### **CMF** Fusible



Vishay Dale

RoHS

COMPLIANT

## Metal Film Resistors, Special Purpose, Fusible, Flameproof



### **FEATURES**

- Special filming and coating processes
- Fusible circuit protection in case of other component failure
- Flameproof meets EIA RS-325, will not flame when overloaded
- Tape and reel packaging is standard
- Material categorization: For definitions of compliance please see <u>www.vishay.com/doc?99912</u>

#### Note

Lead (Pb)-containing terminations are not RoHS-compliant. Exemptions may apply.

| STANDARD ELECTRICAL SPECIFICATIONS |                     |   |   |                  |  |  |
|------------------------------------|---------------------|---|---|------------------|--|--|
| GLOBAL<br>MODEL                    | HISTORICAL<br>MODEL | POWER RATING<br>P <sub>70 °C</sub><br>W | RESISTANCE<br>RANGE <sup>(1)</sup><br>Ω | TOLERANCE<br>± % | TEMPERATURE<br>COEFFICIENT<br>± ppm/°C |  |
| CMF5539                            | CMF-55-39           | 0.25                                    | 4 to 10K                                | 1                | 100                                    |  |
| CMF6064                            | CMF-60-64           | 0.50                                    | 4 to 23K                                | 1                | 100                                    |  |

#### Note

<sup>(1)</sup> Contact factory for extended values

| TECHNICAL SPECIFICATIONS    |                  |                    |                    |  |
|-----------------------------|------------------|--------------------|--------------------|--|
| PARAMETER                   | UNIT             | CMF5539            | CMF6064            |  |
| Rated Dissipation at 70 °C  | W                | 0.25               | 0.50               |  |
| Maximum Flame Test Voltage  | V <sub>RMS</sub> | 350                | 500                |  |
| Dielectric Strength         | V <sub>AC</sub>  | 450                | 750                |  |
| Insulation Resistance       | Ω                | ≥ 10 <sup>10</sup> | ≥ 10 <sup>10</sup> |  |
| Operating Temperature Range | °C               | - 65/+ 165         | - 65/+ 165         |  |
| Weight (Max.)               | g                | 0.20               | 0.50               |  |

### **GLOBAL PART NUMBER INFORMATION**

| New Global Part Nu  | mbering: CMF55100               | R00FKR   | RE39 (preferred   | l part number    | ing format | t)                 |                 |           |              |
|---------------------|---------------------------------|----------|-------------------|------------------|------------|--------------------|-----------------|-----------|--------------|
| С                   | M F 5                           | 5 1      | 0 0               | <b>R</b> 0       | 0 F        | KR                 | E 3             | 9         | ]            |
|                     |                                 |          |                   | -                |            |                    |                 |           |              |
| GLOBAL MODEL        | RESISTANCE VAL                  | UE       | TOLERANCE<br>CODE | TEMPER<br>COEFFI | -          | F                  | PACKAGING       |           | SPECIAL      |
| CMF55               | <b>R</b> = Ω                    |          | <b>F</b> = ± 1 %  | <b>K</b> = 10    | 0 ppm      | <b>EK</b> = L      | ead (Pb)-free   | , bulk    | 39 = Fusible |
| CMF60               | $\mathbf{K} = \mathbf{k}\Omega$ |          |                   |                  |            | EA = Lead          | d (Pb)-free, T/ | /R (full) | CMF55        |
|                     | <b>4R0000</b> = 4.0 Ω           | 2        |                   |                  |            | EB =               | Lead (Pb)-fre   | ee,       | 64 = Fusible |
|                     | <b>680R00</b> = 680 Ω           | 2        |                   |                  |            | T/R                | (1000 pieces    | ;)        | CMF60        |
|                     | <b>23K000</b> = 23 kΩ           | 2        |                   |                  |            | BF =               | Tin/Lead, bul   | lk        |              |
|                     |                                 |          |                   |                  |            |                    | n/Lead, T/R (f  |           |              |
|                     |                                 |          |                   |                  |            | <b>R6</b> = Tin/Le | ead, T/R (100   | 0 pieces) |              |
| Historical Part Num | ber example: CMF-5              | 55-39100 | 00F R36 (will co  | ontinue to be    | accepted)  |                    |                 |           |              |
| CMF-55-39           |                                 | 1        | 000               |                  |            | F                  | ]               |           | R36          |
| HISTORICAL MOD      | EL F                            | RESISTA  | NCE VALUE         |                  | TOLERA     | NCE CODE           | ]               | PAC       | CKAGING      |

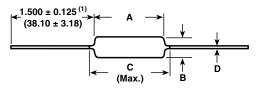
#### Note

• For additional information on packaging, refer to the Through-hole Resistor Packaging document (www.vishay.com/doc?31544).



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### **DIMENSIONS** in inches (millimeters)



Note

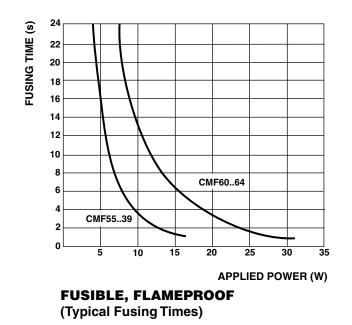
(1) Lead length for product in bulk pack. For product supplied in tape and reel, the actual lead length would be based on the body size, tape spacing and lead trim.

| GLOBAL MODEL | A             | В             | C<br>(Max.) | D             |
|--------------|---------------|---------------|-------------|---------------|
| CMF5539      | 0.240 ± 0.020 | 0.090 ± 0.008 | 0.278       | 0.025 ± 0.002 |
|              | (6.10 ± 0.51) | (2.29 ± 0.21) | (7.06)      | (0.64 ± 0.05) |
| CMF6064      | 0.370 ± 0.035 | 0.145 ± 0.010 | 0.425       | 0.032 ± 0.002 |
|              | (9.40 ± 0.89) | (3.68 ± 0.25) | (10.80)     | (0.81 ± 0.05) |

| MARKIN    | )   |
|-----------|---|
|           | 39 = CMF55-39, C60-64 = CMF60-64<br>coefficient: T1 = 100 ppm |
| CMF55-39, | CMF60-64: (4 lines)   |
| C55-39    | Model   |
| 1.47 kΩ   | Value   |
| 1 % T1    | Tolerance and TC  |
| 1130      | 4-digit date code   |

Note

• Fusing time graphs represent an average for the resistance value range. Low resistance parts require higher power to fuse than high resistance parts. It is recommended that values less than 200  $\Omega$  be evaluated for specific applications.





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