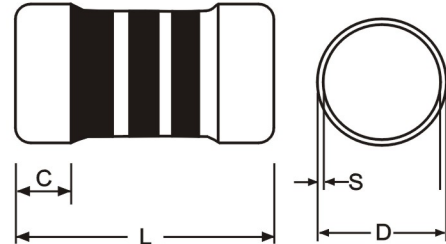


**MELF-MFR TYPE**



**Coating color: Blue.**

涂装色：蓝色

**Dimensions:**

| Type     | Size | Dimensions(mm) |          |          |          |
|----------|------|----------------|----------|----------|----------|
|          |      | L              | D        | C        | S        |
| MELF-MFR | 0102 | 2±0.1          | 1.3±0.1  | 0.55±0.1 | 0.1±0.05 |
|          | 0204 | 3.5±0.2        | 1.45±0.1 | 0.7±0.1  | 0.15±0.1 |
|          | 0207 | 5.7±0.2        | 2.2±0.1  | 0.8±0.2  | 0.2±0.1  |
|          | 0309 | 8.5±0.3        | 3±0.3    | 1.7±0.2  | 0.3±0.1  |
|          | 0411 | 10.5±0.3       | 4±0.3    | 2.3±0.2  | 0.3±0.1  |
|          | 0515 | 14.5±0.3       | 4.5±0.3  | 2.3±0.2  | 0.3±0.1  |

**Range:**

| Type     | Size | POWER RATING | MAX. WORKING VOLTAGE | MAX. OVERLOAD VOLTAGE | T.C.R.                                | RESISTANCE RANGE        |                         |                     |                        |
|----------|------|--------------|----------------------|-----------------------|---------------------------------------|-------------------------|-------------------------|---------------------|------------------------|
|          |      |              |                      |                       |                                       | ±0.1%                   | ±0.25%                  | ±0.5%               | ±1%                    |
| MELF-MFR | 0102 | 1/8Ws        | 150V                 | 300V                  | ±15ppm<br>±25ppm<br>±50ppm<br>±100ppm | 50 <sub>Ω</sub> - 56K   | 50 <sub>Ω</sub> - 100K  | 1 <sub>Ω</sub> - 1M | 0 <sub>Ω</sub> 22 - 2M |
|          | 0204 | 1/8W         | 150V                 | 300V                  |                                       | 100 <sub>Ω</sub> - 56K  | 100 <sub>Ω</sub> - 100K | 1 <sub>Ω</sub> - 1M | 0 <sub>Ω</sub> 22 - 2M |
|          |      | 1/4Ws        | 200V                 | 400V                  |                                       | 100 <sub>Ω</sub> - 56K  | 100 <sub>Ω</sub> - 100K | 1 <sub>Ω</sub> - 1M | 0 <sub>Ω</sub> 5 - 2M  |
|          | 0207 | 1/4W         | 200V                 | 400V                  |                                       | 100 <sub>Ω</sub> - 100K | 10 <sub>Ω</sub> - 560K  | 1 <sub>Ω</sub> - 5M | 0 <sub>Ω</sub> 22 - 5M |
|          |      | 1/2Ws        | 300V                 | 600V                  |                                       | 100 <sub>Ω</sub> - 100K | 10 <sub>Ω</sub> - 560K  | 1 <sub>Ω</sub> - 5M | 0 <sub>Ω</sub> 22 - 5M |
|          |      | 1Wss         | 400V                 | 700V                  |                                       | 100 <sub>Ω</sub> - 100K | 10 <sub>Ω</sub> - 560K  | 1 <sub>Ω</sub> - 5M | 0 <sub>Ω</sub> 5 - 5M  |
|          | 0309 | 1Ws          | 500V                 | 1000V                 | ±50ppm<br>±100ppm                     | -----                   | 10 <sub>Ω</sub> - 100K  | 1 <sub>Ω</sub> - 1M | 0.1 <sub>Ω</sub> - 1M  |
|          | 0411 | 2Ws          |                      |                       |                                       | -----                   | 10 <sub>Ω</sub> - 100K  | 1 <sub>Ω</sub> - 1M | 0.1 <sub>Ω</sub> - 1M  |
|          | 0515 | 3Ws          |                      |                       |                                       | -----                   | 10 <sub>Ω</sub> - 100K  | 1 <sub>Ω</sub> - 1M | 0.1 <sub>Ω</sub> - 1M  |
|          |      |              |                      |                       |                                       | -----                   | 10 <sub>Ω</sub> - 100K  | 1 <sub>Ω</sub> - 1M | 0.1 <sub>Ω</sub> - 1M  |

