse Current		Admissible Zener Current I_{ZM} (mA)
		V_{ZT} (at I_{ZT})					I_R Max (μA)	at V_R (V)	
		Min (V)	Nom (V)	Max (V)					
SMBF2E6V8	2E6V8	6.46	6.8	7.14	73.5	2.0	5	4.0	280
SMBF2E7V5	2E7V5	7.13	7.5	7.88	66.5	2.0	5	5.0	253
SMBF2E8V2	2E8V2	7.79	8.2	8.61	61.4	2.0	5	6.0	232
SMBF2E8V7	2E8V7	8.27	8.7	9.14	58.2	2.0	4	6.6	218
SMBF2E9V1	2E9V1	8.65	9.1	9.56	55.3	3.0	3	7.0	209
SMBF2E10	2E10	9.50	10	10.5	50.6	4.0	3	7.6	190
SMBF2E11	2E11	10.5	11	11.5	45.5	4.0	3	8.4	173
SMBF2E12	2E12	11.4	12	12.6	41.5	4.5	3	9.1	158
SMBF2E13	2E13	12.3	13	14.6	38.5	5.0	0.5	9.9	136
SMBF2E15	2E15	14.2	15	15.7	33.4	7.0	0.5	11.4	126
SMBF2E16	2E16	15.2	16	16.8	31.2	8.0	0.5	12.2	119
SMBF2E17	2E17	16.2	17	17.8	29.4	9.0	0.5	13.4	112
SMBF2E18	2E18	17.1	18	18.9	27.8	10.0	0.5	13.7	105
SMBF2E20	2E20	19.0	20	21.0	25.0	11.0	0.5	15.2	95
SMBF2E22	2E22	20.9	22	23.1	22.8	12.0	0.5	16.7	86
SMBF2E24	2E24	22.8	24	25.2	20.8	13.0	0.5	18.2	79
SMBF2E27	2E27	25.6	27	28.3	18.5	18.0	0.5	20.6	70
SMBF2E30	2E30	28.5	30	31.5	16.6	20.0	0.5	22.8	63
SMBF2E33	2E33	31.4	33	34.6	15.1	23.0	0.5	25.4	57
SMBF2E36	2E36	34.2	36	37.8	13.9	25.0	0.5	27.4	52
SMBF2E39	2E39	37.1	39	40.9	12.8	30.0	0.5	29.7	48
SMBF2E43	2E43	40.9	43	45.1	11.6	35.0	0.5	32.7	44
SMBF2E47	2E47	44.7	47	49.3	10.6	40.0	0.5	35.8	40
SMBF2E51	2E51	48.5	51	53.5	9.80	48.0	0.5	38.8	37
SMBF2E56	2E56	53.2	56	58.8	9.00	55.0	0.5	42.6	34
SMBF2E62	2E62	58.9	62	65.1	8.10	60.0	0.5	47.1	30
SMBF2E68	2E68	64.6	68	71.4	7.40	75.0	0.5	51.7	28
SMBF2E75	2E75	71.3	75	78.7	6.70	90.0	0.5	56.0	25
SMBF2E82	2E82	77.9	82	86.2	6.10	100	0.5	62.2	23
SMBF2E91	2E91	86.3	91	95.5	5.52	125	0.5	69.2	20
SMBF2E100	2E100	95.0	100	105	5.02	175	0.5	76.0	19
SMBF2E110	2E110	104	110	115	4.53	250	0.5	83.6	17
SMBF2E120	2E120	115	120	126	4.25	325	0.5	91.2	15
SMBF2E130	2E130	123	130	136	3.86	400	0.5	98.8	14
SMBF2E150	2E150	142	150	157	3.34	575	0.5	114	12
SMBF2E160	2E160	152	160	168	3.16	650	0.5	121	11
SMBF2E180	2E180	171	180	189	2.81	725	0.5	136	10
SMBF2E200	2E200	190	200	210	2.55	900	0.5	152	9

