



SOD-723 Plastic-Encapsulate Diodes

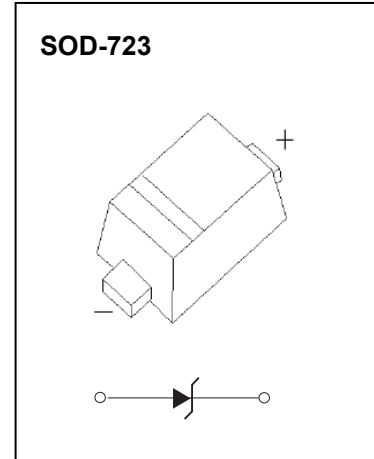
VDZ3.6B-VDZ36B ZENER DIODE

FEATURES

- Ultra small mold type
- High reliability
- By chip-mounter ,automatic mounting is possible

APPLICATION

Voltage regulation



Maximum Ratings ($T_a=25^{\circ}\text{C}$ unless otherwise specified)

Characteristic	Symbol	Value	Unit
Forward Voltage @ $I_F = 10\text{mA}$	V_F	0.9	V
Power Dissipation(Note 1)	P_D	100	mW
Thermal Resistance, Junction to Ambient Air	$R_{\theta JA}$	1250	$^{\circ}\text{C}/\text{W}$
Operating Temperature	T_j	150	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-65 ~ +150	$^{\circ}\text{C}$

Notes:

1. Valid provided that device terminals are kept at ambient temperature.

ELECTRICAL CHARACTERISTICS

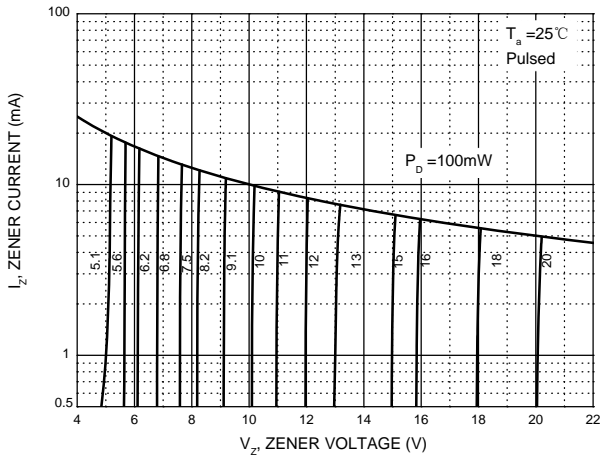
$T_a=25^{\circ}\text{C}$ unless otherwise specified

Type Number	Type Code	Zener Voltage Range			Operating resistance		Rising operating resistance		Reverse Current	
		$V_Z@I_{ZT}$		I_Z	$Z_{ZK}@I_Z$	I_Z	$Z_{ZT}@I_Z$	I_Z	I_R	V_R
		Min(V)	Max(V)	mA	Ω	mA	Ω	mA	μA	V
VDZ3.6B	62	3.60	3.845	5.0	100	5.0	1000	1.0	10.0	1.0
VDZ3.9B	72	3.89	4.16	5.0	100	5.0	1000	1.0	5.0	1.0
VDZ4.3B	82	4.17	4.43	5.0	100	5.0	1000	1.0	5.0	1.0
VDZ4.7B	92	4.55	4.75	5.0	100	5.0	800	0.5	2.0	1.0
VDZ5.1B	A2	4.98	5.20	5.0	80	5.0	500	0.5	2.0	1.5
VDZ5.6B	C2	5.49	5.73	5.0	60	5.0	200	0.5	1.0	2.5
VDZ6.2B	E2	6.06	6.33	5.0	60	5.0	100	0.5	1.0	3.0
VDZ6.8B	F2	6.65	6.93	5.0	40	5.0	60	0.5	0.5	3.5
VDZ7.5B	H2	7.28	7.60	5.0	30	5.0	60	0.5	0.5	4.0
VDZ8.2B	J2	8.02	8.36	5.0	30	5.0	60	0.5	0.5	5.0
VDZ9.1B	L2	8.85	9.23	5.0	30	5.0	60	0.5	0.5	6.0
VDZ10B	05	9.77	10.21	5.0	30	5.0	60	0.5	0.1	7.0
VDZ11B	15	10.76	11.22	5.0	30	5.0	60	0.5	0.1	8.0
VDZ12B	25	11.74	12.24	5.0	30	5.0	80	0.5	0.1	9.0
VDZ13B	35	12.91	13.49	5.0	37	5.0	80	0.5	0.1	10.0
VDZ15B	45	14.34	14.98	5.0	42	5.0	80	0.5	0.1	11.0
VDZ16B	55	15.85	16.51	5.0	50	5.0	80	0.5	0.1	12.0
VDZ18B	65	17.56	18.35	2.0	65	2.0	80	0.5	0.1	13.0
VDZ20B	75	19.52	20.39	2.0	85	2.0	100	0.5	0.1	15.0
VDZ22B	85	21.54	22.47	2.0	100	2.0	100	0.5	0.1	17.0
VDZ24B	95	23.72	24.78	2.0	120	2.0	120	0.5	0.1	19.0
VDZ27B	A5	26.19	27.53	2.0	150	2.0	150	0.5	0.1	21.0
VDZ30B	C5	29.19	30.69	2.0	200	2.0	200	0.5	0.1	23.0
VDZ33B	E5	32.15	33.79	2.0	250	2.0	250	0.5	0.1	25.0
VDZ36B	F5	35.07	36.87	2.0	300	2.0	300	0.5	0.1	27.0