額定電壓是以， $\sqrt{\text{功率(W)} \times \text{阻值}(\Omega)}$  計算所得的值及以規格表中所列最高使用電壓兩者相較小者。

Rated-Voltage =  $\sqrt{P(W) \times R(\Omega)}$  or Max.working voltage,whichever lower.

**Characteristics**

| Item                                     | Characteristics  | Test Method   |
|--|--|---|
| 1. Operating Temp. Range<br>使用温度范围       | -55°C~155°C  |   |
| 2. Temperature Coefficient<br>温度系数       | ±100ppm/°C ; ±50ppm/°C<br>±25ppm/°C ; ±15ppm/°C  | JIS-C-5202; 5.2   |
| 3. Short time overload<br>短时间过负载         | ±(0.5%+0.05Ω)  | Rating voltage×2.5 or Max. overload voltage for 5 sec. Whichever less   |
| 4. Pulse overload<br>断续过负载               | ±(0.5%+0.05Ω)  | Rating voltage ×3 or Max. pulse overload voltage for 10,000 cycle (1 sec. "on" 25 sec. "off"), Whichever less |
| 5. Temperature cycling<br>温度周率           | ±(0.5%+0.05Ω)  | -55°C(30min.)/+85°C(30min.) for 5 cycle   |
| 6. Load Life in Humidity<br>耐湿负载         | ±(1%+0.05Ω)  | 40°C ±2°C, 90% ~95% RH, 1000h, 1.5h "on"/0.5h "off" cycle   |
| 7. Load Life<br>寿命负载                     | ±(1%+0.05Ω)  | 70°C ±2°C, 1000h, 1.5h "on"/0.5h "off" cycle  |
| 8. Resistance to soldering heat<br>焊接耐热性 | ±(0.5%+0.05Ω)  | 260°C ±5°C, 5 sec±1 sec   |
| 9. Solderability<br>焊接性                  | 90% Coverage/Min   | 235°C ±5°C, 2 sec±0.5 sec   |
| 10. Bending test<br>端子强度                 | ±(0.5%+0.05Ω)  | Holding point width 90mm, Bending 5mm, 1 time   |
| 11. Non-Combustibility<br>不燃性            | The resistors shall withstand Overload test in accordance With Article UL-94, V-0 without producing a fire hazard. |   |

**Classification (Part No)**

| MELF-MFR | 0207 | 1/2WS | 121Ω       | F          | T             | 50  |
|----------|------|-------|------------|------------|---------------|-----|
| STYLE    | SIZE | POWER | RESISTANCE | TOLERANCE  | PACKING       | PPM |
|          |      |       |            | F = ±1%    | T = Tape/Reel | 15  |
|          |      |       |            | D = ±0.5%  | B = Bulk      | 25  |
|          |      |       |            | C = ±0.25% |               | 50  |
|          |      |       |            | B = ±0.1%  |               | 100 |
|          |      |       |            | J = ±5%    |               |     |

**Packaging**

| Size | TAPE/REEL | BULK    | CARTON   |
|------|-----------|---------|----------|
| 0102 | 3000pcs   | -----   | -----    |
| 0204 | 3000pcs   | -----   | -----    |
| 0207 | 2000pcs   | -----   | -----    |
| 0309 | 2000pcs   | 2000pcs | 20000pcs |
| 0411 | 1500pcs   | 1000pcs | 10000pcs |
| 0515 | NON       | 500pcs  | 5000pcs  |

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