

# Central<sup>TM</sup> Semiconductor Corp.

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Manufacturers of World Class Discrete Semiconductors

1N5985B thru 1N6031B

500 mW ZENER DIODE

5% TOLERANCE

JEDEC DO-35 CASE

## DESCRIPTION

The CENTRAL SEMICONDUCTOR 1N5985B Series types are high quality Silicon Zener Diodes designed for low leakage applications.

## MAXIMUM RATINGS ( $T_L = 50^\circ\text{C}$ )

Power Dissipation  
Operating and Storage  
Junction Temperature  
Tolerance "B Suffix"  
Tolerance "C Suffix"  
Tolerance "D Suffix"

SYMBOL  
PD

500

UNIT  
mW

$T_J, T_{stg}$

-65 TO +200

$^\circ\text{C}$

$\pm 5$

%

$\pm 2$

%

$\pm 1$

%

## ELECTRICAL CHARACTERISTICS ( $T_L = 30^\circ\text{C}$ )

TYPE	Zener Voltage	Test Current	Maximum Zener Impedance			Maximum Reverse Current		Maximum DC Current
	$V_Z @ I_{Z1}$	$I_{Z1}$	$Z_{Z1} @ I_{Z1}$	$Z_{Z2} @ I_{Z2}$		$I_R @ V_R$		$I_{ZM}$
	Volts	mA	$\Omega$	$\Omega$	mA	$\mu\text{A}$	Volts	mA
1N5985B	2.4	5.0	100	1800	0.25	100	1.0	208
1N5986B	2.7	5.0	100	1900	0.25	75	1.0	185
1N5987B	3.0	5.0	95	2000	0.25	50	1.0	167
1N5988B	3.3	5.0	95	2200	0.25	25	1.0	152
1N5989B	3.6	5.0	90	2300	0.25	15	1.0	139
1N5990B	3.9	5.0	90	2400	0.25	10	1.0	128
1N5991B	4.3	5.0	88	2500	0.25	5.0	1.0	116
1N5992B	4.7	5.0	70	2200	0.25	3.0	1.5	106
1N5993B	5.1	5.0	50	2050	0.25	2.0	2.0	98
1N5994B	5.6	5.0	25	1800	0.25	2.0	3.0	89
1N5995B	6.2	5.0	10	1300	0.25	1.0	4.0	81
1N5996B	6.8	5.0	8.0	750	0.25	1.0	5.2	74
1N5997B	7.5	5.0	7.0	600	0.25	0.5	6.0	67
1N5998B	8.2	5.0	7.0	600	0.25	0.5	6.5	61
1N5999B	9.1	5.0	10	600	0.25	0.1	7.0	55
1N6000B	10	5.0	15	600	0.25	0.1	8.0	50
1N6001B	11	5.0	18	600	0.25	0.1	8.4	45
1N6002B	12	5.0	22	600	0.25	0.1	9.1	42
1N6003B	13	5.0	25	600	0.25	0.1	9.9	38
1N6004B	15	5.0	32	600	0.25	0.1	11	33
1N6005B	16	5.0	36	600	0.25	0.1	12	31
1N6006B	18	5.0	42	600	0.25	0.1	14	28
1N6007B	20	5.0	48	600	0.25	0.1	15	25
1N6008B	22	5.0	55	600	0.25	0.1	17	23
1N6009B	24	5.0	62	600	0.25	0.1	18	21
1N6010B	27	5.0	70	600	0.25	0.1	21	19
1N6011B	30	5.0	78	600	0.25	0.1	23	17
1N6012B	33	5.0	88	700	0.25	0.1	25	15
1N6013B	36	5.0	95	700	0.25	0.1	27	14
1N6014B	39	2.0	130	800	0.25	0.1	30	13
1N6015B	43	2.0	150	900	0.25	0.1	33	12
1N6016B	47	2.0	170	1000	0.25	0.1	36	11
1N6017B	51	2.0	180	1300	0.25	0.1	39	9.8
1N6018B	56	2.0	200	1400	0.25	0.1	43	8.9
1N6019B	62	2.0	225	1400	0.25	0.1	47	8.0
1N6020B	68	2.0	240	1600	0.25	0.1	52	7.4
1N6021B	75	2.0	265	1700	0.25	0.1	56	6.7
1N6022B	82	2.0	280	2000	0.25	0.1	62	6.1
1N6023B	91	2.0	300	2300	0.25	0.1	69	5.5
1N6024B	100	1.0	500	2600	0.25	0.1	76	5.0
1N6025B	110	1.0	650	3000	0.25	0.1	84	4.5
1N6026B	120	1.0	800	4000	0.25	0.1	91	4.2
1N6027B	130	1.0	950	4500	0.25	0.1	99	3.8
1N6028B	150	1.0	1250	5000	0.25	0.1	114	3.3
1N6029B	160	1.0	1400	5500	0.25	0.1	122	3.1
1N6030B	180	1.0	1700	6000	0.25	0.1	137	2.8
1N6031B	200	1.0	2000	7000	0.25	0.1	152	2.5