



Micro Commercial Components



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**1N5985B  
 THRU  
 1N6016B**

## Features

- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)
- ¶ High Reliability
- ¶ Very Sharp Reverse Characteristic
- ¶  $V_Z$  - tolerance  $\pm 5\%$
- Moisture Sensitivity: Level 1
- ¶ Marking: Cathode band and type number

**500 mW  
 Zener Diode  
 2.4 – 47Volts**

## Maximum Ratings

- ¶ Operating Temperature:  $-65^{\circ}\text{C}$  to  $+200^{\circ}\text{C}$
- ¶ Storage Temperature:  $-65^{\circ}\text{C}$  to  $+200^{\circ}\text{C}$
- ¶ DC Power Dissipation: 500mW
- ¶ Maximum Thermal Resistance: 300K/W Junction to Ambient  
 Test Conditions:  $l = 9.5\text{mm}(3/8")$   $T_L = \text{constant}$
- ¶ Forward voltage @ 100mA: 1.5V

Figure 1 Capacitance vs.  $V_Z$  Curve

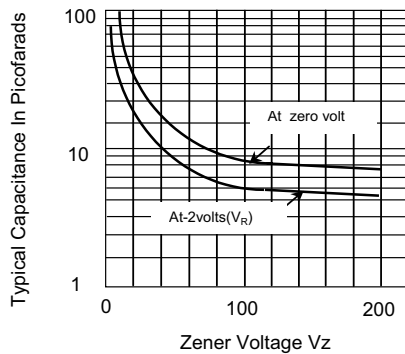
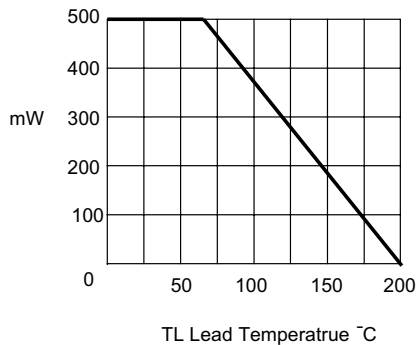
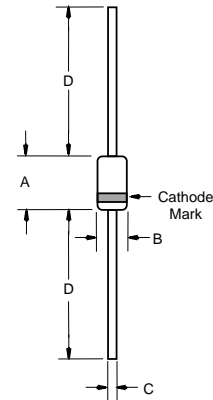


Figure 2 - Derating Curve



DO-35



DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	---	.175	---	4.2	
B	---	.079	---	2.00	
C	---	.020	---	.52	
D	1.000	---	25.40	---	

Note: 1. Lead in Glass Exemption Applied, see EU Directive Annex 7(C)-I.

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## ELECTRICAL CHARACTERISTICS @25°C

MCC PART NUMBER	NOMINAL ZENER VOLTAGE $V_Z @ I_{ZT}$	TEST CURRENT $I_{ZT}$	MAXIMUM ZENER IMPEDANCE $Z_{ZK} @ I_{ZK} = 0.25mA$		MAXIMUM REVERSE LEAKAGE CURRENT $I_R @ V_R$		Max. DC Zener Current $I_{ZM}$
	VOLTS		mA	q	q	nA	
1N5985B	2.4	5.0	100	1800	100	1.0	208
1N5987B	3.0	5.0	95	2000	50	1.0	167
1N5988B	3.3	5.0	95	2200	25	1.0	152
1N5989B	3.6	5.0	90	2300	15	1.0	139
1N5990B	3.9	5.0	90	2400	10	1.0	128
1N5991B	4.3	5.0	88	2500	5.0	1.0	116
1N5992B	4.7	5.0	70	2200	3.0	1.5	106
1N5993B	5.1	5.0	50	2050	2.0	2.0	98
1N5994B	5.6	5.0	25	1800	2.0	3.0	89
1N5995B	6.2	5.0	10	1300	1.0	4.0	81
1N5996B	6.8	5.0	8.0	750	1.0	5.2	74
1N5997B	7.5	5.0	7.0	600	0.5	6.0	67
1N5998B	8.2	5.0	7.0	600	0.5	6.5	61
1N5999B	9.1	5.0	10	600	0.1	7.0	55
1N6000B	10	5.0	15	600	0.1	8.0	50
1N6001B	11	5.0	18	600	0.1	8.4	45
1N6002B	12	5.0	22	600	0.1	9.1	42
1N6003B	13	5.0	25	600	0.1	9.9	38
1N6004B	15	5.0	32	600	0.1	11	33
1N6005B	16	5.0	36	600	0.1	12	31
1N6006B	18	5.0	42	600	0.1	14	28
1N6007B	20	5.0	48	600	0.1	15	25
1N6008B	22	5.0	55	600	0.1	17	23
1N6009B	24	5.0	62	600	0.1	18	21
1N6010B	27	5.0	70	600	0.1	21	19
1N6011B	30	5.0	78	600	0.1	23	17
1N6012B	33	5.0	88	700	0.1	25	15
1N6013B	36	5.0	95	700	0.1	27	14
1N6014B	39	2.0	130	800	0.1	30	13
1N6015B	43	2.0	150	900	0.1	33	12
1N6016B	47	2.0	170	1000	0.1	36	11

Notes:

The type number listed indicates a 5% tolerance. for 2% tolerance, add suffix C;



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### Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 10Kpcs/Reel
Part Number-AP	Ammo Packing: 5Kpcs/Ammo Box
Part Number-BP	Bulk: 100Kpcs/Carton

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