

MF 5MML 低阻抗品 (CD28M)



- 5mm高度, 低阻抗。
Be5mm in height, Low impedance。
- 适用于DC-DC转换器等需用到小体积和低阻抗的情况。
Used in DC-DC converters where smaller case size and lower impedance are required。

Specifications

| 项目 Item | 特性 Characteristics | | | | | |
|--|--|---|------|------|------|------|
| 工作温度范围 Operating temperature range | -40°C~+105°C | | | | | |
| 额定电压范围 Rated voltage range | 6.3V~35V DC | | | | | |
| 静电容量范围 Nominal capacitance range | 1μF~100μF | | | | | |
| 静电容量误差 Capacitance tolerance | ±20% (120Hz·20°C) | | | | | |
| 漏电流 (20°C) leakage current(20°C) | I ≤ 0.01CV or 3μA (whichever is greater) after 2 minute I: Leakage current C: Normal capacitance V: Rated voltage | | | | | |
| 损耗角正切 Dissipation factor (120Hz·20°C) | Rated voltage(V) | 6.3 | 10 | 16 | 25 | 35 |
| | tgδ(MAX) | 0.22 | 0.20 | 0.18 | 0.14 | 0.12 |
| 低温特性 Low temperature characteristics (Impedance ratio max. at 120Hz) | Rated voltage(v) | 6.3 | 10 | 16 | 25 | 35 |
| | Z-25°C/Z+20°C | 2 | 2 | 2 | 2 | 2 |
| | Z-40°C/Z+20°C | 4 | 4 | 3 | 3 | 3 |
| 高温负荷特性 Load Life | After applying rated voltage for 1000 hours at 105°C then resumed 16 hours: | | | | | |
| | Capacitance change | Within ±20% of the initial measured value | | | | |
| | tgδ | ≤200% of the initial specified value | | | | |
| | Leakage current | ≤initial specified value | | | | |
| 高温贮存特性 Shelf Life | After storage for 1000 hours at 105°C then resumed 16 hours: | | | | | |
| | Capacitance change | Within ±20% of the initial measured value | | | | |
| | tgδ | ≤200% of the initial specified value | | | | |
| | Leakage current | ≤initial specified value | | | | |

Diagram of Dimensions(mm)

| | | | | |
|--|------------|------|-----|-----|
| | φ D | 4 | 5 | 6.3 |
| | F ± 0.5 | 1.5 | 2.0 | 2.5 |
| | φ d ± 0.05 | 0.45 | | |
| | α | 1.0 | | |

Multiplier for Ripple Current vs. Frequency:

| | | | | | |
|---------------|--------|------|------|------|------|
| Frequency(Hz) | 50(60) | 120 | 1K | ≥10K | 100K |
| Factor | 0.35 | 0.40 | 0.75 | 0.90 | 1.00 |

Multiplier for Ripple Current vs. Temperature:

| | | | | | |
|----------------|------|------|------|------|------|
| Temperature °C | ~55 | 60 | 70 | 85 | 105 |
| Factor | 2.23 | 2.17 | 2.00 | 1.75 | 1.00 |

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■ Standard Ratings

| WV(Coad) | | 6.3V(0J) | | | 10V(1A) | | | 16V(1C) | | |
|----------|------|----------|------|-----|---------|------|-----|---------|------|-----|
| C(uf) | Coad | φD×L | R.C. | IMP | φD×L | R.C. | IMP | φD×L | R.C. | IMP |
| 1 | 10 | | | | | | | | | |
| 1.5 | 1R5 | | | | | | | | | |
| 2.2 | 2R2 | | | | | | | | | |
| 3.3 | 3R3 | | | | | | | | | |
| 4.7 | 4R7 | | | | | | | | | |
| 6.8 | 6R8 | | | | | | | | | |
| 10 | 100 | | | | | | | 4×5 | 50 | 5.0 |
| 15 | 150 | | | | | | | 5×5 | 80 | 2.6 |
| 22 | 200 | 4×5 | 50 | 5.0 | 5×5 | 80 | 2.6 | 5×5 | 80 | 2.6 |
| 33 | 330 | 5×5 | 80 | 2.6 | 5×5 | 80 | 2.6 | 6.3×5 | 115 | 1.3 |
| 47 | 470 | 5×5 | 80 | 2.6 | 6.3×5 | 115 | 1.3 | 6.3×5 | 115 | 1.3 |
| 68 | 680 | 6.3×5 | 115 | 1.3 | | | | | | |
| 100 | 101 | 6.3×5 | 115 | 1.3 | | | | | | |

| WV(Coad) | | 25V(1E) | | | 35V(1V) | | | | | |
|----------|------|---------|------|-----|---------|------|-----|--|--|--|
| C(uf) | Coad | φD×L | R.C. | IMP | φD×L | R.C. | IMP | | | |
| 1 | 10 | | | | 4×5 | 50 | 5.0 | | | |
| 1.5 | 1R5 | | | | 4×5 | 50 | 5.0 | | | |
| 2.2 | 2R2 | | | | 4×5 | 50 | 5.0 | | | |
| 3.3 | 3R3 | | | | 4×5 | 50 | 5.0 | | | |
| 4.7 | 4R7 | 4×5 | 50 | 5.0 | 4×5 | 50 | 5.0 | | | |
| 6.8 | 6R8 | 4×5 | 50 | 5.0 | 5×5 | 80 | 2.6 | | | |
| 10 | 100 | 5×5 | 80 | 2.6 | 5×5 | 80 | 2.6 | | | |
| 15 | 150 | 6.3×5 | 115 | 1.3 | 6.3×5 | 115 | 1.3 | | | |
| 22 | 220 | 6.3×5 | 115 | 1.3 | 6.3×5 | 115 | 1.3 | | | |
| 33 | 330 | 6.3×5 | 115 | 1.3 | | | | | | |
| 47 | 470 | | | | | | | | | |
| 68 | 680 | | | | | | | | | |
| 100 | 101 | | | | | | | | | |

Permit ripple current : (mArms, 105°C , 100KHZ);

Case size: φ D×L (mm)

Permit impedance : (Ω , 20°C , 100KHZ)