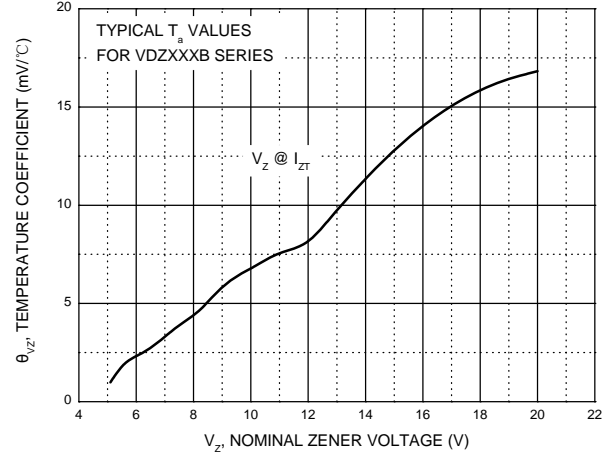
Typical Characteristics

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

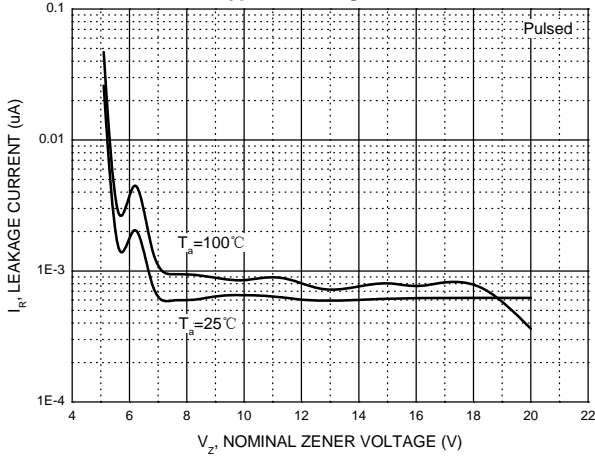
Zener Characteristics (V_z 5.1V to 20 V)



