

DL957B THRU DL982B

Features

- Zener Voltage 6.8V to 75
- Silicon Planar Power Zener Diodes
- V_Z – tolerance $\pm 5\%$
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)

Mechanical Data

- Operating Temperature: -65°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_{tot}	500	mW
Junction Temperature	T_J	200	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-65 to 200	$^{\circ}\text{C}$

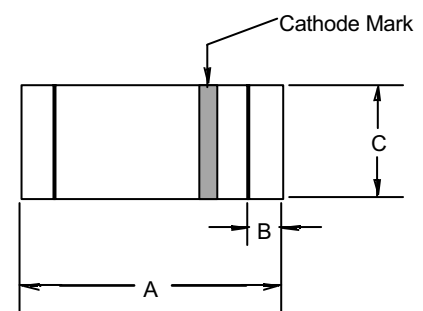
Electrical Characteristics @ 25°C Unless Otherwise Specified

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

Notes: 1. Lead in Glass Exemption Applied, see EU Directive Annex 5.
2. Valid provided that a distance of 8mm from case are kept at ambient temperature.

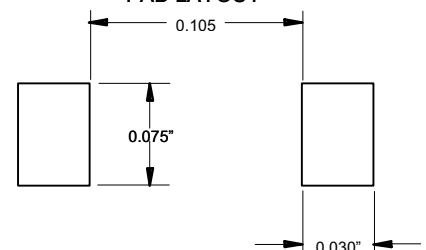
0.5W Silicon Planar Zener Diodes

MINIMELF



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.130	.146	3.30	3.70	
B	.008	.016	.20	.40	
C	.055	.059	1.40	1.50	Ø

SUGGESTED SOLDER PAD LAYOUT



DL957B thru DL982B

MCC PART NUMBER	ZENER VOLTAGE ³⁾ @TEST CURRENT		MAXIMUM ZENER IMPEDANCE ¹⁾		MAXIMUM REVERSE LEAKAGE CURRENT TEST-VOLTAGE		MAXIMUM ZENER CURRENT	
	V _Z	I _{ZT}	Z _{ZT}	Z _{ZK}	I _{ZK}	I _R ²⁾	V _R	I _{ZM} ²⁾
	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_{ZT}) is superimposed on I_{ZT}. 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.

Ordering Information

Device	Packing
(Part Number)-TP	Tape&Reel; 2.5Kpcs/Reel

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