



BZM52C2V4 - BZM52C75

SURFACE MOUNT SILICON ZENER DIODES

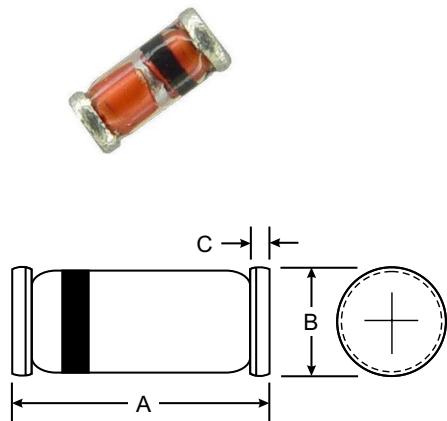
VOLTAGE RANGE: 2.4 - 75V
POWER: 0.5Watts

Features

- Planar Die Construction
- Sealed Glass Case
- Ideally Suited for Automated Insertion
- 2.4V - 75V Nominal Zener Voltages

Mechanical Data

- Case: SOD-80/LL34, Glass
- Terminals: Solderable per MIL-STD-202,
- Method 208
- Polarity: Cathode Band
- Weight: 0.05 grams (approx.)



LL34/ SOD-80		
Dim	Min	Max
A	3.30	3.70
B	1.30	1.60
C	0.28	0.50

All Dimensions in mm

Maximum Ratings $T_A = 25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	Value	Unit
Power Dissipation (Note 2)	P_d	500	mW
Forward Voltage @ $I_F = 200\text{mA}$	V_F	1.5	V
Thermal Resistance, Junction to Ambient Air (Note 2)	$R_{\theta JA}$	300	K/W
Operating and Storage Temperature Range	T_j, T_{STG}	-55 to +175	°C

Notes: 1. Tested with Pulses, $t_p = 20\text{ms}$.
2. Valid provided that Electrodes are kept at Ambient Temperature.



Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Type Number	Nominal Zener Voltage (Note 1)		Zener Voltage Range	Maximum Zener Impedance	Maximum Zener Impedance		Maximum Leakage Current @ V_R			Temperature Coefficient
	$V_Z @ I_{ZT}$		$V_Z @ I_{ZT}$	$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$		$I_R @ T_J = 25^\circ\text{C}$	$I_R @ T_J = 150^\circ\text{C}$	V_R	
	(V)	(mA)	(V)	(Ω)	(Ω)	(mA)	(μA)	(μA)	(V)	(%/K)
BZM52C2V4	2.4	5.0	2.28 to 2.56	85	600	1.0	50	100	1.0	-0.09 to -0.06
BZM52C2V7	2.7	5.0	2.5 to 2.9	85	600	1.0	10	50	1.0	-0.09 to -0.06
BZM52C3V0	3.0	5.0	2.8 to 3.2	90	600	1.0	4.0	40	1.0	-0.08 to -0.05
BZM52C3V3	3.3	5.0	3.1 to 3.5	90	600	1.0	2.0	40	1.0	-0.08 to -0.05
BZM52C3V6	3.6	5.0	3.4 to 3.8	90	600	1.0	2.0	40	1.0	-0.08 to -0.05
BZM52C3V9	3.9	5.0	3.7 to 4.1	90	600	1.0	2.0	40	1.0	-0.08 to -0.05
BZM52C4V3	4.3	5.0	4.0 to 4.6	90	600	1.0	1.0	20	1.0	-0.06 to -0.03
BZM52C4V7	4.7	5.0	4.4 to 5.0	80	600	1.0	0.5	10	1.0	-0.05 to +0.02
BZM52C5V1	5.1	5.0	4.8 to 5.4	60	550	1.0	0.1	2.0	1.0	-0.02 to +0.02
BZM52C5V6	5.6	5.0	5.2 to 6.0	40	450	1.0	0.1	2.0	1.0	-0.05 to +0.05
BZM52C6V2	6.2	5.0	5.8 to 6.6	10	200	1.0	0.1	2.0	2.0	0.03 to 0.06
BZM52C6V8	6.8	5.0	6.4 to 7.2	8.0	150	1.0	0.1	2.0	3.0	0.03 to 0.07
BZM52C7V5	7.5	5.0	7.0 to 7.9	7.0	50	1.0	0.1	2.0	5.0	0.03 to 0.07
BZM52C8V2	8.2	5.0	7.7 to 8.7	7.0	50	1.0	0.1	2.0	6.2	0.03 to 0.08
BZM52C9V1	9.1	5.0	8.5 to 9.6	10	50	1.0	0.1	2.0	6.8	0.03 to 0.09
BZM52C10	10	5.0	9.4 to 10.6	15	70	1.0	0.1	2.0	7.5	0.03 to 0.10
BZM52C11	11	5.0	10.4 to 11.6	20	70	1.0	0.1	2.0	8.2	0.03 to 0.11
BZM52C12	12	5.0	11.4 to 12.7	20	90	1.0	0.1	2.0	9.1	0.03 to 0.11
BZM52C13	13	5.0	12.4 to 14.1	26	110	1.0	0.1	2.0	10	0.03 to 0.11
BZM52C15	15	5.0	13.8 to 15.6	30	110	1.0	0.1	2.0	11	0.03 to 0.11
BZM52C16	16	5.0	15.3 to 17.1	40	170	1.0	0.1	2.0	12	0.03 to 0.11
BZM52C18	18	5.0	16.8 to 19.1	50	170	1.0	0.1	2.0	13	0.03 to 0.11
BZM52C20	20	5.0	18.8 to 21.2	55	220	1.0	0.1	2.0	15	0.03 to 0.11
BZM52C22	22	5.0	20.8 to 23.3	55	220	1.0	0.1	2.0	16	0.04 to 0.12
BZM52C24	24	5.0	22.8 to 25.6	80	220	1.0	0.1	2.0	18	0.04 to 0.12
BZM52C27	27	5.0	25.1 to 28.9	80	220	1.0	0.1	2.0	20	0.04 to 0.12
BZM52C30	30	5.0	28 to 32	80	220	1.0	0.1	2.0	22	0.04 to 0.12
BZM52C33	33	5.0	31 to 35	80	220	1.0	0.1	2.0	24	0.04 to 0.12
BZM52C36	36	5.0	34 to 38	80	220	1.0	0.1	2.0	27	0.04 to 0.12
BZM52C39	39	2.5	37 to 41	90	500	0.5	0.1	5.0	30	0.04 to 0.12
BZM52C43	43	2.5	40 to 46	90	600	0.5	0.1	5.0	33	0.04 to 0.12
BZM52C47	47	2.5	44 to 50	110	700	0.5	0.1	5.0	36	0.04 to 0.12
BZM52C51	51	2.5	48 to 54	125	700	0.5	0.1	10	39	0.04 to 0.12
BZM52C56	56	2.5	52 to 60	135	1000	0.5	0.1	10	43	0.04 to 0.12
BZM52C62	62	2.5	58 to 66	150	1000	0.5	0.1	10	47	0.04 to 0.12
BZM52C68	68	2.5	64 to 72	200	1000	0.5	0.1	10	51	0.04 to 0.12
BZM52C75	75	2.5	70 to 79	250	1500	0.5	0.1	10	56	0.04 to 0.12

Notes: 1. Tested with pulses $t_p = 20$ ms.
 2. Valid provided that electrodes are kept at ambient temperature.