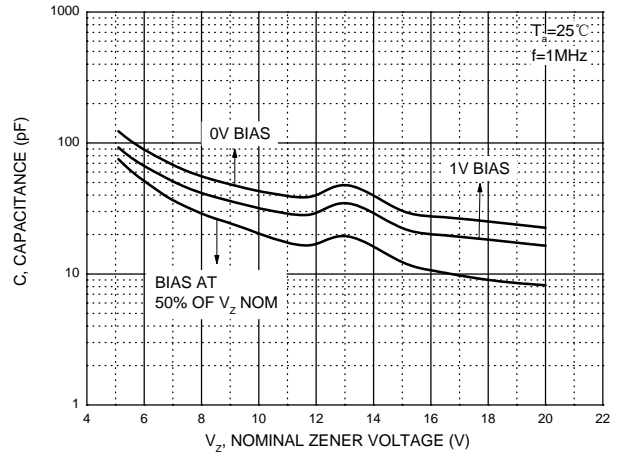
Temperature Coefficients



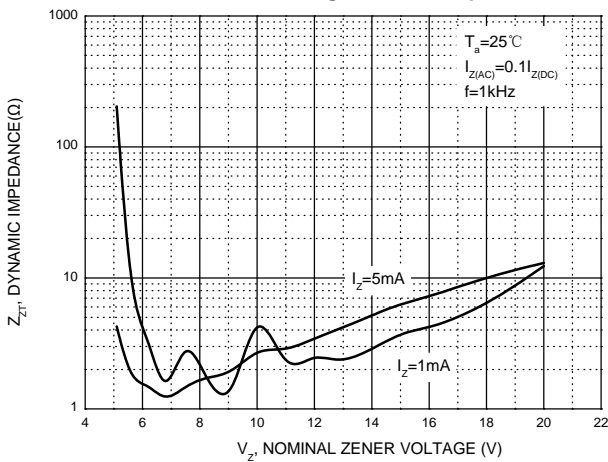
Typical Leakage Current



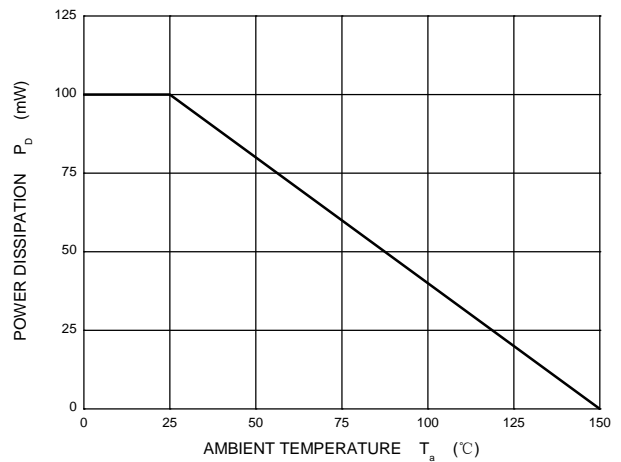
Typical Capacitance



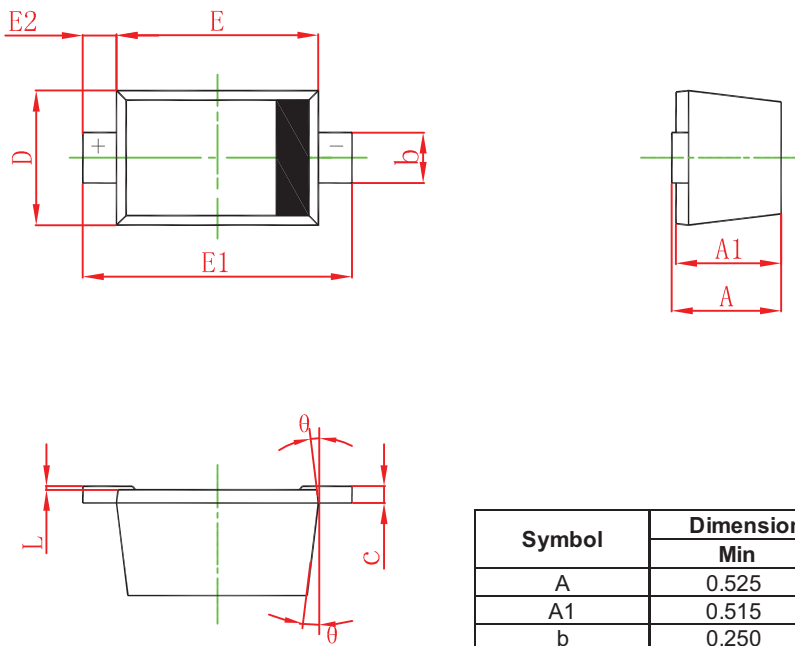
Effect of Zener Voltage on Zener Impedance



Power Derating Curve

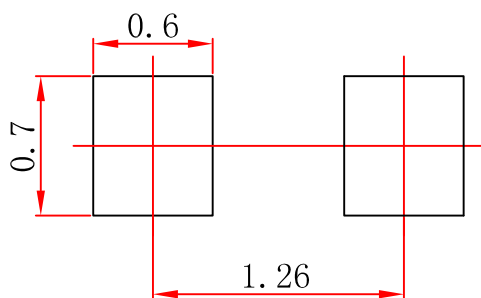


SOD-723 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.525	0.650	0.021	0.026
A1	0.515	0.580	0.020	0.023
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	0.550	0.650	0.022	0.026
E	0.900	1.100	0.035	0.043
E1	1.300	1.500	0.051	0.059
E2	0.200 REF		0.008 REF	
L	0.010	0.070	0.001	0.003
θ	7° REF		7° REF	

SOD-723 Suggested Pad Layout



Note:

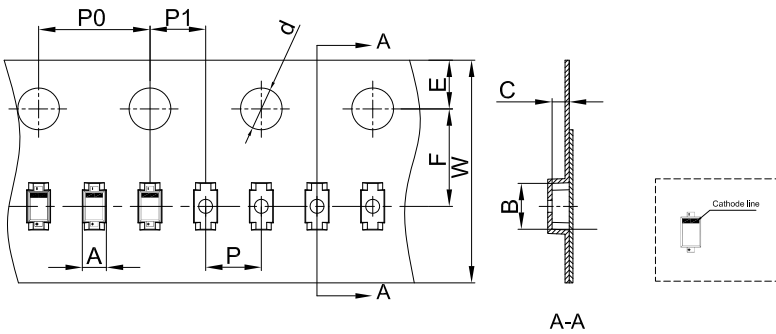
1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.

