

Obsolete

M.C.C.

Micro Commercial Components



Micro Commercial Components
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**DL5918B
THRU
DL5942B**

**1.5 Watt
Zener Diode
5.1 to 51 Volts**

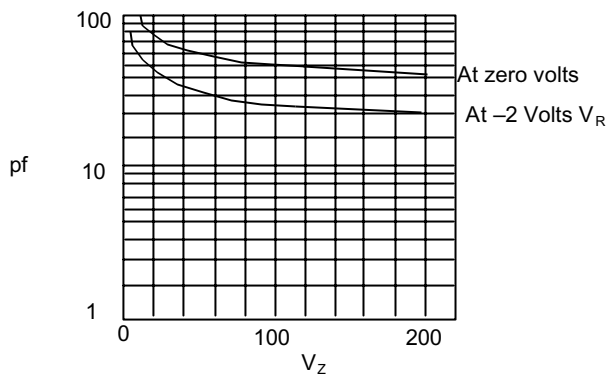
Features

- Wide Voltage Range Available
- Glass Package
- High Temp Soldering: 260°C for 10 Seconds At Terminals
- Marking : Cathode band.
- Moisture Sensitivity Level 1

Maximum Ratings

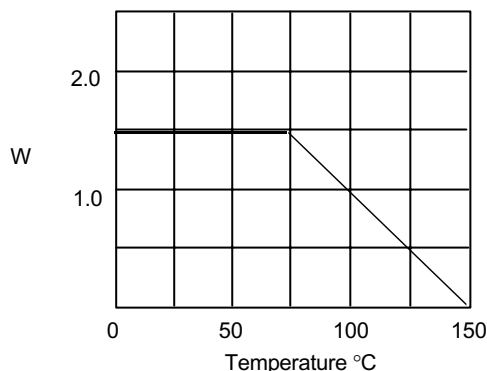
- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- 1.5 Watt DC Power Dissipation
- Power Derating: 20 mW/°C above 75°C
- Forward Voltage @ 200mA: 1.2 Volts

Figure 1 - Typical Capacitance



Typical Capacitance (pf) – versus – Zener voltage (V_Z)

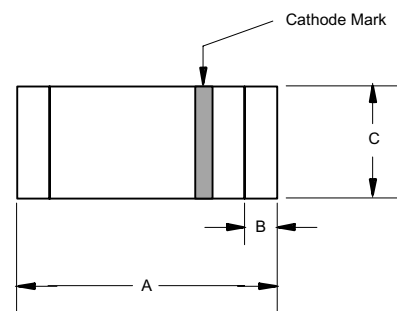
Figure 2 - Derating Curve



Power Dissipation (W) - Versus - Ambient Temperature °C

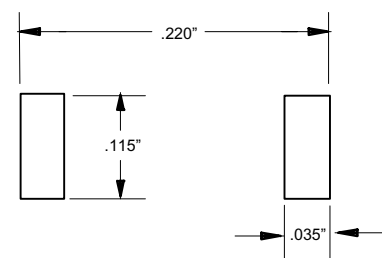
Note: 1. Lead in Glass Exemption Applied, see EU Directive Annex 7(C)-I.

MELF



| DIM | INCHES | | MM | | NOTE |
|-----|--------|------|------|------|---------|
| | MIN | MAX | MIN | MAX | |
| A | .190 | .205 | 4.80 | 5.20 | |
| B | --- | .022 | --- | .55 | Nominal |
| C | .095 | .105 | 2.40 | 2.67 | ∅ |

