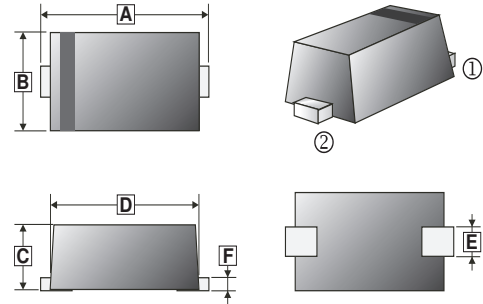


RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Zener Voltages: 2V~51V
- Power Dissipation P_D : 200mW
- Flat Lead SOD-523 Small Outline Plastic Package
- Band Indicates Cathode

SOD-523



PACKAGE INFORMATION

Package	MPQ	Leader Size
SOD-523	3K	7 inch

REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.50	1.70	D	1.10	1.30
B	0.70	0.90	E	0.25	0.35
C	0.50	0.77	F	0.05	0.20

ORDER INFORMATION

Part Number	Type
SBZX584Bxxx-C	Lead (Pb)-free and Halogen-free



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

Parameter	Symbol	Ratings	Unit
Power Dissipation	P_D	200	mW
Thermal Resistance from Junction-Ambient	$R_{\theta JA}$	680	$^\circ\text{C/W}$
Thermal Resistance from Junction-Soldering Point	$R_{\theta JS}$	100	
Operating Junction Temperature Range	T_J	150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65~150	

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

Part Number	Marking	Zener Voltage Range			Maximum Zener Impedance			Maximum Reverse Current		Typical Temperature Coefficient		Test Current	
		$V_Z @ I_{ZT}$			I_{ZT}	$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$	I_{ZK}	I_R	V_R	@ I_{ZTC}		I_{ZTC}
		Min.	Nom.	Max.							Min.	Max.	
		V			mA	Ω		mA	μA	V	mV/°C		mA
SBZX584B2V0-C	V0	1.96	2	2.04	5	100	1000	0.5	120	0.5	-3.5	0	5
SBZX584B2V4-C	05	2.35	2.4	2.45	5	100	564	1	45	1	-3.5	0	5
SBZX584B2V7-C	15	2.65	2.7	2.75	5	100	564	1	18	1	-3.5	0	5
SBZX584B3V0-C	25	2.94	3	3.06	5	100	564	1	9	1	-3.5	0	5
SBZX584B3V3-C	35	3.23	3.3	3.37	5	95	564	1	4.5	1	-3.5	0	5
SBZX584B3V6-C	45	3.53	3.6	3.67	5	90	564	1	4.5	1	-3.5	0	5
SBZX584B3V9-C	55	3.82	3.9	3.98	5	90	564	1	2.7	1	-3.5	0	5
