

•M•C•C•

Micro Commercial Components™



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

DL5518B
THRU
DL5546B

Features

- Zener Voltage 3.3V-33V
- Low Reverse Leakage Characteristic
- Metallurgically Bonded
- High Reliability
- Lead Free Finish/RoHS Compliant (Note 1) ("P" Suffix designates Compliant. See ordering information)
- Surface Mount Application

Mechanical Data

- Case: Double slug type, hermetically sealed glass
- Polarity: Cathode indicated by polarity band
- Moisture Sensitivity Level 1

Maximum Ratings

	Symbol	Value	Units
DC Power Dissipation @ $T_{EC}=125^{\circ}\text{C}$	P_D	500	mW
Junction Temperature	T_J	-65 to 125	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-65 to 125	$^{\circ}\text{C}$
Power Dissipation above $T_{EC}=125^{\circ}\text{C}$	P_D	10	$\text{mW}/^{\circ}\text{C}$

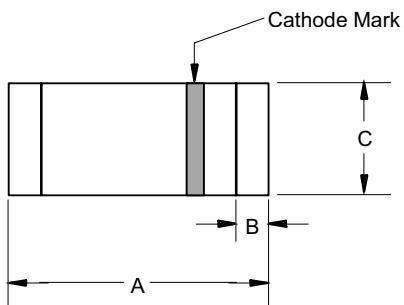
Electrical Characteristics @ 25°C Unless Otherwise Specified

	Symbol	Maximum	Unit
Max. Forward Voltage @ $I_F=200\text{mA}$	V_F	1.1	V

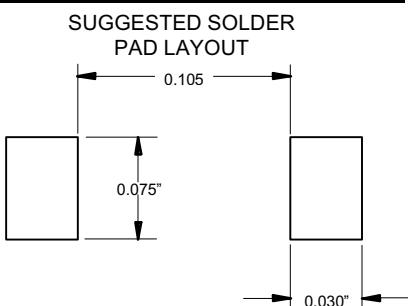
Note: 1. Lead in Glass Exemption Applied, see EU Directive Annex 7(C)-I.

500mW Silicon
Zener Diodes

MINIMELF



DIM	DIMENSION			
	INCHES		MM	
	MIN	MAX	MIN	MAX
A	.130	.146	3.30	3.70
B	.008	.016	0.20	0.40
C	.055	.059	1.40	1.50



DL5518B-DL5546B

Type Number (Note 1)	Nominal Zener Voltage $V_Z@I_{ZT}$ (Note 2)	Zener Test Current I_{ZT}	Max. Zener Impedance B-C-D Suffix $Z_{ZT@I_{ZT}}$ (Note 3)	Max. Reverse Leakage Current			B-C-D Suffix Max. DC Zener Current I_{ZM}	Regulation Factor Current DV_Z (Note 5)	Low V_Z Current I_{ZL}
				IR(Note 4)	VR=Volts				
	Volts	mA	Ohms		Non&A-Suffix	B-C-D Suffix	mA	Volts	mA
DL5518B	3.3	20	26	5	0.9	1	115	0.9	2
DL5519B	3.6	20	24	3	0.9	1	105	0.9	2
DL5520B	3.9	20	22	1	0.9	1	98	0.85	2
DL5521B	4.3	20	18	3	1	1.5	88	0.75	2
DL5522B	4.7	10	22	2	1.5	2	81	0.6	1
DL5523B	5.1	5	26	2	2	2.5	75	0.65	0.25
DL5524B	5.6	3	30	2	3	3.5	68	0.3	0.25
DL5525B	6.2	1	30	1	4.5	5	61	0.2	0.01
DL5526B	6.8	1	30	1	5.5	6.2	56	0.1	0.01
DL5527B	7.5	1	35	0.5	6	6.8	51	0.05	0.01
DL5528B	8.2	1	40	0.5	6.5	7.5	46	0.05	0.01
DL5529B	9.1	1	45	0.1	7	8.2	42	0.05	0.01
DL5530B	10	1	60	0.05	8	9.1	38	0.1	0.01
DL5531B	11	1	80	0.05	9	9.9	35	0.2	0.01
DL5532B	12	1	90	0.05	9.5	10.8	32	0.2	0.01
DL5533B	13	1	90	0.01	10.5	11.7	29	0.2	0.01
DL5534B	14	1	100	0.01	11.5	12.6	27	0.2	0.01
DL5535B	15	1	100	0.01	12.5	13.5	25	0.2	0.01
DL5536B	16	1	100	0.01	13	14.4	24	0.2	0.01
DL5537B	17	1	100	0.01	14	15.3	22	0.2	0.01
DL5538B	18	1	100	0.01	15	16.2	21	0.2	0.01
DL5539B	19	1	100	0.01	16	17.1	20	0.2	0.01
DL5540B	20	1	100	0.01	17	18	19	0.2	0.01
DL5541B	22	1	100	0.01	18	19.8	17	0.25	0.01
DL5542B	24	1	100	0.01	20	21.6	16	0.3	0.01
DL5543B	25	1	100	0.01	21	22.4	15	0.35	0.01
DL5544B	28	1	100	0.01	23	25.2	14	0.4	0.01
DL5545B	30	1	100	0.01	24	27	13	0.45	0.01
DL5546B	33	1	100	0.01	28	29.7	12	0.5	0.01

