



Micro Commercial Components



Micro Commercial Components  
 20736 Marilla Street Chatsworth  
 CA 91311  
 Phone: (818) 701-4933  
 Fax: (818) 701-4939

**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

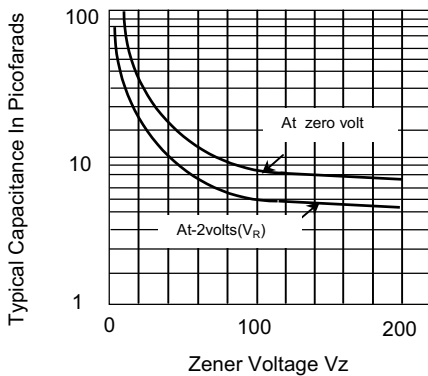
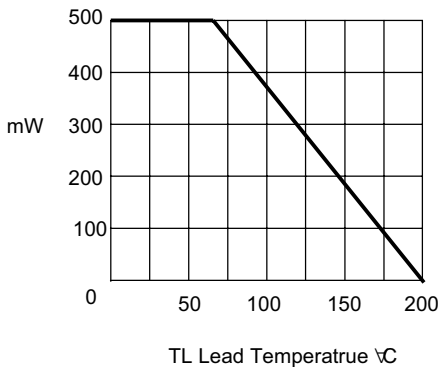
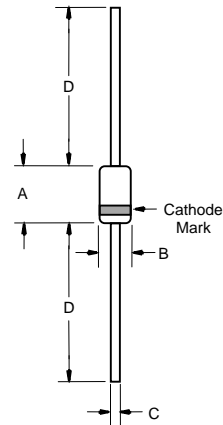


Figure 2 - Derating Curve



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.

# 1N5985B THRU 1N6016B



Micro Commercial Components

## 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			$\mu A$	VOLTS	mA
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;



Micro Commercial Components

### 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

**\*\*\*IMPORTANT NOTICE\*\*\***

**Micro Commercial Components Corp.** reserves the right to make changes without further notice to any product herein to make corrections, modifications , enhancements , improvements , or other changes . **Micro Commercial Components Corp .** does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights ,nor the rights of others . The user of products in such applications shall assume all risks of such use and will agree to hold **Micro Commercial Components Corp .** and all the companies whose products are represented on our website, harmless against all damages.

**\*\*\*LIFE SUPPORT\*\*\***

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

**\*\*\*CUSTOMER AWARENESS\*\*\***

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. **MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources.** MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.