YENYO

BZT52C2V4G THRU BZT52C51VG

Surface Mount Zener Diode

Zener Voltage 2.4 to 51 V
Power Dissipation 500 Milliwatts

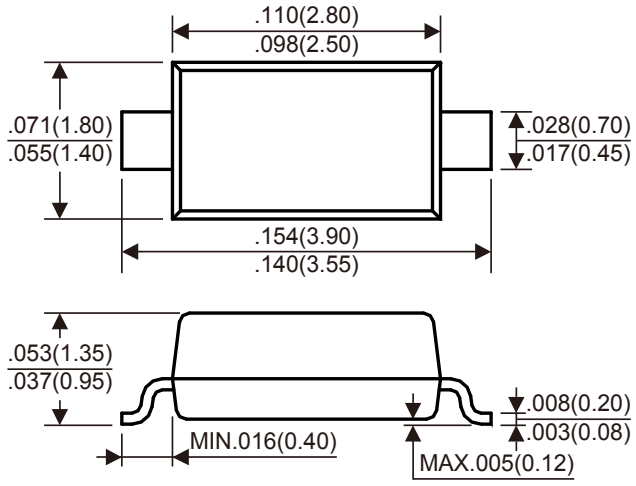
Features

- ✶ Ideally suited for automated assembly processes
- ✶ General purpose, Medium current
- ✶ Low zener impedance
- ✶ High stability and high reliability

Mechanical Data

- ✶ Case: Molded plastic, SOD-123
- ✶ Epoxy: UL 94V-0 rate flame retardant
- ✶ Terminals: Solderable per MIL-STD-202, method 208
- ✶ Polarity: Color band denotes cathode end
- ✶ Mounting position: Any

SOD-123



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND THERMAL CHARACTERISTICS

T_A = 25℃ unless otherwise noted

PARAMETER	SYMBOL	VALUE	UNIT
DC power dissipation at T_L = 75℃	P_D	500	mW
Maximum forward voltage at I_F = 10mA	V_F	0.9	V
Junction temperature range	T_J	-65 to +150	℃
Storage temperature range	T_{STG}	-65 to +150	℃

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Electrical Characteristics(T_A=25℃ unless otherwise noted)

Part Number	Device Marking Code	Zener Voltage Range V_Z@I_{ZT}				Maximum Zener Impendance f = 1kHz			Maximum Reverse Leakage Current I_R@V_R	
		Min (V)	Nom (V)	Max (V)	I_{ZT} (mA)	Z_{ZT}@I_{ZT} (Ω)	Z_{ZK}@I_{ZK} (Ω)	I_{ZK} (mA)	I_R (μA)	V_R (V)
BZT52C2V4G	WX	2.2	2.4	2.6	5	100	600	1	50	1
BZT52C2V7G	W1	2.5	2.7	2.9	5	100	600	1	20	1
BZT52C3V0G	W2	2.8	3	3.2	5	95	600	1	10	1
BZT52C3V3G	W3	3.1	3.3	3.5	5	95	600	1	5	1
BZT52C3V6G	W4	3.4	3.6	3.8	5	90	600	1	5	1
BZT52C3V9G	W5	3.7	3.9	4.1	5	90	600	1	3	1
BZT52C4V3G	W6	4	4.3	4.6	5	90	600	1	3	1
BZT52C4V7G	W7	4.4	4.7	5	5	80	500	1	3	2
BZT52C5V1G	W8	4.8	5.1	5.4	5	60	480	1	2	2
BZT52C5V6G	W9	5.2	5.6	6	5	40	400	1	1	2
BZT52C6V2G	WA	5.8	6.2	6.6	5	10	150	1	3	4
BZT52C6V8G	WB	6.4	6.8	7.2	5	15	80	1	2	4
BZT52C7V5G	WC	7	7.5	7.9	5	15	80	1	1	5
BZT52C8V2G	WD	7.7	8.2	8.7	5	15	80	1	0.7	5
BZT52C9V1G	WE	8.5	9.1	9.6	5	15	100	1	0.5	6
BZT52C10VG	WF	9.4	10	10.6	5	20	150	1	0.2	7
BZT52C11VG	WG	10.4	11	11.6	5	20	150	1	0.1	8
BZT52C12VG	WH	11.4	12	12.7	5	25	150	1	0.1	8
BZT52C13VG	WI	12.4	13	14.1	5	30	170	1	0.1	8
BZT52C15VG	WJ	13.8	15	15.6	5	30	200	1	0.1	10.5
BZT52C16VG	WK	15.3	16	17.1	5	40	200	1	0.1	11.2
BZT52C18VG	WL	16.8	18	19.1	5	45	225	1	0.1	12.6
BZT52C20VG	WM	18.8	20	21.2	5	55	225	1	0.1	14
BZT52C22VG	WN	20.8	22	23.3	5	55	250	1	0.1	15.4
BZT52C24VG	WO	22.8	24	25.6	5	70	250	1	0.1	16.8
BZT52C27VG	WP	25.1	27	28.9	2	80	300	0.5	0.1	18.9
BZT52C30VG	WQ	28	30	32	2	80	300	0.5	0.1	21
BZT52C33VG	WR	31	33	35	2	80	325	0.5	0.1	23.1
BZT52C36VG	WS	34	36	38	2	90	350	0.5	0.1	25.2
BZT52C39VG	WT	37	39	41	2	130	350	0.5	0.1	27.3
BZT52C43VG	WU	40	43	46	5	100	700	1	0.1	32
BZT52C47VG	WV	44	47	50	5	100	750	1	0.1	35
BZT52C51VG	WW	48	51	54	5	100	750	1	0.1	38

