

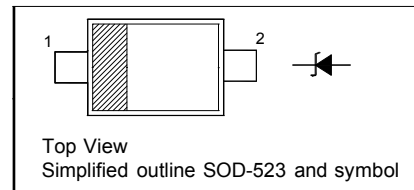
## SILICON PLANAR ZENER DIODES

### Features

- Power Dissipation: 200 mW
- Zener Voltage Tolerance:  $\pm 2\%$

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



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

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

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

Parameter	Symbol	Max.	Unit
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	635	$^\circ\text{C/W}$
Forward Voltage at $I_F = 10\text{ mA}$	$V_F$	0.9	V

**MM5Z2B4~MM5ZB75**

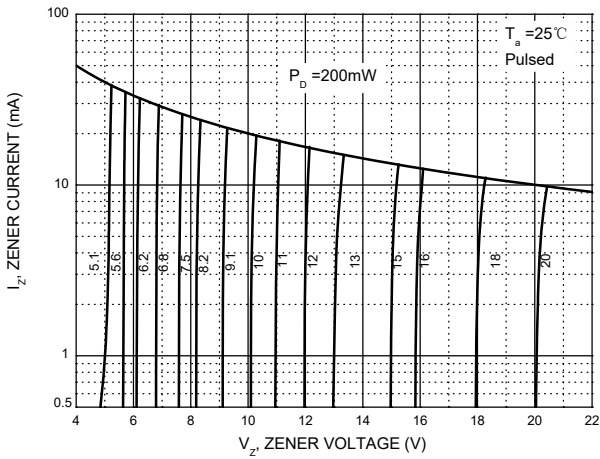
Type	Marking Code	Zener Voltage Range <sup>1)</sup>			Dynamic Impedance		Reverse Leakage Current	
		V <sub>znom</sub>	I <sub>ZT</sub>	for V <sub>ZT</sub>	Z <sub>ZT</sub> (Max.)	at I <sub>Z</sub>	I <sub>R</sub> (Max.)	at V <sub>R</sub>
		V	mA	V	Ω	mA	uA	V
MM5Z2B4	XY	2.4	5	2.352...2.448	100	5	120	1
MM5Z2B7	XZ	2.7	5	2.646...2.754	110	5	120	1
MM5Z3B0	FR	3.0	5	2.94...3.06	120	5	50	1
MM5Z3B3	FX	3.3	5	3.234...3.366	130	5	20	1
MM5Z3B6	FY	3.6	5	3.528...3.672	130	5	10	1
MM5Z3B9	FZ	3.9	5	3.822...3.978	130	5	5	1
MM5Z4B3	HA	4.3	5	4.214...4.386	130	5	5	1
MM5Z4B7	HB	4.7	5	4.606...4.794	130	5	2	1
MM5Z5B1	HC	5.1	5	4.998...5.202	130	5	2	1.5
MM5Z5B6	HD	5.6	5	5.488...5.712	80	5	1	2.5
MM5Z6B2	HE	6.2	5	6.076...6.324	50	5	1	3
MM5Z6B8	HF	6.8	5	6.664...6.936	30	5	0.5	3.5
MM5Z7B5	HH	7.5	5	7.35...7.65	30	5	0.5	4
MM5Z8B2	HJ	8.2	5	8.036...8.364	30	5	0.5	5
MM5Z9B1	HK	9.1	5	8.918...9.282	30	5	0.5	6
MM5ZB10	HM	10	5	9.8...10.2	30	5	0.1	7
MM5ZB11	HN	11	5	10.78...11.22	30	5	0.1	8
MM5ZB12	HP	12	5	11.76...12.24	35	5	0.1	9
MM5ZB13	HR	13	5	12.74...13.26	35	5	0.1	10
MM5ZB15	HX	15	5	14.7...15.3	40	5	0.1	11
MM5ZB16	HY	16	5	15.68...16.32	40	5	0.1	12
MM5ZB18	HZ	18	5	17.64...18.36	45	5	0.1	13
MM5ZB20	JA	20	5	19.6...20.4	50	5	0.1	15
MM5ZB22	JB	22	5	21.56...22.44	55	5	0.1	17
MM5ZB24	JC	24	5	23.52...24.48	60	5	0.1	19
MM5ZB27	JD	27	5	26.46...27.54	70	2	0.1	21
MM5ZB30	JE	30	5	29.4...30.6	80	2	0.1	23
MM5ZB33	JF	33	5	32.34...33.66	80	2	0.1	25
MM5ZB36	JH	36	5	35.28...36.72	90	2	0.1	27
MM5ZB39	JJ	39	2.5	38.22...39.78	100	2	2	30
MM5ZB43	JK	43	2.5	42.14...43.86	130	2	2	33
MM5ZB47	JM	47	2.5	46.06...47.94	150	2	2	36
MM5ZB51	YA	51	2.5	49.98...52.02	180	2	1	39
MM5ZB56	YB	56	2.5	54.88...57.12	180	2	1	43
MM5ZB62	YC	62	2.5	60.76...63.24	200	2	0.2	47
MM5ZB68	YD	68	2.5	66.64...69.36	250	2	0.2	52
MM5ZB75	YE	75	2.5	73.5...76.5	300	2	0.2	57

<sup>1)</sup> Tested with pulses t<sub>p</sub> = 20 ms.

