

**BZV55C2V4 THRU BZV55C75**

**SURFACE MOUNT SILICON  
ZENER DIODES  
0.5 WATT, 2.4 THRU 75 VOLT  
± 5% TOLERANCE**

**SOD-80 CASE**[www.centrasemi.com](http://www.centrasemi.com)**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR BZV55C2V4 series are high quality, highly reliable silicon Zener diodes designed for use in all types of commercial, industrial, entertainment, computer, and automotive applications.

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

Average Forward Current

Peak Repetitive Forward Current

Power Dissipation ( $T_L=50^{\circ}\text{C}$ )

Operating and Storage Junction Temperature

**SYMBOL** $I_O$  $I_{FRM}$  $P_D$  $T_J, T_{stg}$ 

250

250

500

-65 to +200

**UNITS**

mA

mA

mW

 $^{\circ}\text{C}$ **ELECTRICAL CHARACTERISTICS:** ( $T_A=25^{\circ}\text{C}$ )  $V_F=1.1\text{V MAX @ } I_F=200\text{mA}$  (for all types)

TYPE	ZENER VOLTAGE $V_Z @ I_{ZT}$			TEST CURRENT $I_{ZT}$	MAXIMUM ZENER IMPEDANCE			MAXIMUM REVERSE CURRENT		MAXIMUM ZENER CURRENT $I_{ZM}$
	MIN	NOM	MAX		$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$		$I_R @ V_R$		
	V	V	V		$\Omega$	$\Omega$	mA	$\mu\text{A}$	V	
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

R3 (13-March 2015)

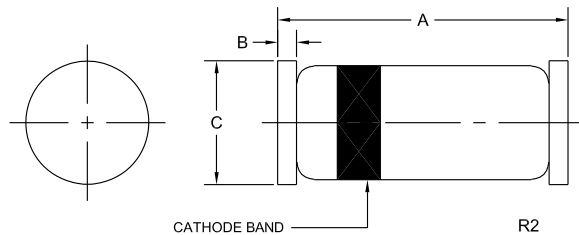
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**ELECTRICAL CHARACTERISTICS - Continued:** ( $T_A=25^{\circ}\text{C}$ )  $V_F=1.1\text{V MAX @ } I_F=200\text{mA}$  (for all types)

TYPE	ZENER VOLTAGE $V_Z @ I_{ZT}$			TEST CURRENT	MAXIMUM ZENER IMPEDANCE			MAXIMUM REVERSE CURRENT		MAXIMUM ZENER CURRENT
	MIN	NOM	MAX	$I_{ZT}$	$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$		$I_R @ V_R$		$I_{ZM}$
	V	V	V	mA	$\Omega$	$\Omega$	mA	$\mu\text{A}$	V	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	0.014		0.35	
C (DIA)	0.049	0.067	1.25	1.70

SOD-80 (REV:R2)

**MARKING: CATHODE BAND**

R3 (13-March 2015)

## OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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### PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

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### DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2<sup>nd</sup> day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

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### REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix "PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

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### CONTACT US

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**Worldwide Field Representatives:**  
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