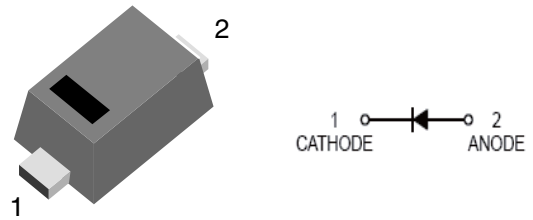


Zener Diode in SOD-523

Features

- Low Zener Impedance
- 200mW Power Dissipation
- High Stability and High Reliability



Mechanical Data

- **Case:** SOD-523 (plastic package).
Lead free; RoHS compliant
- **Molding Compound Flammability Rating:**
UL 94 V-0
- **Terminals:** High temperature soldering guaranteed:
260 °C/10 sec. at terminals

Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

Characteristic	Symbol	Value	Unit
Forward Voltage (Note 2) @ $I_F = 10\text{mA}$	V_F	0.9	V
Power Dissipation(Note 1)	P_d	200	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	340	°C/W
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55~+150	°C

- 1) Device mounted on ceramic PCB: 7.6mm x 9.4mm x 0.87mm with pad areas 25mm²
- 2) Short duration test pulse used to minimize self-heating effect
- 3) f=1KHz

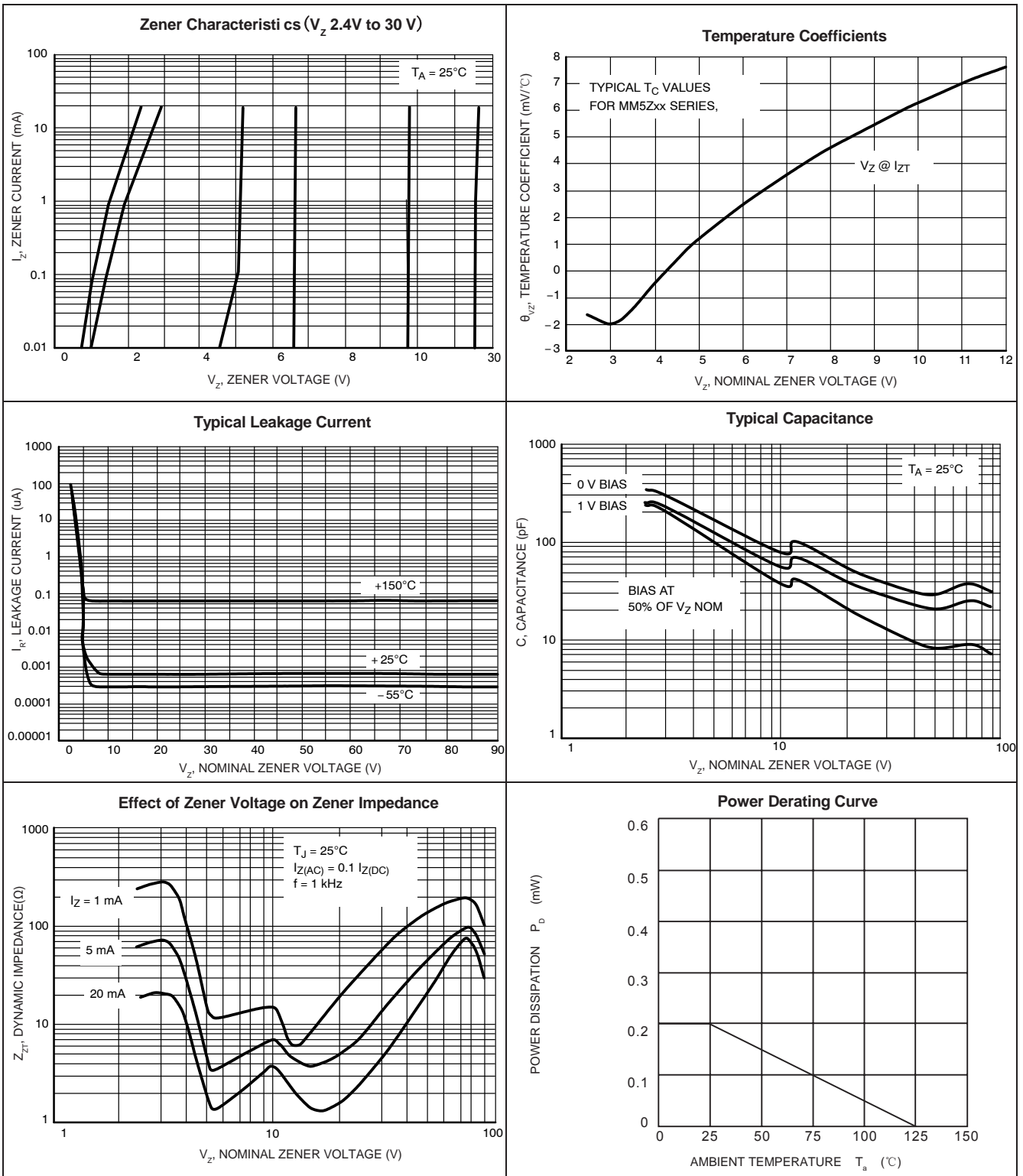
Electrical Characteristics

($T_A = 25\text{ }^\circ\text{C}$ unless otherwise specified)