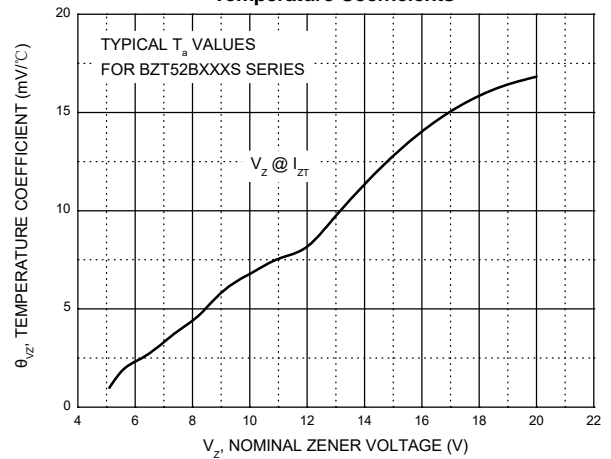
## Typical Characteristics

Notes: Our company currently provide 5.1 V - 20 V products only

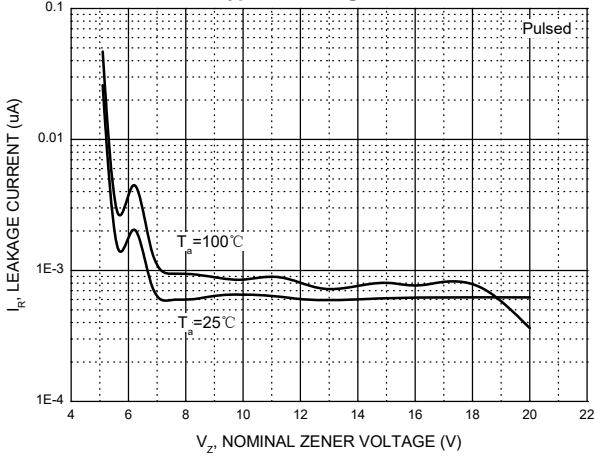
**Zener Characteristics ( $V_z$  5.1V to 20 V)**



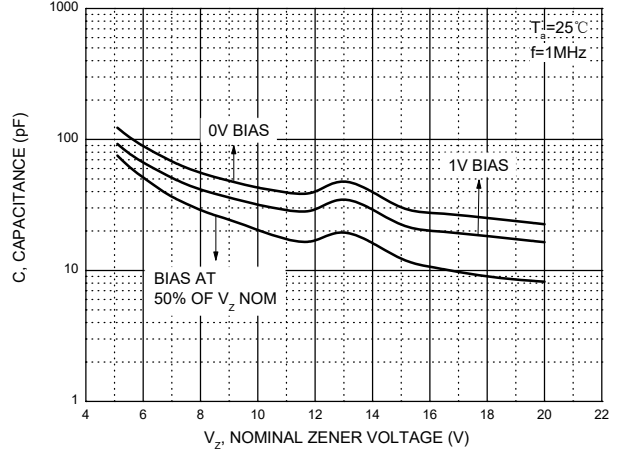
**Temperature Coefficients**



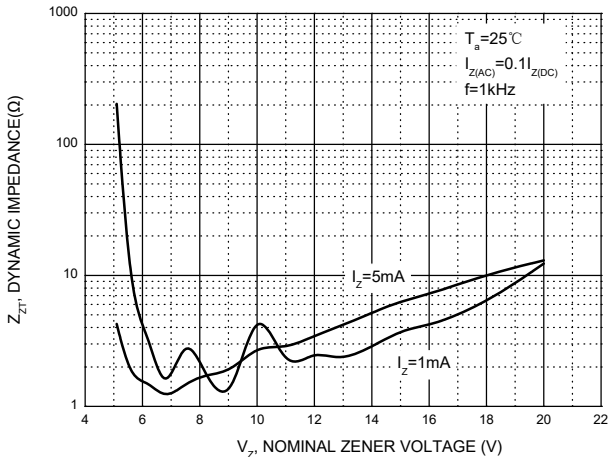
**Typical Leakage Current**



**Typical Capacitance**



**Effect of Zener Voltage on Zener Impedance**



**Power Derating Curve**

