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 _{70 °C} W	RESISTANCE RANGE ⁽¹⁾ 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

⁽¹⁾ 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 _{RMS}	350	500	1000	
Dielectric Strength	V _{AC}	450	750	900	
Insulation Resistance	Ω	≥ 10 ¹⁰	≥ 10 ¹⁰	≥ 10 ¹⁰	
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	$\mathbf{R} = \Omega$	F = ± 1 %	K = 100 ppm	EK = lea	d (Pb)-free, bulk	39 = fusible
	(= kΩ				ead (Pb)-free,	CMF 55
	00 = 4.0 Ω				T/R (full)	64 = fusible
	$\Omega = 680 \Omega$				ad (Pb)-free, T/R	CMF60
23K0	00 = 23 kΩ			· ·	ces; except 70's)	5 = 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

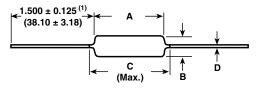
• For additional information on packaging, refer to the Through Hole Resistor Packaging document (<u>www.vishay.com/doc?31544</u>).

Revision: 16-Sep-16



Vishay Dale

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 (Max.)	D
CMF5539	0.240 ± 0.020	0.090 ± 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

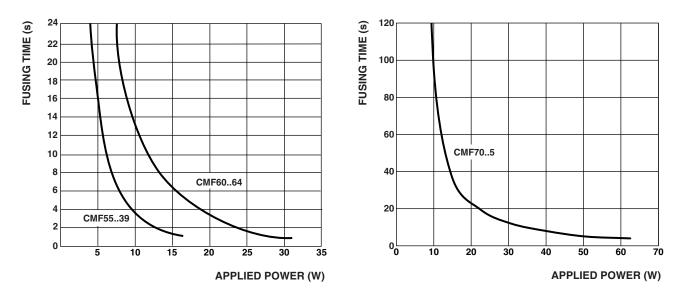
```
Model: C55-39 = CMF55-39, C60-64 = CMF60-64, C70-5 = CMF70-5
Temperature coefficient: T1 = 100 ppm
```

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 Ω be evaluated for specific applications.



Vishay

Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Vishay makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Vishay disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Vishay's knowledge of typical requirements that are often placed on Vishay products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein.

Except as expressly indicated in writing, Vishay products are not designed for use in medical, life-saving, or life-sustaining applications or for any other application in which the failure of the Vishay product could result in personal injury or death. Customers using or selling Vishay products not expressly indicated for use in such applications do so at their own risk. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay. Product names and markings noted herein may be trademarks of their respective owners.