

**VOLTAGE** 2.4 to 100 Volts

**POWER** 500 mWatts

**MINI-MELF/LL-34**

Unit : inch (mm)

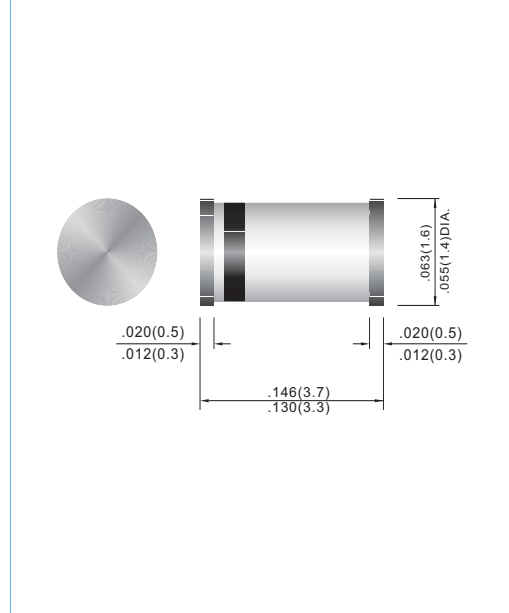
### FEATURES

- Planar Die construction
- 500mW Power Dissipation
- Ideally Suited for Automated Assembly Processes
- In compliance with EU RoHS 2002/95/EC directives

### MECHANICAL DATA

- Case: Molded Glass MINI-MELF
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: See Diagram Below
- Approx. Weight: 0.03 grams
- Mounting Position: Any
- Packing information

T/R - 2.5K per 7" plastic Reel



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

| Parameter                         | Symbol           | Value       | Units |
|-----------------------------------|------------------|-------------|-------|
| Power Dissipation at Tamb = 25 °C | P <sub>TOT</sub> | 500         | mW    |
| Junction Temperature              | T <sub>J</sub>   | 175         | °C    |
| Storage Temperature Range         | T <sub>S</sub>   | -65 to +175 | °C    |

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

| Parameter                                  | Symbol           | Min. | Typ. | Max. | Units |
|--|------------------|------|------|------|-------|
| Thermal Resistance Junction to Ambient Air | R <sub>θJA</sub> | --   | --   | 0.3  | K/mW  |
| Forward Voltage at I <sub>F</sub> = 200mA  | V <sub>F</sub>   | --   | --   | 1.5  | V     |

