## **CMF** Fusible



Vishay Dale

# Metal Film Resistors, Axial, 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



RoHS

- Tape and reel packaging is standard
- Material categorization: for definitions of compliance please see <u>www.vishay.com/doc?99912</u>

### Note

This datasheet provides information about parts that are RoHS-compliant and/or parts that are non-RoHS-compliant. For example, parts with lead (Pb) terminations are not RoHS-compliant. Please see the information / tables in this datasheet for details.

STANDARD ELECTRICAL SPECIFICATIONS					
GLOBAL MODEL	HISTORICAL MODEL	POWER RATING P <sub>70 °C</sub> W	RESISTANCE RANGE <sup>(1)</sup> Ω	TOLERANCE ± %	TEMPERATURE COEFFICIENT ± ppm/°C
CMF5539	CMF-55-39	0.25	4 to 10K	1	100
CMF6064	CMF-60-64	0.50	4 to 23K	1	100
CMF705	CMF-70-5	1.5	4 to 30K	1	100

### Note

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

TECHNICAL SPECIFICATIONS					
PARAMETER	UNIT	CMF5539	CMF6064	CMF705	
Rated Dissipation at 70 °C	W	0.25	0.50	1.5	
Maximum Flame Test Voltage	V <sub>RMS</sub>	350	500	1000	
Dielectric Strength	V <sub>AC</sub>	450	750	900	
Insulation Resistance	Ω	≥ 10 <sup>10</sup>	≥ 10 <sup>10</sup>	≥ 10 <sup>10</sup>	
Operating Temperature Range	°C	-65/+165	-65/+165	-65/+165	
Weight (Max.)	g	0.28	0.50	1.30	

GLOBAL PART NUMBER INFORMATION						
Global Part Numbering: CM	F55100R00FKF	RE39 (preferred part n	umbering format)			
C M F 5 5 1 0 0 R 0 0 F K R E 3 9						
				L		
GLOBAL MODEL RESIST	ANCE VALUE	TOLERANCE CODE	TEMP. COEFFICIENT	PA	CKAGING	SPECIAL
CMF55	$\mathbf{R} = \Omega$	<b>F</b> = ± 1 %	<b>K</b> = 100 ppm	EK = lea	d (Pb)-free, bulk	39 = fusible
	<b>(</b> = kΩ				ead (Pb)-free,	CMF 55
	<b>00</b> = 4.0 Ω				T/R (full)	64 = fusible
	$\Omega = 680 \Omega$				ad (Pb)-free, T/R	CMF60
23K0	<b>00</b> = 23 kΩ			· ·	ces; except 70's)	<b>5</b> = fusible
					tin/lead, bulk	CMF70
					tin/lead, T/R	
					except 70's)	
					tin/lead, T/R ; 70's only)	
					tin/lead, T/R	
					ces; except 70's)	
Historical Part Number example: CMF-55-391000F R36 (will continue to be accepted)						
CMF-55-39 1000		F		R36		
HISTORICAL MODEL	RES	SISTANCE VALUE	TOLERANCE CO	DDE	PACKA	GING

### Note

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

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



Note

<sup>(1)</sup> 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 (Max.)	D
CMF5539	0.240 ± 0.020	$0.090 \pm 0.008$	0.290	0.025 ± 0.002
	(6.10 ± 0.51)	(2.29 ± 0.21)	(7.37)	(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)
CMF705	0.562 ± 0.031	0.230 ± 0.015	0.687	0.032 ± 0.002
	(14.27 ± 0.79)	(5.84 ± 0.38)	(17.54)	(0.81 ± 0.05)

### MARKING

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Model: C55-39 = CMF55-39, C60-64 = CMF60-64, C70-5 = CMF70-5
Temperature coefficient: T1 = 100 ppm
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CMF55-39, CMF60-64, CMF70-5: (5 lines)

DALE C55-39	Manufacturer Model
1.47 kΩ	Value
1 % T1	Tolerance and TC
1130	4-digit date code

## FUSIBLE, FLAMEPROOF

(Typical Fusing Times)



### 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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