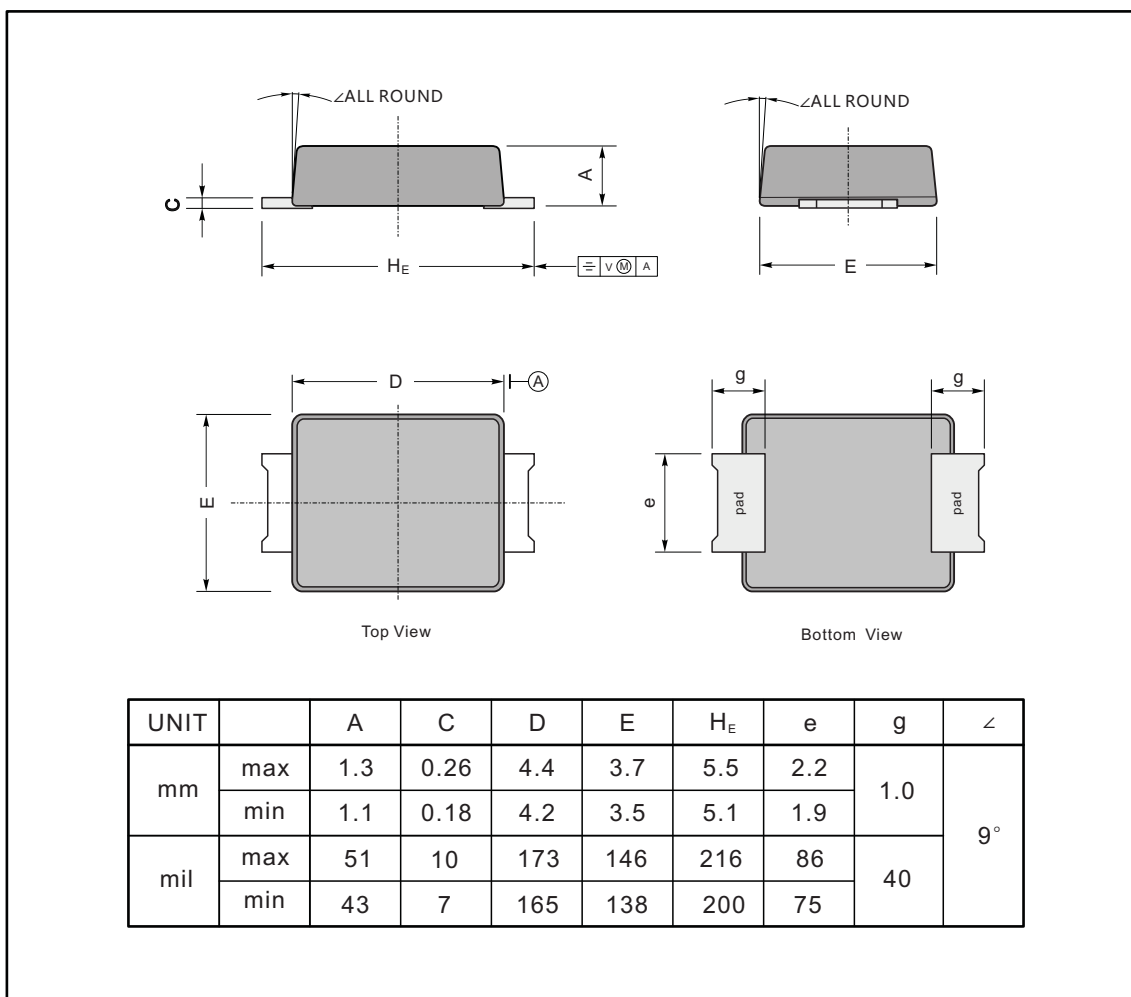
(1) V_{ZT} is tested with pulses (20 ms)



PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SMBF



The recommended mounting pad size

