

Features

- Large selection of zener voltages: 2.0V ~ 75V
- Tight voltage tolerance: $\pm 5\%$ for C-series
- Ultra low-profile package well suited for automated assembly

Applications

- General voltage regulation
- Mobile & handheld systems

Ordering Information

- Package: SOD523
- Shipping Qty: 3000/7inch Tape & Reel

SOD523



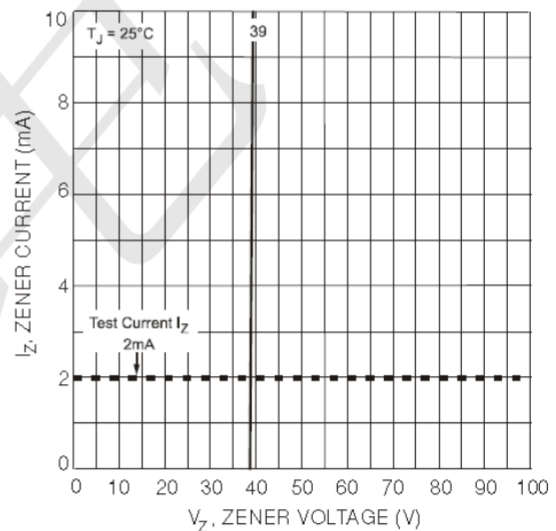
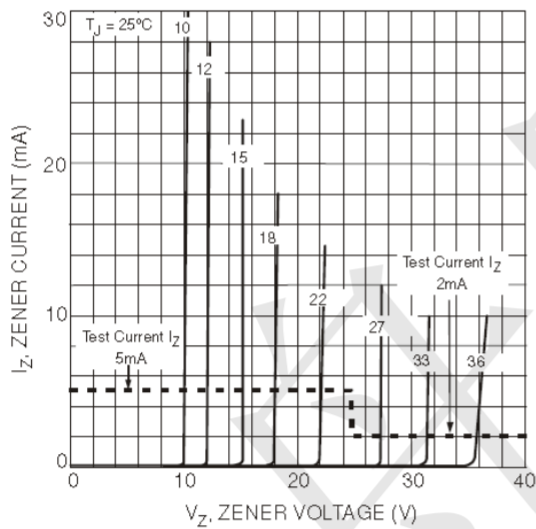
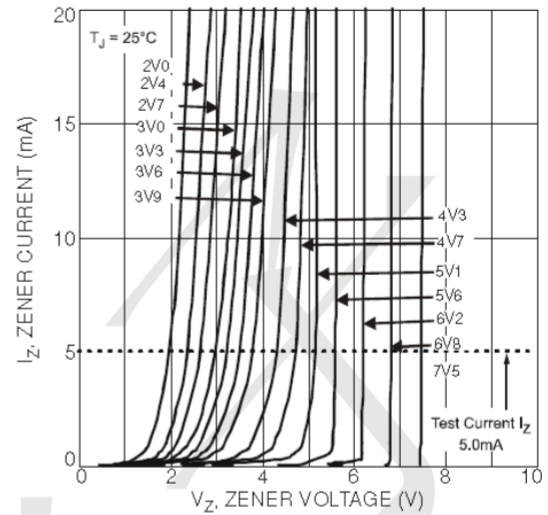
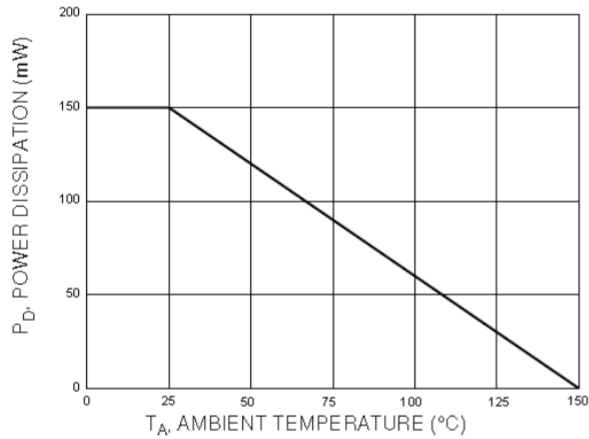
Absolute Maximum Ratings ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Forward Voltage @ $I_F = 10\text{mA}$	V_F	0.9	V
Power Dissipation	P_D	150	mW
Thermal Resistance (Junction-to-Ambient)	$R_{\theta JA}$	834	$^\circ\text{C/W}$
Junction Temperature Range	T_J	-55 ~ +150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65 ~ +150	$^\circ\text{C}$

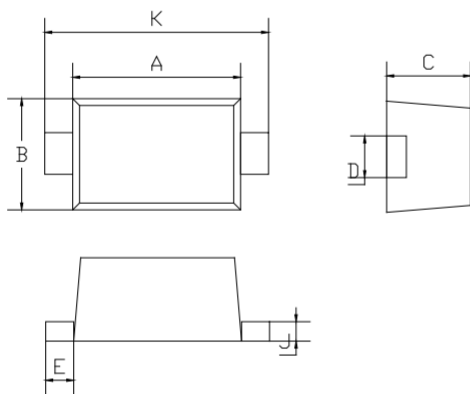
Electrical Characteristics ($T_A=25^\circ\text{C}$ unless otherwise noted)