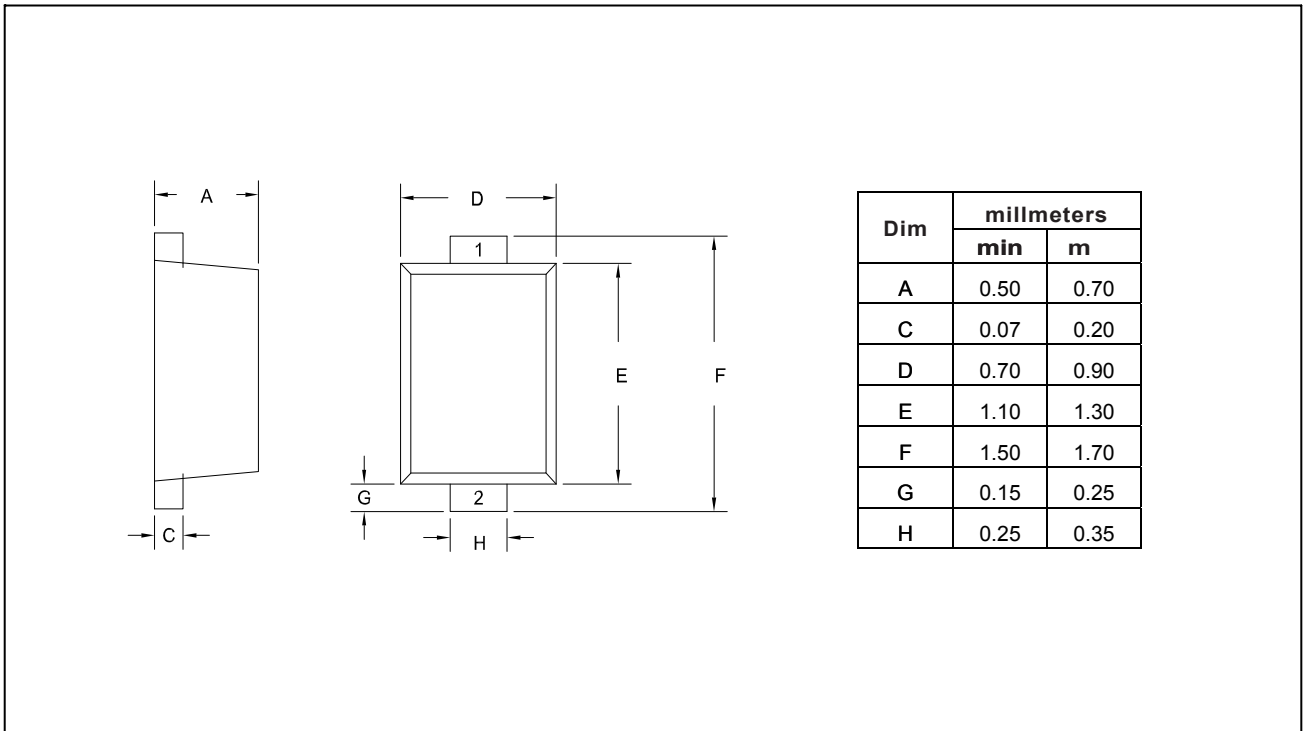
Type	Marking Code	Zener Voltage Range ¹⁾			Dynamic Impedance		Reverse Leakage Current	
		V_{znom} V	I_{zT} mA	for V_{zT} V	Z_{zT} (Max.) Ω	at I_z mA	I_R (Max.) μA	at V_R V
CZ5D2V4B	XY	2.4	5	2.352...2.448	100	5	120	1
CZ5D2V7B	XZ	2.7	5	2.646...2.754	110	5	120	1
CZ5D3V0B	FR	3.0	5	2.94...3.06	120	5	50	1
CZ5D3V3B	FX	3.3	5	3.234...3.366	130	5	20	1
CZ5D3V6B	FY	3.6	5	3.528...3.672	130	5	10	1
CZ5D3V9B	FZ	3.9	5	3.822...3.978	130	5	5	1
CZ5D4V3B	HA	4.3	5	4.214...4.386	130	5	5	1
CZ5D4V7B	HB	4.7	5	4.606...4.794	130	5	2	1
CZ5D5V1B	HC	5.1	5	4.998...5.202	130	5	2	1.5
CZ5D5V6B	HD	5.6	5	5.488...5.712	80	5	1	2.5
CZ5D6V2B	HE	6.2	5	6.076...6.324	50	5	1	3
CZ5D6V8B	HF	6.8	5	6.664...6.936	30	5	0.5	3.5
CZ5D7V5B	HH	7.5	5	7.35...7.65	30	5	0.5	4
CZ5D8V2B	HJ	8.2	5	8.036...8.364	30	5	0.5	5
CZ5D9V1B	HK	9.1	5	8.918...9.282	30	5	0.5	6
CZ5D10VB	HM	10	5	9.8...10.2	30	5	0.1	7
CZ5D11VB	HN	11	5	10.78...11.22	30	5	0.1	8
CZ5D12VB	HP	12	5	11.76...12.24	35	5	0.1	9
CZ5D13VB	HR	13	5	12.74...13.26	35	5	0.1	10
CZ5D15VB	HX	15	5	14.7...15.3	40	5	0.1	11
CZ5D16VB	HY	16	5	15.68...16.32	40	5	0.1	12
