



Micro Commercial Components



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

# DL957B THRU DL982B

## Features

- Zener Voltage 6.8V to 75
- Silicon Planar Power Zener Diodes
- $V_Z$  - tolerance  $\pm 5\%$
- Moisture Sensitivity Level 1

## 0.5W Silicon Planar Zener Diodes

## Mechanical Data

- Operating Temperature:  $-65^{\circ}\text{C}$  to  $+175^{\circ}\text{C}$
- Glass Package
- Marking : Cathode band denotes polarity

## Maximum Ratings

	Symbol	Value	Units
Zener Current		See Table 1	
Power Dissipation @ $T_A=25^{\circ}\text{C}$	$P_{\text{tot}}$	500	mW
Junction Temperature	$T_J$	200	$^{\circ}\text{C}$
Storage Temperature Range	$T_{\text{STG}}$	-65 to 200	$^{\circ}\text{C}$

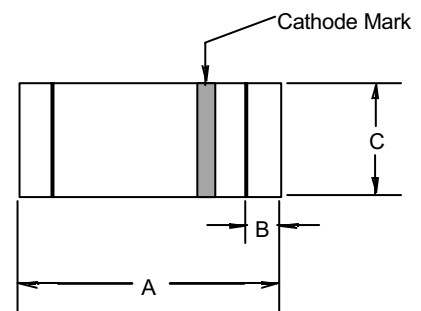
## Electrical Characteristics @ $25^{\circ}\text{C}$ Unless Otherwise Specified

	Symbol	Maximum	Unit
Thermal resistance	$R_{\theta\text{JA}}$	300	$^{\circ}\text{C}/\text{W}$
Forward Voltage @ $I_F=200\text{mA}$	$V_F$	1.5	V

### NOTE:

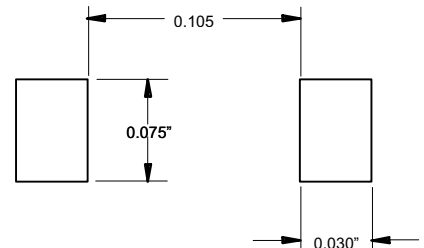
Valid provided that a distance of 8mm from case are kept at ambient temperature

## MINIMELF



DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.134	.142	3.40	3.60	
B	.008	.016	.20	.40	
C	.055	.059	1.40	1.50	$\emptyset$

### SUGGESTED SOLDER PAD LAYOUT



## DL957B thru DL982B

MCC PART NUMBER	ZENER VOLTAGE <sup>3)</sup> @TEST CURRENT		MAXIMUM ZENER IMPEDANCE <sup>1)</sup>		MAXIMUM REVERSE LEAKAGE CURRENT TEST-VOLTAGE		MAXIMUM ZENER CURRENT	
	V <sub>Z</sub>	I <sub>ZT</sub>	Z <sub>ZT</sub>	Z <sub>ZK</sub>	I <sub>ZK</sub>	I <sub>R</sub> <sup>2)</sup>	V <sub>R</sub>	I <sub>ZM</sub> <sup>2)</sup>
	V	mA	Ω	Ω	mA	μA	V	mA
DL957B	6.8	18.5	4.5	700	1.0	150	5.2	47
DL958B	7.5	16.5	5.5	700	0.5	75	5.7	42
DL959B	8.2	15	5.5	700	0.5	50	6.2	38
DL960B	9.1	14	5.5	700	0.5	10	6.9	35
DL961B	10	12.5	5.5	700	0.25	5	7.6	32
DL962B	11	11.5	5	700	0.25	5	8.4	28
DL963B	12	10.5	11.5	700	0.25	5	9.1	26
DL964B	13	9.5	13	700	0.25	5	9.9	24
DL965B	15	8.5	16	700	0.25	5	11.4	21
DL966B	16	7.8	17	700	0.25	5	12.2	19
DL967B	18	7.0	21	750	0.25	5	13.7	17
DL968B	20	6.2	25	750	0.25	5	15.2	15
DL969B	22	5.6	29	750	0.25	5	16.7	14
DL970B	24	5.2	33	750	0.25	5	18.2	13
DL971B	27	4.6	41	750	0.25	5	20.6	11
DL972B	30	4.2	49	1000	0.25	5	22.8	10
DL973B	33	3.8	58	1000	0.25	5	25.1	9.0
DL974B	36	3.4	70	1000	0.25	5	27.4	8.5
DL975B	39	3.2	80	1000	0.25	5	29.7	7.8
DL978B	51	2.5	125	1500	0.25	5	38.8	5.9
DL979B	56	2.2	150	2000	0.25	5	42.6	5.4
DL982B	75	1.7	270	2000	0.25	5	56	4.1

Note:

- 1) The Zener impedance is derived from the 1kHz AC voltage which results when an AC current having an RMS value equal to 10% of the Zener current (I<sub>ZT</sub>) is superimposed on I<sub>ZT</sub>. Zener impedance is measured at two points to insure a sharp knee on the breakdown curve and to eliminate unstable units.
- 2) Valid provided that leads are kept at ambient temperature at a distance of 8mm from case.
- 3) Measured with device junction in thermal equilibrium.



Micro Commercial Components

### Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 2.5Kpcs/Reel

**\*\*\*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.