



FUKUCOM COMPANY LTD.

福 靈 有 限 公 司

FLAT P, 3/F., EVEREST INDUSTRIAL CENTRE, 396 KWUN TONG ROAD,
KWUN TONG, KOWLOON, HONG KONG.

TEL: 852-2790 0314 FAX: 852-2790 0206

MM5Z3V9B~MM5Z20B

SILICON PLANAR ZENER DIODES

FEATURES

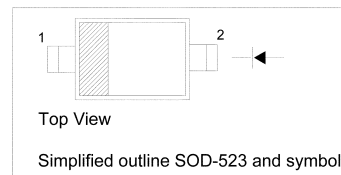
- Total power dissipation: max. 200 mW
- Small plastic package suitable for surface mounted design

DESCRIPTION

Silicon planar zener diode in a small plastic SMD SOD-523 package

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Power Dissipation	P_{tot}	200	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_s	-55 to +150	$^\circ\text{C}$

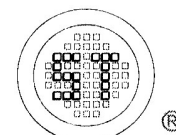
Characteristics at $T_{amb} = 25^\circ\text{C}$

Parameter	Symbol	Max.	Unit
Thermal Resistance Junction to Ambient Air	R_{thA}	0.3	K/mW
Forward Voltage at $I_F = 10\text{ mA}$	V_F	0.9	V

Type	Marking Code	Zener Voltage Range ¹⁾			Dynamic Impedance ²⁾		Reverse Leakage Current		Temp. coefficient of Zener Voltage
		V_{znom} V	I_{zT} mA	for V_{ZT} V	$Z_{ZT}(\text{Max})$ Ω	at I_z mA	$I_R(\text{Max})$ μA	at V_R V	TKvz %/K
MM5Z3V9B	JY	3.9	5	3.89...4.16	130	5	5	1	-0.08...-0.05
MM5Z4V3B	JZ	4.3	5	4.17...4.43	130	5	5	1	-0.06...-0.03
MM5Z4V7B	KA	4.7	5	4.55...4.75	130	5	2	1	-0.05...+0.02
MM5Z5V1B	KB	5.1	5	4.98...5.2	130	5	2	1.5	-0.02...+0.02
MM5Z5V6B	KC	5.6	5	5.49...5.73	80	5	1	2.5	-0.05...+0.05
MM5Z6V2B	KD	6.2	5	6.06...6.33	50	5	1	3	0.03...0.06
MM5Z6V8B	KE	6.8	5	6.65...6.93	30	5	0.5	3.5	0.03...0.07
MM5Z7V5B	KF	7.5	5	7.28...7.6	30	5	0.5	4	0.03...0.07
MM5Z8V2B	KH	8.2	5	8.02...8.36	30	5	0.5	5	0.03...0.08
MM5Z9V1B	KJ	9.1	5	8.85...9.23	30	5	0.5	6	0.03...0.09
MM5Z10B	KK	10	5	9.77...10.21	30	5	0.1	7	0.03...0.1
MM5Z11B	KM	11	5	10.76...11.22	30	5	0.1	8	0.03...0.11
MM5Z12B	KN	12	5	11.74...12.24	35	5	0.1	9	0.03...0.11
MM5Z13B	KP	13	5	12.91...13.49	35	5	0.1	10	0.03...0.11
MM5Z15B	KR	15	5	14.34...14.98	40	5	0.1	11	0.03...0.11
MM5Z16B	KX	16	5	15.85...16.51	40	5	0.1	12	0.03...0.11
MM5Z18B	KY	18	5	17.56...18.35	45	5	0.1	13	0.03...0.11
MM5Z20B	KZ	20	5	19.52...20.39	50	5	0.1	15	0.03...0.11

¹⁾ V_z is tested with pulses (20 ms).

²⁾ Z_{ZT} is measured at I_z by given a very small A.C. current signal.



SEMTECH

Dated : 03/05/2006



FUKUCOM COMPANY LTD.

福 靈 有 限 公 司

FLAT P, 3/F., EVEREST INDUSTRIAL CENTRE, 396 KWUN TONG ROAD,
KWUN TONG, KOWLOON, HONG KONG.

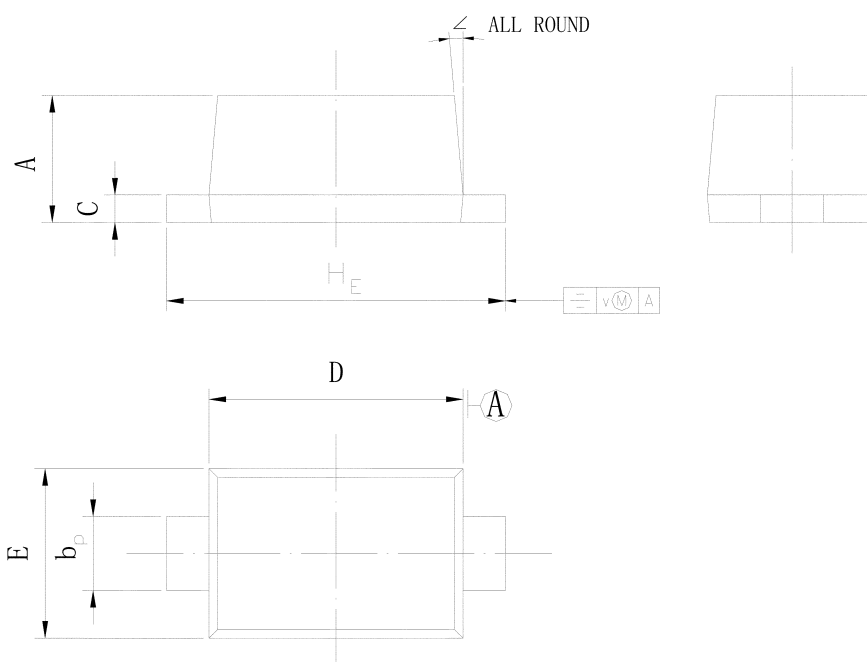
TEL: 852-2790 0314 FAX: 852-2790 0206

MM5Z3V9B~MM5Z20B

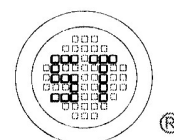
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-523



UNIT	A	b _D	C	D	E	H _E	v	∠
mm	0.70 0.60	0.4 0.3	0.135 0.127	1.25 1.15	0.85 0.75	1.7 1.5	0.1	5°



SEMTECH

Dated : 03/05/2006