



Features

- Radial leaded devices
- Aids compliance with:
 - ITU-T K.20/21/45
 - Telcordia GR-1089-CORE
 - UL 60950, 3rd Ed.
- Narrow resistance tolerance
- RoHS compliant*
- Agency recognition:

Applications

- Used as a secondary overcurrent protection device in:
- Customer Premise Equipment (CPE)
 - Central Office (CO)
 - Access equipment

CMF-RL Series - Telecom CPTC Resettable Fuses

Electrical Characteristics

Model	Induction Voltage Withstand	Rated Voltage	Rated Resistance (RN)		Packaging Resistance Matching	Hold Current	Trip Current	I _{max} @ 230 VAC	Time to Trip @ I _{max} /230 VAC
	VAC	Volts	Ohms	Tolerance	Ohms	Amps @ 25 °C	Amps @ 25 °C	Amps	Seconds
CMF-RL10	650	230	10	±20 %	± 0.5	0.14	0.30	4	≤ 0.3
CMF-RL10-10	650	230	10	±10 %	± 0.5	0.14	0.30	4	≤ 0.3
CMF-RL25	600	230	25	±20 %	± 0.5	0.180	0.36	0.9	≤ 0.5
CMF-RL25U	600	230	25	±20 %	± 0.5	0.060	0.150	0.9	≤ 0.25
CMF-RL35	650	230	35	±20 %	± 0.5	0.075	0.150	3	≤ 0.15
CMF-RL35-10	650	230	35	±10 %	± 0.5	0.075	0.150	3	≤ 0.15
CMF-RL35A	650	230	35	±10 %	± 0.5	0.075	0.150	3	≤ 0.15
CMF-RL35A-10	650	230	35	±10 %	± 0.5	0.075	0.150	3	≤ 0.15
CMF-RL50	650	230	50	±20 %	± 0.5	0.065	0.150	3	≤ 0.15
CMF-RL50-10	650	230	50	±10 %	± 0.5	0.065	0.150	3	≤ 0.15
CMF-RL50A	650	230	50	±20 %	± 0.5	0.050	0.100	3	≤ 0.1
CMF-RL50A-10	650	230	50	±10 %	± 0.5	0.050	0.100	3	≤ 0.1
CMF-RL55	650	230	55	±20 %	± 0.5	0.065	0.150	3	≤ 0.15
CMF-RL55-10	650	230	55	±10 %	± 0.5	0.065	0.150	3	≤ 0.15
CMF-RL55A	650	230	55	±20 %	± 0.5	0.050	0.100	3	≤ 0.1
CMF-RL55A-10	650	230	55	±10 %	± 0.5	0.050	0.100	3	≤ 0.1

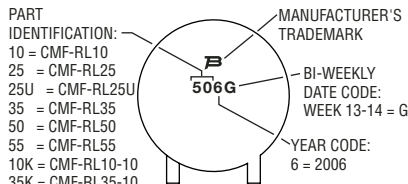
Test Procedures And Requirements For Model CMF-RL Series

Test	Primary Protection	Test Condition	Requirements
Mains Power Contact - ITU-T K.20, K.21	None	230 V rms, 10 ohms, 15 Min.	(Ri-Rf) / Ri < ±10 %
Power Induction - ITU-T K.20, K.21	None	600V rms, 600 ohms, 0.2 seconds, 10 cycles, every 1 Min.	(Ri-Rf) / Ri < ±10 %
Power Induction - ITU-T K.20, K.21	GDT	600 V rms, 600 ohms, 1 second, 10 cycles, every 1 Min.	(Ri-Rf) / Ri < ±10 %
Power Induction - ITU-T K.20, K.21	GDT	600 V rms, 200 ohms, 1 second, 10 cycles, every 1 Min.	(Ri-Rf) / Ri < ±10 %
Lightning Surge - ITU-T K.20, K.21		10/700 μs, 25 ohms, 1.0 kV, 10 Tests, every 1 Min.	(Ri-Rf) / Ri < ±10 %
Lightning Surge		10/1000 μs, 40 ohms, 1.0 kV, 30 Tests, every 3 Min.	(Ri-Rf) / Ri < ±10 %

Ri = R initial
Rf = R final

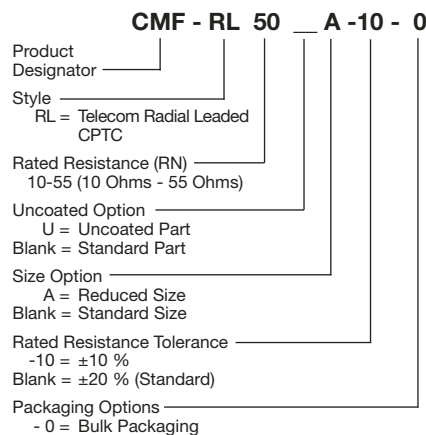
Typical Part Marking

Represents total content. Layout may vary.



NOTE: UNCOATED PARTS ARE UNMARKED.

How to Order



Alternative tolerances, resistances and lead lengths available on request.

*RoHS Directive 2002/95/EC Jan 27 2003 including Annex. Specifications are subject to change without notice.

Customers should verify actual device performance in their specific applications.

