



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





Silicon Zener Diode Series

1N957BUR-1 thru 1N986BUR-1

Features

- Available in JAN, JANTX and JANTXV per MIL-PRF-19500/117
- Standard voltage tolerances are plus/minus 5% with B suffix, 10% with A suffix identification.
- Tight tolerances available in plus or minus 2% or 1% with C or D suffix respectively.
- 500 mW power handling
- Hermetically sealed axial-leaded glass DO-213AA package.



Maximum Ratings

Operating & Storage Temperature: -65°C to +175°C

Thermal Resistance: 250°C/W

Steady-State Power: 0.5 watts

Forward Voltage @200 MA: 1.1 V for 1N957BUR-1 – 1N986BUR-1

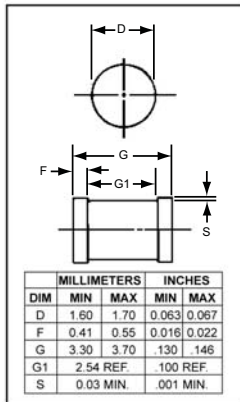
Electrical Specifications @ +25 °C (Unless Otherwise Specified)

JEDEC TYPE Number (Note 1)	Normal Zener Voltage	Zener Test Current	Maximum Zener Impedance			Maximum DC Zener Current	Maximum Surge Current	Maximum Reverse Leakage		Maximum Temperature Coefficient
	V _Z Volts	I _{ZT} mA	Z _{ZT} @ I _{ZT} Ohms	Z _{ZK} @ I _{ZK} Ohms	I _{ZK} mA	I _{ZM} mA	I _{ZSM} mA	I _R @ V _R µA	V _R Volts	α _{VZ} %/°C
1N957BUR-1	6.8	18.5	4.5	700	1.0	55	300	150	5.2	+0.05
1N958BUR-1	7.5	16.5	5.5	700	.5	50	275	75	5.7	+0.058
1N959BUR-1	8.2	15.0	6.5	700	.5	45	250	50	6.2	+0.065
1N960BUR-1	9.1	14.0	7.5	700	.5	41	225	25	6.9	+0.068
1N961BUR-1	10	12.5	8.5	700	.25	38	200	10	7.6	+0.075
1N962BUR-1	11	11.5	9.5	700	.25	32	175	5	8.4	+0.076
1N963BUR-1	12	10.5	11.5	700	.25	31	160	5	9.1	+0.077
1N964BUR-1	13	9.5	13	700	.25	28	150	5	9.9	+0.079
1N965BUR-1	15	8.5	16	700	.25	25	130	5	11.4	+0.082
1N966BUR-1	16	7.8	17	700	.25	24	120	5	12.2	+0.083
1N967BUR-1	18	7.0	21	750	.25	20	110	5	13.7	+0.085
1N968BUR-1	20	6.2	25	750	.25	18	100	5	15.2	+0.086
1N969BUR-1	22	5.6	29	750	.25	16	90	5	16.7	+0.087
1N970BUR-1	24	5.2	33	750	.25	15	80	5	18.2	+0.088
1N971BUR-1	27	4.6	41	750	.25	13	70	5	20.6	+0.090
1N972BUR-1	30	4.2	49	1000	.25	12	65	5	22.8	+0.091
1N973BUR-1	33	3.8	58	1000	.25	11	60	5	25.1	+0.092
1N974BUR-1	36	3.4	70	1000	.25	10	55	5	27.4	+0.093
1N975BUR-1	39	3.2	80	1000	.25	9.5	46	5	29.7	+0.094
1N976BUR-1	43	3.0	93	1000	.25	8.8	44	5	32.7	+0.095
1N977BUR-1	47	2.7	105	1500	.25	7.9	40	5	35.8	+0.095
1N978BUR-1	51	2.5	125	1500	.25	7.4	37	5	38.8	+0.096
1N979BUR-1	56	2.2	150	2000	.25	6.8	35	5	42.6	+0.096
1N980BUR-1	62	2.0	185	2000	.25	6.0	30	5	47.1	+0.097
1N981BUR-1	68	1.8	230	2000	.25	5.5	28	5	51.7	+0.097
1N982BUR-1	75	1.7	270	2000	.25	5.0	26	5	56.0	+0.098
1N983BUR-1	82	1.5	330	3000	.25	4.6	23	5	62.2	+0.098
1N984BUR-1	91	1.4	400	3000	.25	4.1	21	5	69.2	+0.099
1N985BUR-1	100	1.3	500	3000	.25	3.7	18	5	76.0	+0.11
1N986BUR-1	110	1.1	750	4000	.25	3.3	16	5	83.6	+0.11