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

## ZMM55-C2V4 SERIES

| Part Number | Nominal Zener Voltage |        |        | Max. Zener Impedance |     |           |     | Max Reverse Leakage Current |     | Marking code |
|-------------|-----------------------|--------|--------|----------------------|-----|-----------|-----|-----------------------------|-----|--------------|
|             | Vz @ IzT              |        |        | ZzT @ IzT            |     | Zzk @ Izk |     | IR @ VR                     |     |              |
|             | Nom. V                | Min. V | Max. V | Ω                    | mA  | Ω         | mA  | uA                          | V   |              |
| ZMM55-C2V4  | 2.4                   | 2.28   | 2.56   | 85                   | 5   | 600       | 1   | 50                          | 1   | C2V4         |
| ZMM55-C2V7  | 2.7                   | 2.5    | 2.9    | 85                   | 5   | 600       | 1   | 10                          | 1   | C2V7         |
| ZMM55-C3V0  | 3                     | 2.8    | 3.2    | 85                   | 5   | 600       | 1   | 4                           | 1   | C3V0         |
| ZMM55-C3V3  | 3.3                   | 3.1    | 3.5    | 85                   | 5   | 600       | 1   | 2                           | 1   | C3V3         |
| ZMM55-C3V6  | 3.6                   | 3.4    | 3.8    | 85                   | 5   | 600       | 1   | 2                           | 1   | C3V6         |
| ZMM55-C3V9  | 3.9                   | 3.7    | 4.1    | 85                   | 5   | 600       | 1   | 2                           | 1   | C3V9         |
| ZMM55-C4V3  | 4.3                   | 4      | 4.6    | 75                   | 5   | 600       | 1   | 1                           | 1   | C4V3         |
| ZMM55-C4V7  | 4.7                   | 4.4    | 5      | 60                   | 5   | 600       | 1   | 0.5                         | 1   | C4V7         |
| ZMM55-C5V1  | 5.1                   | 4.8    | 5.4    | 35                   | 5   | 550       | 1   | 0.1                         | 1   | C5V1         |
| ZMM55-C5V6  | 5.6                   | 5.2    | 6      | 25                   | 5   | 450       | 1   | 0.1                         | 1   | C5V6         |
| ZMM55-C6V2  | 6.2                   | 5.8    | 6.6    | 10                   | 5   | 200       | 1   | 0.1                         | 2   | C6V2         |
| ZMM55-C6V8  | 6.8                   | 6.4    | 7.2    | 8                    | 5   | 150       | 1   | 0.1                         | 3   | C6V8         |
| ZMM55-C7V5  | 7.5                   | 7      | 7.9    | 7                    | 5   | 50        | 1   | 0.1                         | 5   | C7V5         |
| ZMM55-C8V2  | 8.2                   | 7.7    | 8.7    | 7                    | 5   | 50        | 1   | 0.1                         | 6   | C8V2         |
| ZMM55-C9V1  | 9.1                   | 8.5    | 9.6    | 10                   | 5   | 50        | 1   | 0.1                         | 7   | C9V1         |
| ZMM55-C10   | 10                    | 9.4    | 10.6   | 15                   | 5   | 70        | 1   | 0.1                         | 7.5 | C10V         |
| ZMM55-C11   | 11                    | 10.4   | 11.6   | 20                   | 5   | 70        | 1   | 0.1                         | 8.5 | C11V         |
| ZMM55-C12   | 12                    | 11.4   | 12.7   | 20                   | 5   | 90        | 1   | 0.1                         | 9   | C12V         |
| ZMM55-C13   | 13                    | 12.4   | 14.1   | 26                   | 5   | 110       | 1   | 0.1                         | 10  | C13V         |
| ZMM55-C15   | 15                    | 13.8   | 15.6   | 30                   | 5   | 110       | 1   | 0.1                         | 11  | C15V         |
| ZMM55-C16   | 16                    | 15.3   | 17.1   | 40                   | 5   | 170       | 1   | 0.1                         | 12  | C16V         |
| ZMM55-C18   | 18                    | 16.8   | 19.1   | 50                   | 5   | 170       | 1   | 0.1                         | 14  | C18V         |
| ZMM55-C20   | 20                    | 18.8   | 21.2   | 55                   | 5   | 220       | 1   | 0.1                         | 15  | C20V         |
| ZMM55-C22   | 22                    | 20.8   | 23.3   | 55                   | 5   | 220       | 1   | 0.1                         | 17  | C22V         |
| ZMM55-C24   | 24                    | 22.8   | 25.6   | 80                   | 5   | 220       | 1   | 0.1                         | 18  | C24V         |
| ZMM55-C27   | 27                    | 25.1   | 28.9   | 80                   | 5   | 220       | 1   | 0.1                         | 20  | C27V         |
| ZMM55-C30   | 30                    | 28     | 32     | 80                   | 5   | 220       | 1   | 0.1                         | 22  | C30V         |
| ZMM55-C33   | 33                    | 31     | 35     | 80                   | 5   | 220       | 1   | 0.1                         | 24  | C33V         |
| ZMM55-C36   | 36                    | 34     | 38     | 80                   | 5   | 220       | 1   | 0.1                         | 27  | C36V         |
| ZMM55-C39   | 39                    | 37     | 41     | 90                   | 2.5 | 500       | 1   | 0.1                         | 30  | C39V         |
| ZMM55-C43   | 43                    | 40     | 46     | 90                   | 2.5 | 600       | 1   | 0.1                         | 33  | C43V         |
| ZMM55-C47   | 47                    | 44     | 50     | 110                  | 2.5 | 700       | 1   | 0.1                         | 36  | C47V         |
| ZMM55-C51   | 51                    | 48     | 54     | 125                  | 2.5 | 700       | 0.5 | 0.1                         | 39  | C51V         |
| ZMM55-C56   | 56                    | 52     | 60     | 135                  | 2.5 | 1000      | 0.5 | 0.1                         | 43  | C56V         |
| ZMM55-C62   | 62                    | 58     | 66     | 150                  | 2.5 | 1000      | 0.5 | 0.1                         | 47  | C62V         |
| ZMM55-C68   | 68                    | 64     | 72     | 200                  | 2.5 | 1000      | 0.5 | 0.1                         | 51  | C68V         |
| ZMM55-C75   | 75                    | 70     | 79     | 250                  | 2.5 | 1500      | 0.5 | 0.1                         | 56  | C75V         |
| ZMM55-C82   | 82                    | 77     | 87     | 300                  | 2.5 | 2000      | 0.5 | 0.1                         | 62  | C82V         |
| ZMM55-C91   | 91                    | 85     | 96     | 450                  | 1   | 5000      | 0.1 | 0.1                         | 68  | C91V         |

