

Z2SMB6.8-Z2SMB200 SURFACE MOUNT SILICON ZENER DIODES

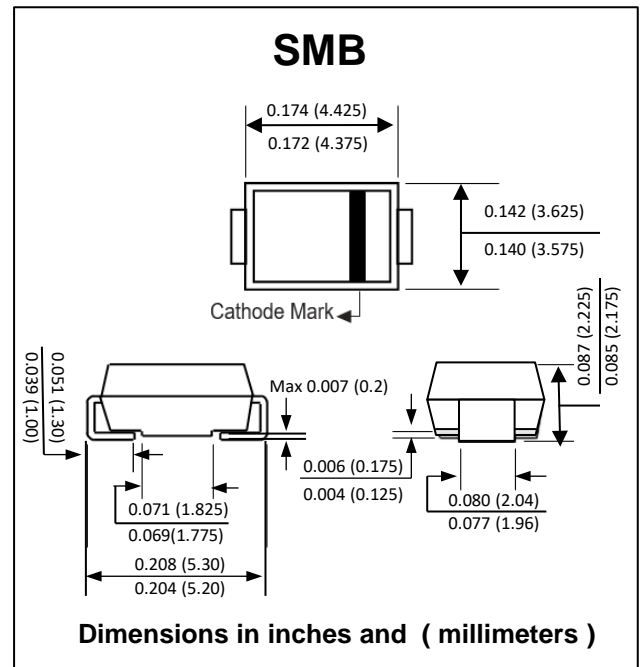
V_Z : 6.8 - 200 Volts
P_D : 2 Watts

FEATURES :

- * Complete Voltage Range 6.8 to 200 Volts
- * High peak reverse power dissipation
- * High reliability
- * Low leakage current
- * Pb / RoHS Free

MECHANICAL DATA

- * Case : SMB Molded plastic
- * Epoxy : UL94V-0 rate flame retardant
- * Lead : Lead Formed for Surface Mount
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.108 gram



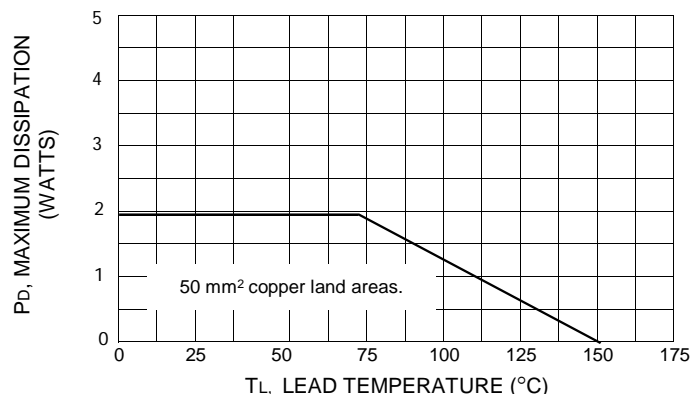
MAXIMUM RATINGS

Rating at 25 °C ambient temperature unless otherwise specified

Rating	Symbol	Value	Unit
Maximum Power Dissipation at T _L = 50 °C (Note1)	P _{tot}	2.0	W
Non-repetitive peak reverse	P _{ZSM}	40	W
Junction Temperature Range	T _J	- 55 to + 150	°C
Storage Temperature Range	T _s	- 55 to + 150	°C

Note : (1) T_L = Lead temperature at 50 mm² copper land areas.

Fig. 1 POWER TEMPERATURE DERATING CURVE





ELECTRICAL CHARACTERISTICS (Rating at 25 °C ambient temperature unless otherwise specified)

TYPE	Zener Voltage ²⁾			Maximum Zener Impedance		Minimum Reverse Leakage Current		Maximum DC Zener Current
	Vz @ IZT		IZT (mA)	ZZT @ IZT (Ω)	IZT (mA)	IR @ VR		IZM (mA)
	Min.(V)	Max.(V)				(μA)	(V)	
Z2SMB6.8	6.4	7.2	100	2	100	1	2.0	278
Z2SMB7.5	7.0	7.9	100	2	100	1	2.0	253
Z2SMB8.2	7.7	8.7	100	2	100	1	3.5	230
Z2SMB9.1	8.5	9.6	50	4	50	1	3.5	208
Z2SMB10	9.4	10.6	50	4	50	1	5	189
Z2SMB11	10.4	11.6	50	7	50	1	5	172
Z2SMB12	11.4	12.6	50	7	50	1	7	157
Z2SMB13	12.4	14.1	50	10	50	1	7	142
Z2SMB15	13.8	15.6	50	10	50	1	10	128
Z2SMB16	15.3	17.1	25	15	25	1	10	117
Z2SMB18	16.8	19.1	25	15	25	1	10	105
Z2SMB20	18.8	21.2	25	15	25	1	10	94
Z2SMB22	20.8	23.3	25	15	25	1	12	86
Z2SMB24	22.8	25.6	25	15	25	1	12	78
Z2SMB27	25.1	28.9	25	15	25	1	14	69
Z2SMB30	28	32	25	15	25	1	14	63
Z2SMB33	31	35	25	15	25	1	17	57
Z2SMB36	34	38	10	40	10	1	17	53
Z2SMB39	37	41	10	40	10	1	20	49
Z2SMB43	40	46	10	45	10	1	20	43
Z2SMB47	44	50	10	45	10	1	24	40
Z2SMB51	48	54	10	60	10	1	24	37
Z2SMB56	52	60	10	60	10	1	28	33
Z2SMB62	58	66	10	80	10	1	28	30
Z2SMB68	64	72	10	80	10	1	34	28
Z2SMB75	70	79	10	100	10	1	34	25
Z2SMB82	77	88	10	100	10	1	41	23
Z2SMB91	85	96	5	200	5	1	41	21
Z2SMB100	94	106	5	200	5	1	50	19
Z2SMB110	104	116	5	250	5	1	50	17
Z2SMB120	114	126	5	250	5	1	60	16
Z2SMB130	124	141	5	300	5	1	60	14
Z2SMB150	138	156	5	300	5	1	75	13
Z2SMB160	153	171	5	350	5	1	75	12
Z2SMB180	168	191	5	350	5	1	90	10
Z2SMB200	188	212	5	350	5	1	90	9

Notes :

- (1) The type number listed have a standard tolerance on the nominal zener voltage of ± 5%,
- (2) Tested with pulses tp = 20 ms