NOTE 1: The JEDEC type numbers shown (B Suffix) have a ±5% tolerance on nominal Zener Voltage. The suffix A is used to identify ±10% tolerance; suffix C is used to identify ±2%; and suffix D is used identify ±1%; no suffix indicates ±20%.



Outline Drawing



LEADED DESIGN DATA

CASE: DO-213AA, Hermetically sealed glass case. (MELF, SOD-80, LL34)

LEAD FINISH: Tin / Lead

THERMAL RESISTANCE: ($R_{\theta JEC}$): 100 °C/W maximum at L = 0 inch

THERMAL IMPEDANCE: ($Z_{\theta JX}$): 25 °C/W maximum

POLARITY: Diode to be operated with the banded (cathode) end positive.

MOUNTING POSITION: Any.

MOUNTING SURFACE SELECTION: The Axial Coefficient of Expansion (COE) Of this Device is Approximately +6 PPM/°C. The COE of the Mounting Surface System Should Be Selected To Provide A Suitable Match With This Device.

Graphs

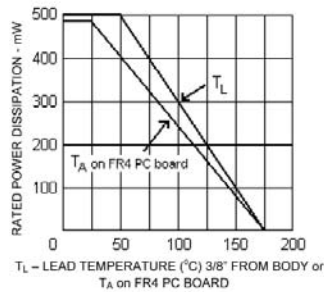


FIGURE 1
POWER DERATING CURVE

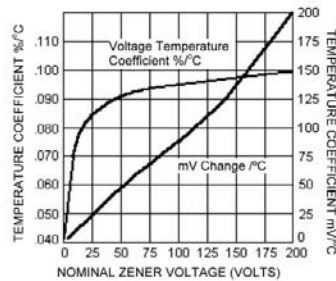


FIGURE 2
ZENER VOLTAGE TEMPERATURE COEFFICIENT vs. ZENER VOLTAGE

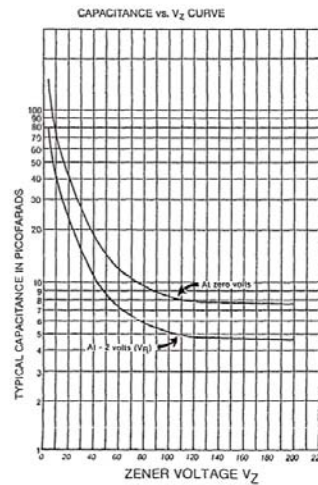


FIGURE 3
CAPACITANCE vs. ZENER VOLTAGE (TYPICAL)

Aeroflex / Metelics, Inc.

975 Stewart Drive,
Sunnyvale, CA 94085
Tel: (408) 737-8181
Fax: (408) 733-7645

Sales: 888-641-SEMI (7364)

Hi-Rel Components

9 Hampshire Street,
Lawrence, MA 01840
Tel: (603) 641-3800
Fax: (978) 683-3264

www.aeroflex.com/metelics-hirelcomponents

www.aeroflex.com/metelics metelics-sales@aeroflex.com

Aeroflex / Metelics, Inc. reserves the right to make changes to any products and services herein at any time without notice. Consult Aeroflex or an authorized sales representative to verify that the information in this data sheet is current before using this product. Aeroflex does not assume any responsibility or liability arising out of the application or use of any product or service described herein, except as expressly agreed to in writing by Aeroflex; nor does the purchase, lease, or use of a product or service from Aeroflex convey a license under any patent rights, copyrights, trademark rights, or any other of the intellectual rights of Aeroflex or of third parties.

Copyright 2012 Aeroflex / Metelics. All rights reserved.

ISO 9001: 2008 certified companies



Our passion for performance is defined by three attributes represented by these three icons: solution-minded, performance-driven and customer-focused.