SUNMATE

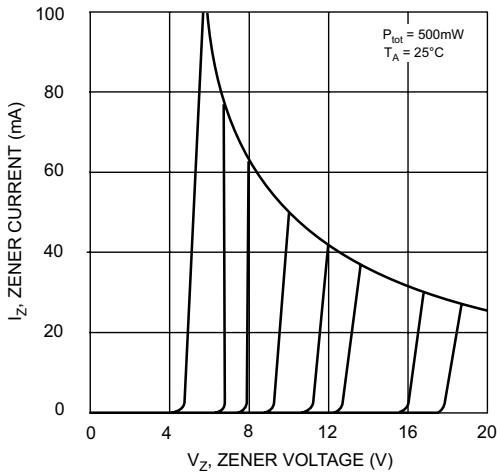


Fig. 1, Zener Current vs Zener Voltage

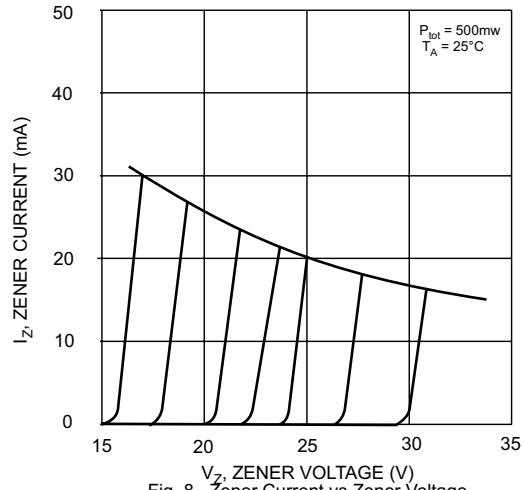


Fig. 8, Zener Current vs Zener Voltage

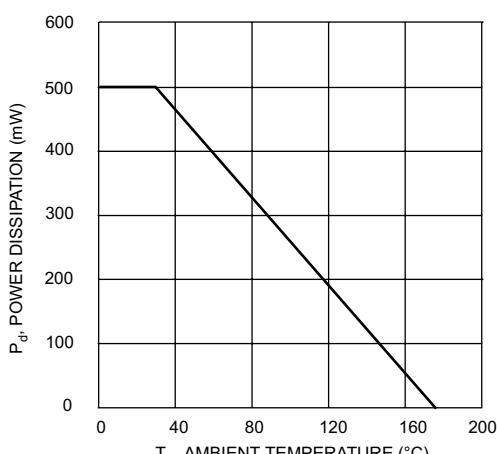


Fig. 3, Power Dissipation vs Ambient Temperature

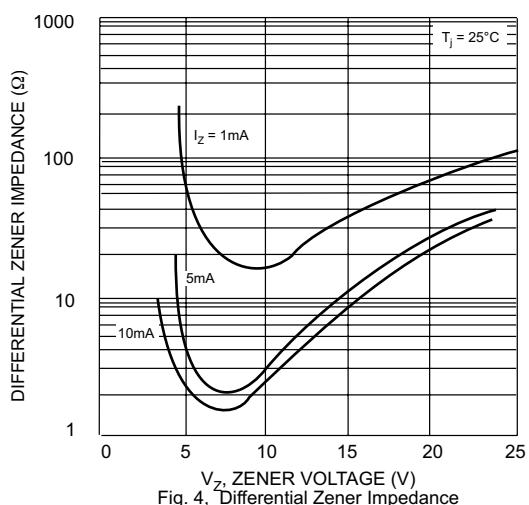


Fig. 4, Differential Zener Impedance

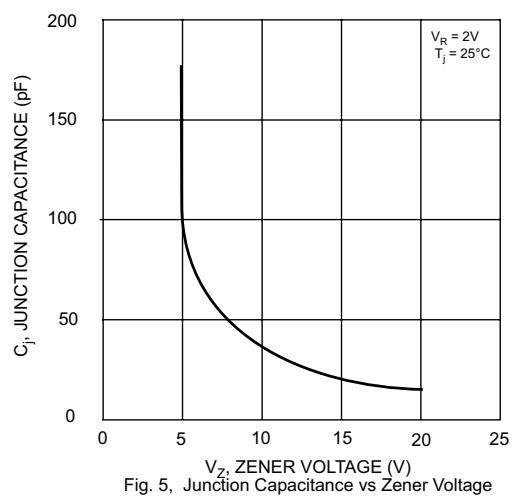


Fig. 5, Junction Capacitance vs Zener Voltage