

1N5985B THRU 1N6020B

SILICON ZENER DIODES
500mW, 2.4 THRU 68 VOLTS
5% TOLERANCE



DO-35 CASE



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR 1N5985B series 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

SYMBOL

P_D

T_J, T_{stg}

500

-65 to +200

UNITS

mW

$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS: ($T_L=30^\circ\text{C}$) $V_F=1.5\text{V MAX @ } I_F=100\text{mA}$ (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	Ω	Ω	mA	μA	V	mA
1N5985B	2.280	2.4	2.520	5.0	100	1.8K	0.25	100	1.0	208
1N5986B	2.565	2.7	2.835	5.0	100	1.9K	0.25	75	1.0	185
1N5987B	2.850	3.0	3.150	5.0	95	2.0K	0.25	50	1.0	167
1N5988B	3.135	3.3	3.465	5.0	95	2.2K	0.25	25	1.0	152
1N5989B	3.420	3.6	3.780	5.0	90	2.3K	0.25	15	1.0	139
1N5990B	3.705	3.9	4.095	5.0	90	2.4K	0.25	10	1.0	128
1N5991B	4.085	4.3	4.515	5.0	88	2.5K	0.25	5.0	1.0	116
1N5992B	4.465	4.7	4.935	5.0	70	2.2K	0.25	3.0	1.5	106
1N5993B	4.845	5.1	5.355	5.0	50	2.05K	0.25	2.0	2.0	98
1N5994B	5.320	5.6	5.880	5.0	25	1.8K	0.25	2.0	3.0	89
1N5995B	5.890	6.2	6.510	5.0	10	1.3K	0.25	1.0	4.0	81
1N5996B	6.460	6.8	7.140	5.0	8.0	750	0.25	1.0	5.2	74
1N5997B	7.125	7.5	7.875	5.0	7.0	600	0.25	0.5	6.0	67
1N5998B	7.790	8.2	8.610	5.0	7.0	600	0.25	0.5	6.5	61
1N5999B	8.645	9.1	9.555	5.0	10	600	0.25	0.1	7.0	55
1N6000B	9.500	10	10.50	5.0	15	600	0.25	0.1	8.0	50
1N6001B	10.45	11	11.55	5.0	18	600	0.25	0.1	8.4	45
1N6002B	11.40	12	12.60	5.0	22	600	0.25	0.1	9.1	42
1N6003B	12.35	13	13.65	5.0	25	600	0.25	0.1	9.9	38
1N6004B	14.25	15	15.75	5.0	32	600	0.25	0.1	11	33
1N6005B	15.20	16	16.80	5.0	36	600	0.25	0.1	12	31
1N6006B	17.10	18	18.90	5.0	42	600	0.25	0.1	14	28
1N6007B	19.00	20	21.00	5.0	48	600	0.25	0.1	15	25
1N6008B	20.90	22	23.10	5.0	55	600	0.25	0.1	17	23
1N6009B	22.80	24	25.20	5.0	62	600	0.25	0.1	18	21
1N6010B	25.65	27	28.35	5.0	70	600	0.25	0.1	21	19

R1 (9-August 2016)

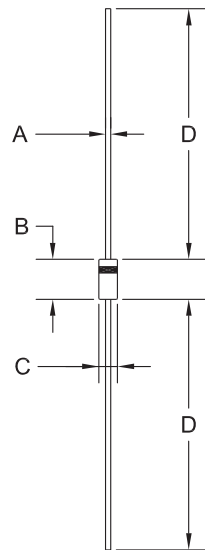
1N5985B THRU 1N6020B

SILICON ZENER DIODES
500mW, 2.4 THRU 68 VOLT
5% TOLERANCE



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	Ω	Ω	mA	μA	V	mA
1N6011B	28.50	30	31.50	5.0	78	600	0.25	100	23	17
1N6012B	31.35	33	34.65	5.0	88	700	0.25	100	25	15
1N6013B	34.20	36	37.80	5.0	95	700	0.25	100	27	14
1N6014B	37.05	39	40.95	5.0	130	800	0.25	100	30	13
1N6015B	40.85	43	45.15	2.0	150	900	0.25	100	33	12
1N6016B	44.65	47	49.35	2.0	170	1.0K	0.25	100	36	11
1N6017B	48.45	51	53.55	2.0	180	1.3K	0.25	100	39	9.8
1N6018B	53.20	56	58.80	2.0	200	1.4K	0.25	100	43	8.9
1N6019B	58.90	62	65.10	2.0	225	1.4K	0.25	100	47	8.0
1N6020B	64.60	68	71.40	2.0	240	1.6K	0.25	100	52	7.4