SUGGESTED SOLDER PAD LAYOUT



ELECTRICAL CHARACTERISTICS @25°C

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| MCC PART NUMBER | ZENER VOLTAGE V_Z | TEST CURRENT I_{ZT} | MAXIMUM DYNAMIC IMPEDANCE Z_{ZT} @ I_{ZT} | KNEE CURRENT I_{ZK} | KNEE IMPEDANCE Z_{ZK} | MAXIMUM REVERSE CURRENT I_R | REVERSE VOLTAGE V_R | MAXIMUM DC CURRENT I_{ZM} |
|-----------------------|---------------------------|-----------------------------|--|-----------------------------|----------------------------|--|-----------------------------|-----------------------------------|
| | VOLTS | mA | OHMS | mA | OHMS | μ A | VOLTS | mA |
| DL5918B | 5.1 | 73.5 | 4.0 | 1.0 | 350 | 5.0 | 2.0 | 294 |
| DL5919B | 5.6 | 66.9 | 2.0 | 1.0 | 250 | 5.0 | 3.0 | 267 |
| DL5920B | 6.2 | 60.5 | 2.0 | 1.0 | 200 | 5.0 | 4.0 | 241 |
| DL5921B | 6.8 | 55.1 | 2.5 | 1.0 | 200 | 5.0 | 5.2 | 220 |
| DL5922B | 7.5 | 50 | 3.0 | 0.5 | 400 | 5.0 | 6.0 | 200 |
| DL5923B | 8.2 | 45.7 | 3.5 | 0.5 | 400 | 5.0 | 6.5 | 182 |
| DL5924B | 9.1 | 41.2 | 4.0 | 0.5 | 500 | 5.0 | 7.0 | 164 |
| DL5925B | 10 | 37.5 | 4.5 | 0.25 | 500 | 5.0 | 8.0 | 150 |
| DL5926B | 11 | 34.1 | 5.5 | 0.25 | 550 | 1.0 | 8.4 | 125 |
| DL5927B | 12 | 31.2 | 6.5 | 0.25 | 550 | 1.0 | 9.1 | 125 |
| DL5928B | 13 | 28.8 | 7.0 | 0.25 | 550 | 1.0 | 9.9 | 115 |
| DL5929B | 15 | 25 | 9.0 | 0.25 | 600 | 1.0 | 11.4 | 100 |
| DL5930B | 16 | 23.4 | 10 | 0.25 | 600 | 1.0 | 12.2 | 93 |
| DL5931B | 18 | 20.8 | 12 | 0.25 | 650 | 1.0 | 13.7 | 83 |
| DL5932B | 20 | 18.7 | 14 | 0.25 | 650 | 1.0 | 15.2 | 75 |
| DL5933B | 22 | 17 | 17.5 | 0.25 | 650 | 1.0 | 16.7 | 68 |
| DL5934B | 24 | 15.6 | 19 | 0.25 | 700 | 1.0 | 18.2 | 62 |
| DL5935B | 27 | 13.9 | 23 | 0.25 | 700 | 1.0 | 20.6 | 55 |
| DL5936B | 30 | 12.5 | 28 | 0.25 | 750 | 1.0 | 22.8 | 50 |
| DL5937B | 33 | 11.4 | 33 | 0.25 | 800 | 1.0 | 25.1 | 45 |
| DL5938B | 36 | 10.4 | 38 | 0.25 | 850 | 1.0 | 27.4 | 41 |
| DL5939B | 39 | 9.6 | 45 | 0.25 | 900 | 1.0 | 29.7 | 38 |
| DL5940B | 43 | 8.7 | 53 | 0.25 | 950 | 1.0 | 32.7 | 34 |
| DL5941B | 47 | 8.0 | 67 | 0.25 | 1000 | 1.0 | 35.8 | 31 |
| DL5942B | 51 | 7.3 | 70 | 0.25 | 1100 | 1.0 | 38.8 | 29 |

Note 1: Suffix B indicates a 5% tolerance on nominal V_Z , Suffix C denotes a 2% tolerance.

2: Zener voltage(V_Z) measured at $T_L = 30^\circ\text{C}$. Voltage measurement to be performed 20 seconds after application of DC current.

3: The Zener impedance is derived from the 60 Hz ac voltage, which results when an ac current having an rms value equal to 10% of the DC Zener current(I_{ZT} or I_{ZK}) is superimposed on I_{ZT} or I_{ZK} .



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Ordering Information :

| Device | Packing |
|----------------|-----------------------|
| Part Number-TP | Tape&Reel: 5Kpcs/Reel |

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