NOTICE

JCET reserve the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. JCET does not assume any liability arising out of the application or use of any product described herein.

SOD-723 Tape and Reel

SOD-723 Embossed Carrier Tape



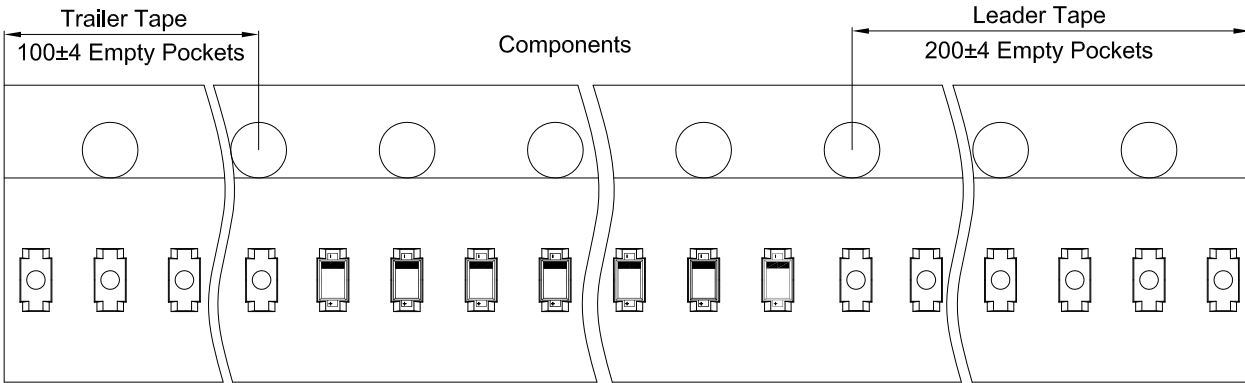
Packaging Description:

SOD-723 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in standard option are shipped with 8,000 units per 7" or 17.8cm diameter reel. The reels are clear in color and is made of polystyrene plastic (anti-static coated).

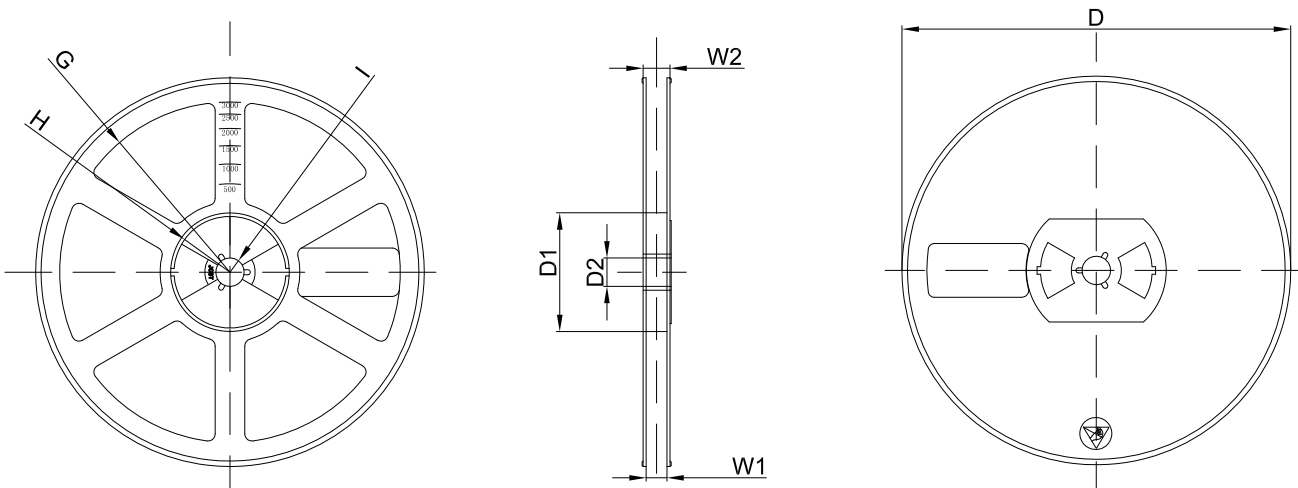
Note: If it is the product of the same polarity, the cathode line should be removed.

Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOD-723	0.73	1.71	0.62	Ø1.50	1.75	3.50	4.00	2.00	2.00	8.00

SOD-723 Tape Leader and Trailer



SOD-723 Reel



Dimensions are in millimeter								
Reel Option	D	D1	D2	G	H	I	W1	W2
7" Dia	Ø178.00	54.40	13.00	R78.00	R25.60	R6.50	9.50	12.30

REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)	G.W.(kg)
8000 pcs	7 inch	120,000 pcs	203×203×195	480,000 pcs	438×438×220	