SBZX584B4V3-C	65	4.21	4.3	4.39	5	90	564	1	2.7	1	-3.5	0	5
SBZX584B4V7-C	75	4.61	4.7	4.79	5	80	470	1	2.7	2	-3.5	0	5
SBZX584B5V1-C	85	5	5.1	5.2	5	60	451	1	1.8	2	-2.7	1.2	5
SBZX584B5V6-C	95	5.49	5.6	5.71	5	40	376	1	0.9	2	-2	2.5	5
SBZX584B6V2-C	A5	6.08	6.2	6.32	5	10	141	1	2.7	4	0.4	3.7	5
SBZX584B6V8-C	B5	6.66	6.8	6.94	5	15	75	1	1.8	4	1.2	4.5	5
SBZX584B7V5-C	C5	7.35	7.5	7.65	5	15	75	1	0.9	5	2.5	5.3	5
SBZX584B8V2-C	D5	8.04	8.2	8.36	5	15	75	1	0.63	5	3.2	6.2	5
SBZX584B9V1-C	E5	8.92	9.1	9.28	5	15	94	1	0.45	6	3.8	7	5
SBZX584B10V-C	F5	9.8	10	10.2	5	20	141	1	0.18	7	4.5	8	5
SBZX584B11V-C	G5	10.78	11	11.22	5	20	141	1	0.09	8	5.4	9	5
SBZX584B12V-C	H5	11.6	12	12.24	5	25	141	1	0.09	8	6	10	5
SBZX584B13V-C	J5	12.74	13	13.26	5	30	160	1	0.09	8	7	11	5
SBZX584B15V-C	K5	14.7	15	15.3	5	30	188	1	0.045	10.5	9.2	13	5
SBZX584B16V-C	L5	15.68	16	16.32	5	40	188	1	0.045	11.2	10.4	14	5
SBZX584B18V-C	M5	17.64	18	18.36	5	45	212	1	0.045	12.6	12.4	16	5
SBZX584B20V-C	N5	19.6	20	20.4	5	55	212	1	0.045	14	14.4	18	5
SBZX584B22V-C	P5	21.56	22	22.44	5	55	235	1	0.045	15.4	16.4	20	5
SBZX584B24V-C	R5	23.52	24	24.48	5	70	235	1	0.045	16.8	18.4	22	5
SBZX584B27V-C	S5	26.46	27	27.54	2	80	282	0.5	0.045	18.9	21.4	25.3	2
SBZX584B30V-C	T5	29.4	30	30.6	2	80	282	0.5	0.045	21	24.4	29.4	2
SBZX584B33V-C	U5	32.34	33	33.66	2	80	306	0.5	0.045	23	27.4	33.4	2
SBZX584B36V-C	V5	35.28	36	36.72	2	90	329	0.5	0.045	25.2	30.4	37.4	2
SBZX584B39V-C	X5	38.22	39	39.78	2	130	329	0.5	0.045	27.3	33.4	41.2	2
SBZX584B43V-C	Y5	42.14	43	43.86	2	150	353	0.5	0.045	30.1	10	12	5
SBZX584B47V-C	Z5	46.06	47	47.94	2	170	353	0.5	0.045	33	10	12	5
SBZX584B51V-C	-5	49.98	51	52.02	2	180	376	0.5	0.045	35.7	10	12	5