CZ5D18VB	HZ	18	5	17.64...18.36	45	5	0.1	13
CZ5D20VB	JA	20	5	19.6...20.4	50	5	0.1	15
CZ5D22VB	JB	22	5	21.56...22.44	55	5	0.1	17
CZ5D24VB	JC	24	5	23.52...24.48	60	5	0.1	19
CZ5D27VB	JD	27	5	26.46...27.54	70	2	0.1	21
CZ5D30VB	JE	30	5	29.4...30.6	80	2	0.1	23
CZ5D33VB	JF	33	5	32.34...33.66	80	2	0.1	25
CZ5D36VB	JH	36	5	35.28...36.72	90	2	0.1	27
CZ5D39VB	JJ	39	2.5	38.22...39.78	100	2	2	30
CZ5D43VB	JK	43	2.5	42.14...43.86	130	2	2	33
CZ5D47VB	JM	47	2.5	46.06...47.94	150	2	2	36
CZ5D51VB	YA	51	2.5	49.98...52.02	180	2	1	39
CZ5D56VB	YB	56	2.5	54.88...57.12	180	2	1	43
CZ5D62VB	YC	62	2.5	60.76...63.24	200	2	0.2	47
CZ5D68VB	YD	68	2.5	66.64...69.36	250	2	0.2	52
CZ5D75VB	YE	75	2.5	73.5...76.5	300	2	0.2	57

¹⁾ Tested with pulses $t_p = 20\text{ ms}$.

Typical Characteristics ($T_{amb} = 25\text{ }^{\circ}\text{C}$ unless otherwise specified)



Package Dimensions



Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
CZ5D2V4B~CZ5D75VB	SOD-523	Tape and reel	4000pcs / reel	EIA STD RS-481

Revision history

Date	Revision	Changes
23-May-2012	1.0	Initial release

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