

BZV55C2V4
THRU
BZV55C75

SURFACE MOUNT
SILICON ZENER DIODE
0.5 WATT, 2.4 THRU 75 VOLTS
± 5% TOLERANCE



SOD-80 CASE

CentralTM
Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR BZV55C2V4 Series Surface Mount Silicon Zener Diode is a high quality, well constructed, highly reliable component designed for use in all types of commercial, industrial, entertainment, computer, and automotive applications.

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

	<u>SYMBOL</u>		<u>UNITS</u>
Average Forward Current	I_O	250	mA
Peak Repetitive Forward Current	I_{FRM}	250	mA
Power Dissipation ($T_L=50^{\circ}\text{C}$)	P_D	500	mW
Operating and Storage			
Junction Temperature	T_J, T_{stg}	-65 to +200	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS: ($T_A=25^{\circ}\text{C}$), $V_F=0.9\text{V MAX @ } I_F=10\text{mA}$ FOR ALL TYPES.

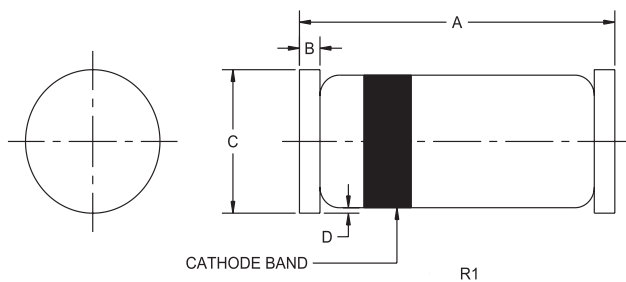
TYPE NO.	ZENER VOLTAGE $V_Z @ I_{ZT}$			TEST CURRENT	MAXIMUM ZENER IMPEDANCE			MAXIMUM REVERSE CURRENT		MAXIMUM ZENER CURRENT
	MIN	NOM	MAX	I_{ZT}	$Z_{ZT}@I_{ZT}$	Z_{ZK}	@ I_{ZK}	I_R	@ V_R	I_{ZM}
	VOLTS	VOLTS	VOLTS	mA	Ω	Ω	mA	μA	VOLTS	mA
BZV55C2V4	2.280	2.4	2.520	5.0	100	600	1.0	50	1.0	208
BZV55C2V7	2.565	2.7	2.835	5.0	100	600	1.0	20	1.0	185
BZV55C3V0	2.850	3.0	3.150	5.0	95	600	1.0	10	1.0	167
BZV55C3V3	3.135	3.3	3.465	5.0	95	600	1.0	5.0	1.0	152
BZV55C3V6	3.420	3.6	3.780	5.0	90	600	1.0	5.0	1.0	139
BZV55C3V9	3.705	3.9	4.095	5.0	90	600	1.0	3.0	1.0	128
BZV55C4V3	4.085	4.3	4.515	5.0	90	600	1.0	3.0	1.0	116
BZV55C4V7	4.465	4.7	4.935	5.0	80	500	1.0	3.0	2.0	106
BZV55C5V1	4.845	5.1	5.355	5.0	60	480	1.0	2.0	2.0	96
BZV55C5V6	5.320	5.6	5.880	5.0	40	400	1.0	1.0	2.0	89
BZV55C6V2	5.890	6.2	6.510	5.0	10	150	1.0	3.0	4.0	81
BZV55C6V8	6.460	6.8	7.140	5.0	15	80	1.0	2.0	4.0	74
BZV55C7V5	7.125	7.5	7.875	5.0	15	80	1.0	1.0	5.0	67
BZV55C8V2	7.790	8.2	8.610	5.0	15	80	1.0	0.7	5.0	61
BZV55C9V1	8.645	9.1	9.555	5.0	15	100	1.0	0.5	6.0	55
BZV55C10	9.500	10	10.50	5.0	20	150	1.0	0.1	7.0	50
BZV55C11	10.45	11	11.55	5.0	20	150	1.0	0.1	8.0	45

R0 (13-November 2001)

ELECTRICAL CHARACTERISTICS CONTINUED: ($T_A=25^\circ\text{C}$), $V_F=0.9\text{V MAX @ } I_F=10\text{mA}$ FOR ALL TYPES.

TYPE NO.	ZENER VOLTAGE $V_Z @ I_{ZT}$			TEST CURRENT	MAXIMUM ZENER IMPEDANCE			MAXIMUM REVERSE CURRENT		MAXIMUM ZENER CURRENT
	MIN	NOM	MAX	I_{ZT}	$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$		$I_R @ V_R$		I_{ZM}
	VOLTS	VOLTS	VOLTS	mA	Ω	Ω	mA	μA	VOLTS	mA
BZV55C12	11.40	12	12.60	5.0	25	150	1.0	0.1	8.0	42
BZV55C13	12.35	13	13.65	5.0	30	170	1.0	0.1	8.0	38
BZV55C15	14.25	15	15.75	5.0	30	200	1.0	0.05	10.5	33
BZV55C16	15.20	16	16.80	5.0	40	200	1.0	0.05	11.2	31
BZV55C18	17.10	18	18.90	5.0	45	225	1.0	0.05	12.6	28
BZV55C20	19.00	20	21.00	5.0	55	225	1.0	0.05	14.0	25
BZV55C22	20.90	22	23.10	5.0	55	250	1.0	0.05	15.4	23
BZV55C24	22.80	24	25.20	5.0	70	250	1.0	0.05	16.8	21
BZV55C27	25.65	27	28.35	2.0	80	300	0.5	0.05	18.9	19
BZV55C30	28.50	30	31.50	2.0	80	300	0.5	0.05	21.0	17
BZV55C33	31.35	33	34.65	2.0	80	325	0.5	0.05	23.1	15
BZV55C36	34.20	36	37.80	2.0	90	350	0.5	0.05	25.2	14
BZV55C39	37.05	39	40.95	2.0	130	350	0.5	0.05	27.3	13
BZV55C43	40.85	43	45.15	2.0	150	375	0.5	0.05	30.1	12
BZV55C47	44.65	47	49.35	2.0	170	375	0.5	0.05	32.9	11
BZV55C51	48.45	51	53.55	2.0	180	400	0.5	0.05	35.7	9.9
BZV55C56	53.20	56	58.80	2.0	200	425	0.5	0.05	39.2	8.9
BZV55C62	58.90	62	65.10	2.0	215	450	0.5	0.05	43.4	8.0
BZV55C68	64.60	68	71.40	2.0	240	475	0.5	0.05	47.6	7.4
BZV55C75	71.25	75	78.75	2.0	255	500	0.5	0.05	52.5	6.7

SOD-80 CASE - MECHANICAL OUTLINE



DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.130	0.146	3.30	3.71
B	0.016		0.41	
C (DIA)	0.051	0.067	1.30	1.70
D	-	0.004	-	0.10

SOD-80 (REV:R1)

R0 (13-November 2001)