CMF-RL Series - Telecom CPTC Resettable Fuses

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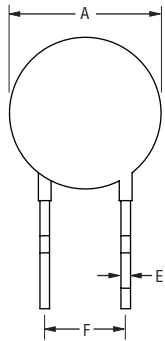
Product Dimensions

Model	A	B	C	D	E	F	Physical Characteristics Material	Style
	Max.	Max.	Max.	Nom.	Nom.	Nom.		
CMF-RL10	$\frac{9.5}{(0.374)}$	$\frac{4.5}{(0.177)}$	$\frac{13.5}{(0.531)}$	$\frac{3.5}{(0.138)}$ MAX.	$\frac{0.6 \pm 0.05}{(0.024 \pm 0.019)}$	$\frac{5.0 \pm 0.2}{(0.197 \pm 0.008)}$	Sn/Cu	1
CMF-RL25	$\frac{6.2}{(0.244)}$	$\frac{4.0}{(0.157)}$	$\frac{6.2}{(0.244)}$	$\frac{25}{(0.984)}$	$\frac{0.6 \pm 0.05}{(0.024 \pm 0.019)}$	$\frac{5.0 \pm 0.3}{(0.197 \pm 0.012)}$	Sn/Cu	3
CMF-RL25U	$\frac{5.2}{(0.205)}$	$\frac{3.5}{(0.138)}$	$\frac{5.2}{(0.205)}$	$\frac{3.8}{(0.150)}$	$\frac{0.6 \pm 0.05}{(0.024 \pm 0.019)}$	$\frac{5.0 \pm 0.2}{(0.197 \pm 0.008)}$	Sn/Cu	2
CMF-RL35	$\frac{9.8}{(0.386)}$	$\frac{5.0}{(0.197)}$	$\frac{13.5}{(0.531)}$	$\frac{3.0 - 3.5}{(0.118 - 0.138)}$	$\frac{0.6 \pm 0.05}{(0.024 \pm 0.019)}$	$\frac{5.08 \pm 0.3}{(0.200 \pm 0.012)}$	Sn/Cu	1
CMF-RL35A	$\frac{7.5}{(0.295)}$	$\frac{5.6}{(0.220)}$	$\frac{13.0}{(0.512)}$	$\frac{3.5}{(0.138)}$ MIN.	$\frac{0.6 \pm 0.05}{(0.024 \pm 0.019)}$	$\frac{5.0 \pm 0.2}{(0.197 \pm 0.008)}$	Sn/Cu	1
CMF-RL50	$\frac{9.8}{(0.386)}$	$\frac{5.0}{(0.197)}$	$\frac{13.5}{(0.531)}$	$\frac{3.0 - 3.5}{(0.118 - 0.138)}$	$\frac{0.6 \pm 0.05}{(0.024 \pm 0.019)}$	$\frac{5.08 \pm 0.3}{(0.200 \pm 0.012)}$	Sn/Cu	1
CMF-RL50A	$\frac{7.5}{(0.295)}$	$\frac{5.6}{(0.220)}$	$\frac{13.0}{(0.512)}$	$\frac{3.5}{(0.138)}$ MIN.	$\frac{0.6 \pm 0.05}{(0.024 \pm 0.019)}$	$\frac{5.0 \pm 0.2}{(0.197 \pm 0.008)}$	Sn/Cu	1
CMF-RL55	$\frac{9.8}{(0.386)}$	$\frac{5.0}{(0.197)}$	$\frac{13.5}{(0.531)}$	$\frac{3.0 - 3.5}{(0.118 - 0.138)}$	$\frac{0.6 \pm 0.05}{(0.024 \pm 0.019)}$	$\frac{5.08 \pm 0.3}{(0.200 \pm 0.012)}$	Sn/Cu	1
CMF-RL55A	$\frac{7.5}{(0.295)}$	$\frac{5.6}{(0.220)}$	$\frac{13.0}{(0.512)}$	$\frac{3.5}{(0.138)}$ MIN.	$\frac{0.6 \pm 0.05}{(0.024 \pm 0.019)}$	$\frac{5.0 \pm 0.2}{(0.197 \pm 0.008)}$	Sn/Cu	1

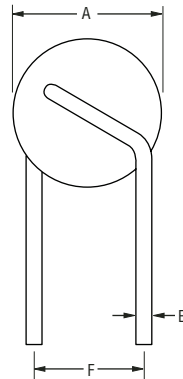
Packaging options:
BULK: 500 pcs. per bag

DIMENSIONS = $\frac{\text{MM}}{(\text{INCHES})}$

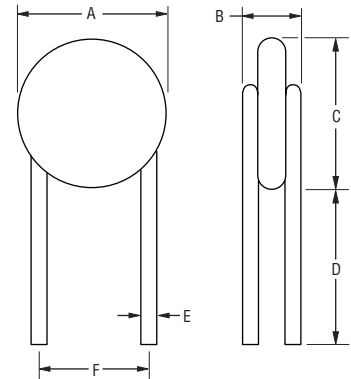
Style 1



Style 2



Style 3



Asia-Pacific: Tel: +886-2 2562-4117 • Fax: +886-2 2562-4116
 Europe: Tel: +41-41 768 5555 • Fax: +41-41 768 5510
 The Americas: Tel: +1-951 781-5500 • Fax: +1-951 781-5700
www.bourns.com

CMF-RL SERIES, REV. I, 06/08

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