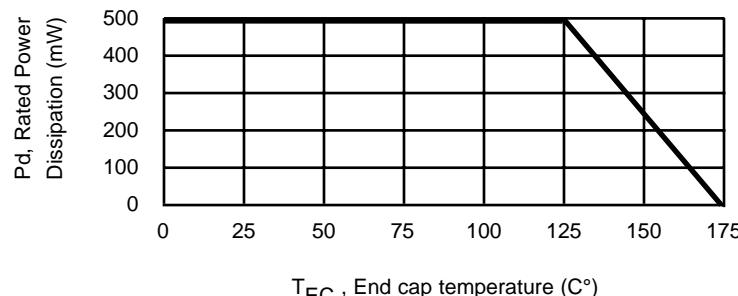
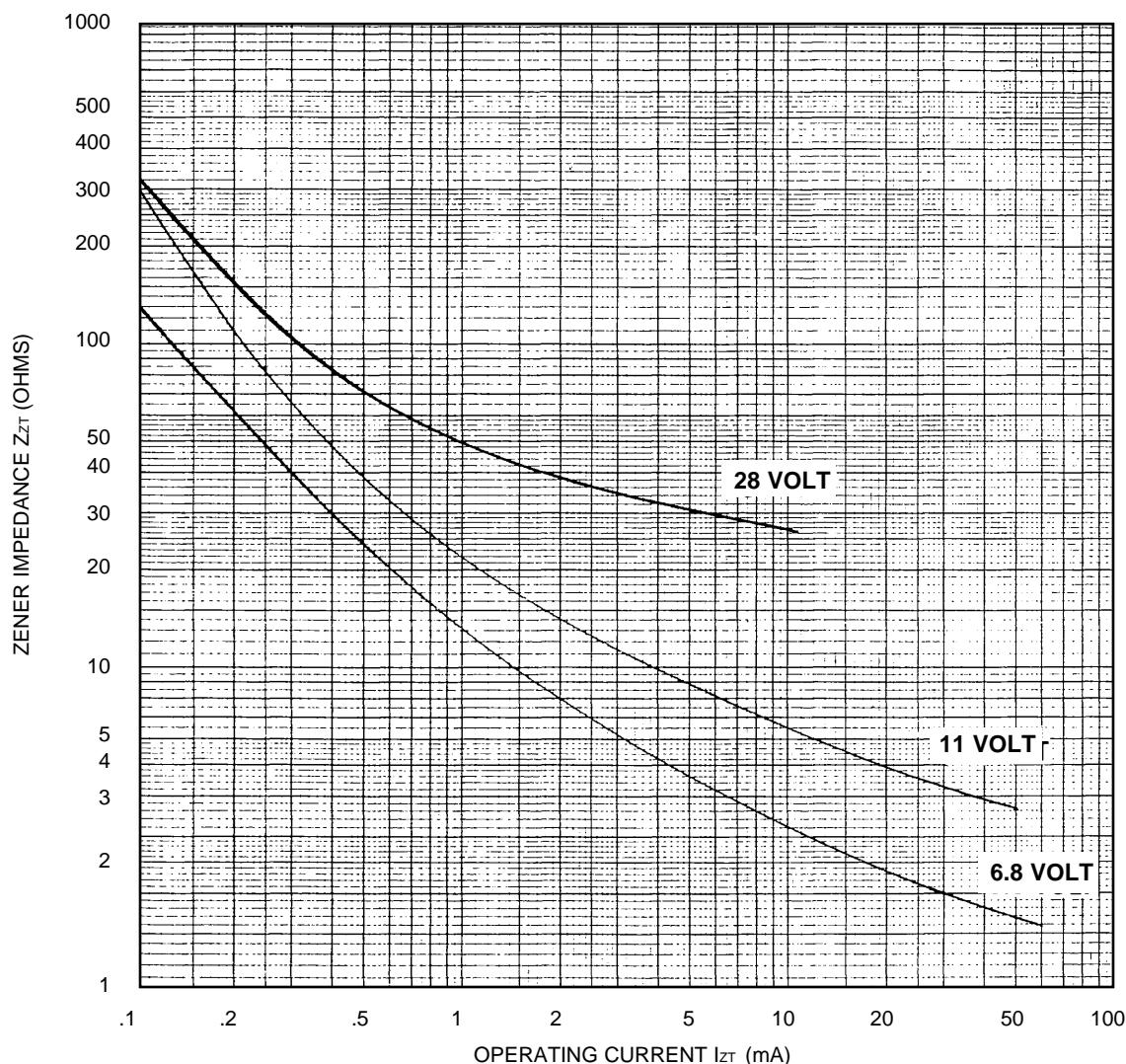
NOTE 1 Suffix "B" = 5% tolerance on nominal Zener voltage, suffix "C" signifies 2%.

NOTE 2 Zener voltage is measured with the device junction in thermal equilibrium at an ambient temperature of $25^\circ\text{C} \pm 3^\circ\text{C}$ temperature of $25^\circ\text{C} +$

NOTE 3 Zener impedance is derived by superimposing on I_{ZT} A 60Hz rms a.c. current equal to 10% of I_{ZT} .

NOTE 4 Reverse leakage currents are measured at V_R as shown on the table.

NOTE 5 ΔV_Z is the maximum difference between V_Z at I_{ZT} and V_Z at I_{ZL} measured with the device junction in thermal equilibrium.

DL5518B-DL5546B**FIGURE 1****POWER DERATING CURVE****FIGURE 2**
ZENER IMPEDANCE VS. OPERATING CURRENT

TM

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.

www.mccsemi.com