DO-35 CASE - MECHANICAL OUTLINE



R1

SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.018	0.022	0.46	0.56
B	0.120	0.200	3.05	5.08
C	0.060	0.090	1.52	2.29
D	1.000	-	25.40	-

DO-35 (REV: R1)

R1 (9-August 2016)

OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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

DESIGNER SUPPORT/SERVICES

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

- Free quick ship samples (2nd 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

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).

CONTACT US

Corporate Headquarters & Customer Support Team

Central Semiconductor Corp.
145 Adams Avenue
Hauppauge, NY 11788 USA
Main Tel: (631) 435-1110
Main Fax: (631) 435-1824
Support Team Fax: (631) 435-3388
www.centrasemi.com

Worldwide Field Representatives:
www.centrasemi.com/wwreps

Worldwide Distributors:
www.centrasemi.com/wwdistributors

For the latest version of Central Semiconductor's **LIMITATIONS AND DAMAGES DISCLAIMER**, which is part of Central's Standard Terms and Conditions of sale, visit: www.centrasemi.com/terms

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Central Semiconductor:

[1N6012B BK](#) [1N6020B BK](#) [1N6006B TR](#) [1N5994B BK](#) [1N5993B BK](#) [1N6004B BK](#) [1N5989B BK](#) [1N5999B BK](#)
[1N5986B BK](#) [1N5988B BK](#) [1N5999B TR](#) [1N5993B TR](#) [1N6009B BK](#) [1N5989B TR](#) [1N6000B TR](#) [1N6002B BK](#)
[1N5998B BK](#) [1N5997B TR](#) [1N5985B TR](#) [1N5985B BK](#) [1N5995B TR](#) [1N5994B TR](#) [1N6002B TR](#) [1N5987B BK](#)
[1N6013B BK](#) [1N5992B BK](#) [1N5996B TR](#) [1N5996B BK](#) [1N5990B BK](#) [1N6020B TR](#) [1N5990B TR](#) [1N6006B BK](#)
[1N5995B BK](#) [1N6000B BK](#) [1N5988B TR](#) [1N5991B TR](#) [1N5989B TR TIN/LEAD](#) [1N5991B TR TIN/LEAD](#) [1N5986B](#)
[BK TIN/LEAD](#) [1N6002B TR TIN/LEAD](#) [1N6006B TR TIN/LEAD](#) [1N5998B BK TIN/LEAD](#) [1N5988B BK TIN/LEAD](#)
[1N5988B TR TIN/LEAD](#) [1N5999B BK TIN/LEAD](#) [1N6000B BK TIN/LEAD](#) [1N5990B BK TIN/LEAD](#) [1N5995B BK](#)
[TIN/LEAD](#) [1N5985B BK TIN/LEAD](#) [1N5995B TR TIN/LEAD](#) [1N6002B BK TIN/LEAD](#) [1N5996B TR TIN/LEAD](#)
[1N6004B BK TIN/LEAD](#) [1N5999B TR TIN/LEAD](#) [1N6000B TR TIN/LEAD](#) [1N5985B TR TIN/LEAD](#) [1N5996B BK](#)
[TIN/LEAD](#) [1N5993B TR TIN/LEAD](#) [1N6013B BK TIN/LEAD](#) [1N5994B BK TIN/LEAD](#) [1N6012B BK TIN/LEAD](#)
[1N5989B BK TIN/LEAD](#) [1N5993B BK TIN/LEAD](#) [1N6009B BK TIN/LEAD](#) [1N5987B BK TIN/LEAD](#) [1N5997B TR](#)
[TIN/LEAD](#) [1N5990B TR TIN/LEAD](#) [1N6006B BK TIN/LEAD](#) [1N5992B BK TIN/LEAD](#) [1N5994B TR TIN/LEAD](#)