RATINGS AND CHARACTERISTIC CURVES
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Fig.1 - Power Derating Curve

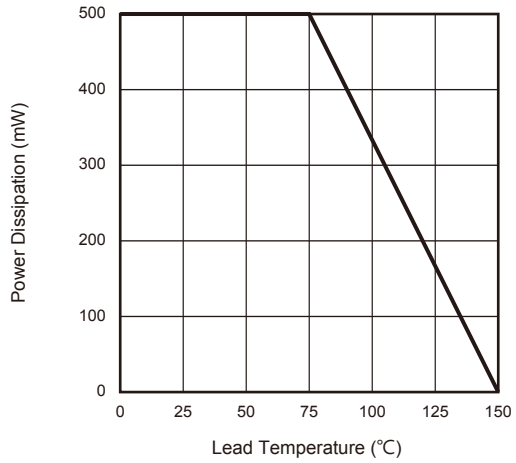

Fig.2 - Typical Zener Breakdown Characteristics

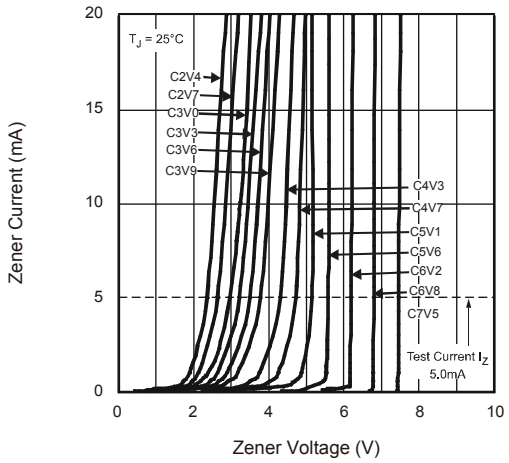

Fig.3 - Typical Zener Breakdown Characteristics

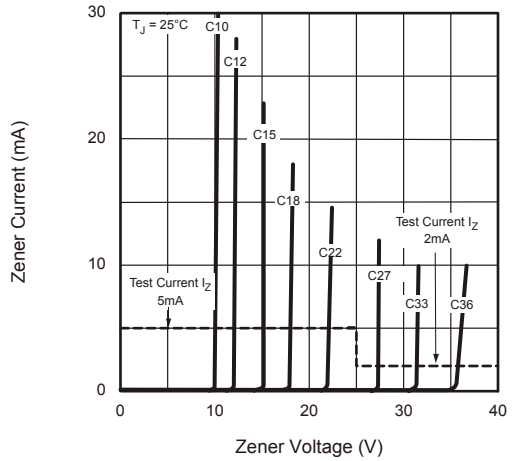

Fig.4 - Typical Zener Breakdown Characteristics

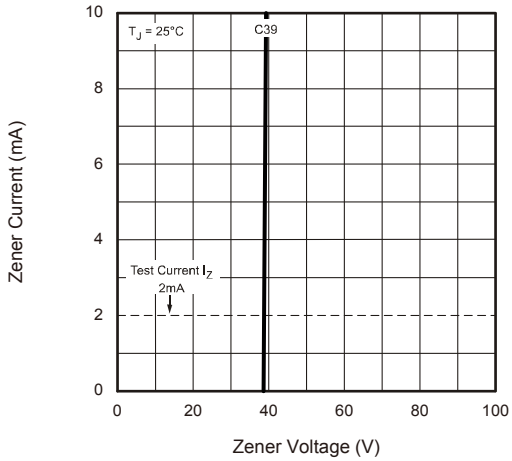

Fig.5 - Typical Total Capacitance vs. Nominal Zener Voltage