Part Number	Zener Voltage V_Z (V)			@ I_{ZT} (mA)	Maximum Zener Impedance			Temperature Coefficient @ I_{ZT} T_C (mV/ $^\circ\text{C}$)		Maximum Reverse Current I_R (μA)	@ V_R (V)
	Min.	Typ.	Max.		Z_{ZT} (Ω) @ I_{ZT}	Z_{ZK} (Ω)	@ I_{ZK} (mA)	Min.	Max.		
TPZ2V0C-523	1.90	2.00	2.10	5	100	600	1.0	-3.5	0.0	150.000	1.0
TPZ2V2C-523	2.09	2.20	2.31	5	100	600	1.0	-3.5	0.0	150.000	1.0
TPZ2V4C-523	2.28	2.40	2.52	5	100	600	1.0	-3.5	0.0	50.000	1.0
TPZ2V7C-523	2.57	2.70	2.84	5	100	600	1.0	-3.5	0.0	20.000	1.0
TPZ3V0C-523	2.85	3.00	3.15	5	95	600	1.0	-3.5	0.0	10.000	1.0
TPZ3V3C-523	3.14	3.30	3.47	5	95	600	1.0	-3.5	0.0	5.000	1.0
TPZ3V6C-523	3.42	3.60	3.78	5	90	600	1.0	-3.5	0.0	5.000	1.0
TPZ3V9C-523	3.71	3.90	4.10	5	90	600	1.0	-3.5	0.0	3.000	1.0
TPZ4V3C-523	4.09	4.30	4.52	5	90	600	1.0	-3.5	0.0	3.000	1.0
TPZ4V7C-523	4.47	4.70	4.94	5	80	500	1.0	-3.5	0.2	3.000	2.0
TPZ5V1C-523	4.85	5.10	5.36	5	60	480	1.0	-2.7	1.2	2.000	2.0
TPZ5V6C-523	5.32	5.60	5.88	5	40	400	1.0	-2.0	2.5	1.000	2.0
TPZ6V2C-523	5.89	6.20	6.51	5	10	150	1.0	0.4	3.7	3.000	4.0
TPZ6V8C-523	6.46	6.80	7.14	5	15	80	1.0	1.2	4.5	2.000	4.0
TPZ7V5C-523	7.13	7.50	7.88	5	15	80	1.0	2.5	5.3	1.000	5.0
TPZ8V2C-523	7.79	8.20	8.61	5	15	80	1.0	3.2	6.2	0.700	5.0
TPZ9V1C-523	8.65	9.10	9.56	5	15	100	1.0	3.8	7.0	0.500	6.0
TPZ10VC-523	9.50	10.00	10.50	5	20	150	1.0	4.5	8.0	0.200	7.0
TPZ11VC-523	10.45	11.00	11.55	5	20	150	1.0	5.4	9.0	0.100	8.0
TPZ12VC-523	11.40	12.00	12.60	5	25	150	1.0	6.0	10.0	0.100	8.0
TPZ13VC-523	12.35	13.00	13.65	5	30	170	1.0	7.0	11.0	0.100	8.0
TPZ15VC-523	14.25	15.00	15.75	5	30	200	1.0	9.2	13.0	0.100	10.5
TPZ16VC-523	15.20	16.00	16.80	5	40	200	1.0	10.4	14.0	0.100	11.2
TPZ18VC-523	17.10	18.00	18.90	5	45	225	1.0	12.4	16.0	0.100	12.6
TPZ20VC-523	19.00	20.00	21.00	5	55	225	1.0	14.4	18.0	0.100	14.0
TPZ22VC-523	20.90	22.00	23.10	5	55	250	1.0	16.4	20.0	0.100	15.4
TPZ24VC-523	22.80	24.00	25.20	5	70	250	1.0	18.4	22.0	0.100	16.8
TPZ27VC-523	25.65	27.00	28.35	2	80	300	0.5	21.4	25.3	0.100	18.9
TPZ30VC-523	28.50	30.00	31.50	2	80	300	0.5	24.4	29.4	0.100	21.0
TPZ33VC-523	31.35	33.00	34.65	2	80	325	0.5	27.4	33.4	0.100	23.1
TPZ36VC-523	34.20	36.00	37.80	2	90	350	0.5	30.4	37.4	0.100	25.2
TPZ39VC-523	37.05	39.00	40.95	2	130	350	0.5	33.4	41.2	0.100	27.3
TPZ43VC-523	40.85	43.00	45.15	2	150	375	0.5	37.6	46.6	0.100	30.1
TPZ47VC-523	44.65	47.00	49.35	2	170	375	0.5	42.0	51.8	0.100	32.9
TPZ51VC-523	48.45	51.00	53.55	2	180	400	0.5	46.6	57.2	0.100	35.7
TPZ56VC-523	53.20	56.00	58.80	2	200	400	0.5	52.2	63.8	0.045	39.2
TPZ62VC-523	58.90	62.00	65.10	2	215	423	0.5	58.8	71.6	0.045	43.4
TPZ68VC-523	64.60	68.00	71.40	2	240	447	0.5	65.6	79.8	0.045	47.6
TPZ75VC-523	71.25	75.00	78.75	2	255	470	0.5	73.4	88.6	0.045	52.5

Typical Electrical Characteristic Curves



Outline Drawing - SOD523 (unit: mm)



SOD-523		
Dimension	Min.	Max.
A	1.10	1.30
B	0.70	0.90
C	0.50	0.70
D	0.25	0.35
E	0.15	0.25
J	0.05	0.15
K	1.50	1.70

Mounting Pad Layout-SOD523 (unit: mm)