CHARACTERISTIC CURVES

Fig.1 TYPICAL FORWARD VOLTAGE

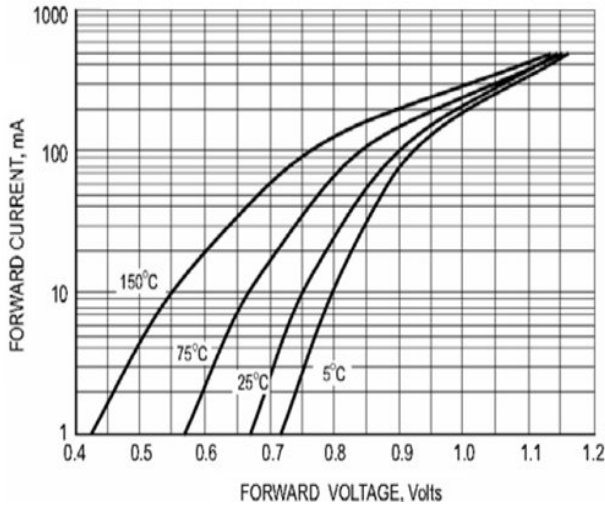


Fig.2 EFFECT OF ZENER VOLTAGE ON ZENER IMPEDANCE

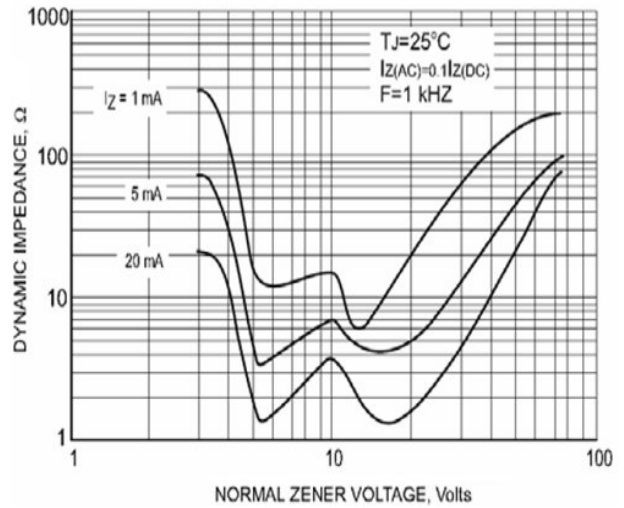


Fig.3 POWER DISSIPATION VS. AMBIENT TEMP.

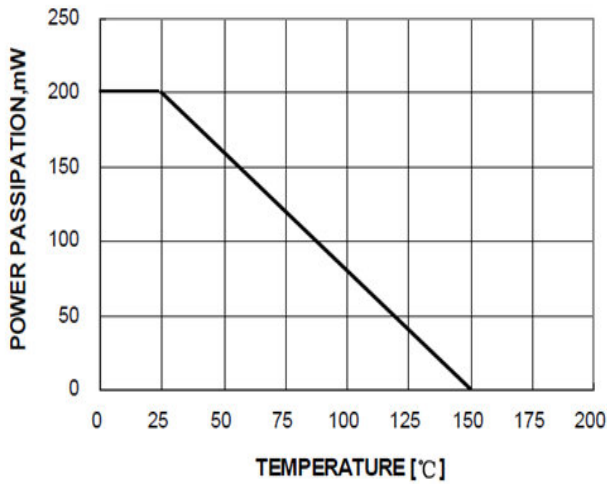


Fig.4 TYPICAL CAPACITANCE

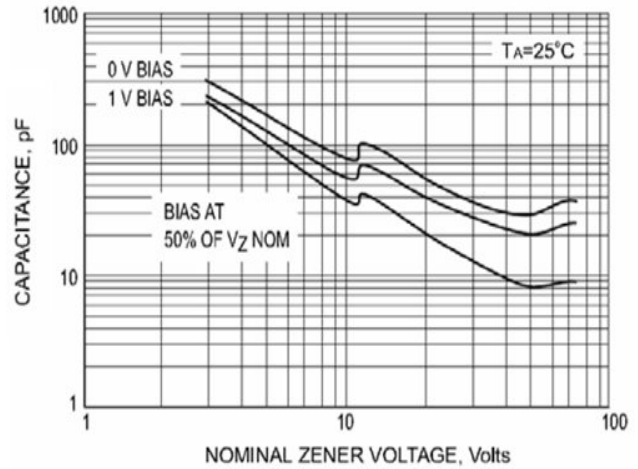


Fig.5 ZENER BREAKDOWN CHARACTERISTICS

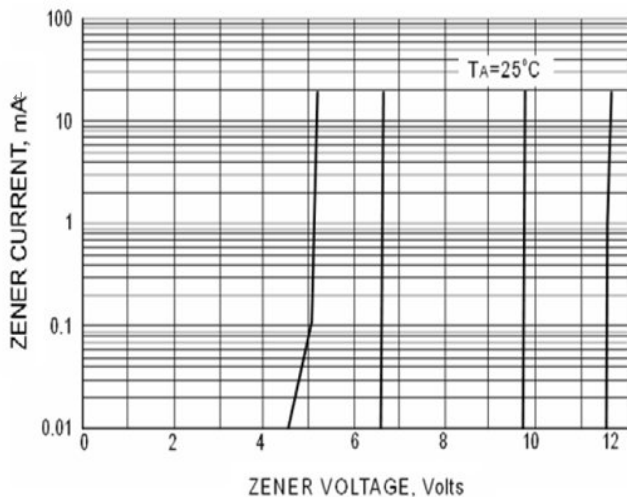


Fig.6 ZENER BREAKDOWN CHARACTERISTICS