### Notes.

STANDARD VOLTAGE TOLERANCE IS  $\pm 5\%$  AND :

SUFFIX "A" FOR  $\pm 1\%$

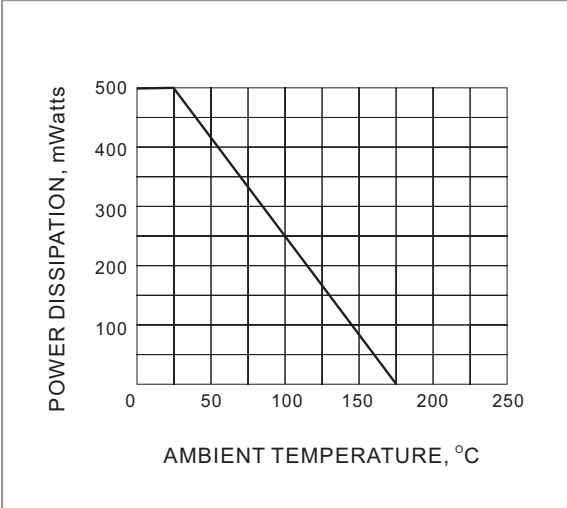
SUFFIX "B" FOR  $\pm 2\%$

SUFFIX "C" FOR  $\pm 5\%$

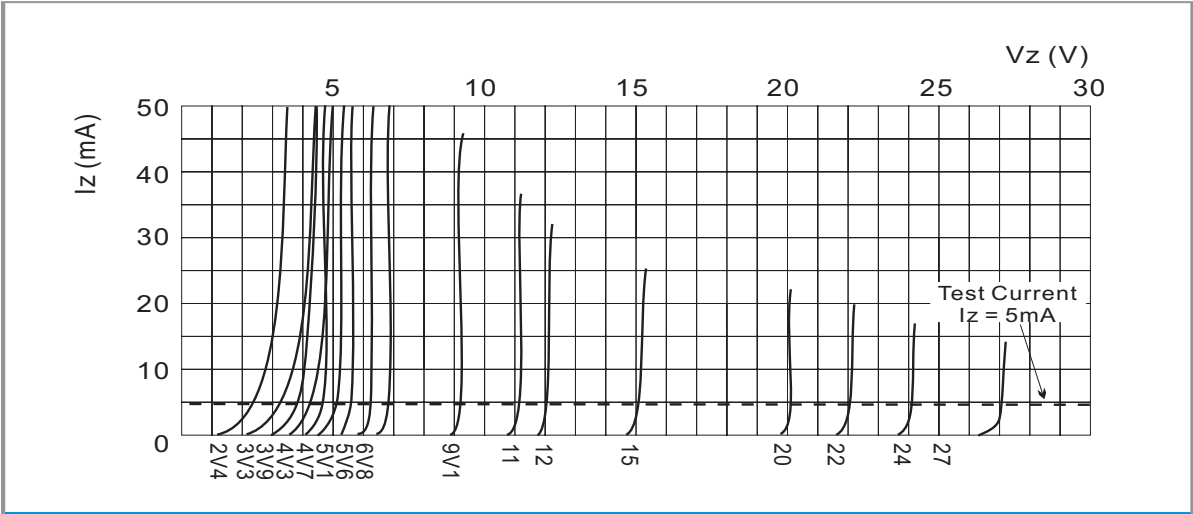
SUFFIX "D" FOR  $\pm 20\%$

# ZMM55-C2V4 SERIES

## RATING AND CHARACTERISTIC CURVES



**FIG. 1 POWER DERATING CURVE**



**Fig.2 BREAKDOWN CHARACTERISTICS**

# ZMM55-C2V4 SERIES

## MOUNTING PAD LAYOUT

