



Features

- Two resistance-matched PTCs in a plastic housing
- Narrow resistance tolerance
- RoHS compliant*

Applications

Used as a secondary overcurrent protection device in:

- Customer Premise Equipment (CPE)
- Central Office (CO)
- Access equipment

CMF-SDP Series - Telecom CPTC Resettable Fuses

Electrical Characteristics

Model	Induction Voltage Withstand	Rated Voltage	Rated Resistance (RN)		Resistance Matching in Housing	Hold Current	Trip Current	I _{max} @ 230 VAC	Typ. Time to Trip @ I _{max} / 230 VAC
	VAC	Volts	Ohms	Tolerance	Ohms	Amps @ 25 °C	Amps @ 25 °C	Amps	Seconds
CMF-SDP07	250	230	7	±20 %	≤1.0	0.080	0.200	3.0	0.45
CMF-SDP10	250	230	10	±20 %	≤1.0	0.180	0.360	1.0	3.8
CMF-SDP10A	250	230	10	±20 %	≤1.0	0.150	0.360	1.0	3.8
CMF-SDP25	250	230	25	±20 %	≤1.0	0.130	0.260	2.8	0.2
CMF-SDP25A	250	230	25	±20 %	≤1.0	0.130	0.260	2.8	0.3
CMF-SDP35	600	230	35	+15/-20 %	≤1.0	0.110	0.230	4.6	0.06
CMF-SDP35A	600	230	35	+15/-20 %	≤1.0	0.110	0.230	2.5	0.2
CMF-SDP50	600	230	50	±15 %	≤1.0	0.090	0.190	2.5	0.13
CMF-SDP50A	600	230	50	±15 %	≤1.0	0.090	0.190	2.5	0.2
CMF-SDP75	600	230	75	±20 %	≤2.0	0.070	0.150	2.5	0.12

Operating Temperature Range: -40 °C to +125 °C.

Test Procedures And Requirements For Model CMF-SDP Series

Test	Primary Protection	Test Condition	Requirements
Mains Power Contact - ITU-T K.20, K.21	None	230 V rms, 10 ohms, 15 Min.	(R _i -R _f) / R _i < ±10 %
Power Induction - ITU-T K.20, K.21	None	600V rms, 600 ohms, 0.2 seconds, 10 cycles, every 1 Min.	(R _i -R _f) / R _i < ±10 %
Power Induction - ITU-T K.20, K.21	GDT	600 V rms, 600 ohms, 1 second, 10 cycles, every 1 Min.	(R _i -R _f) / R _i < ±10 %
Power Induction - ITU-T K.20, K.21	GDT	600 V rms, 200 ohms, 1 second, 10 cycles, every 1 Min.	(R _i -R _f) / R _i < ±10 %
Lightning Surge - ITU-T K.20, K.21		10/700 μs, 25 ohms, 1.0 kV, 10 Tests, every 1 Min.	(R _i -R _f) / R _i < ±10 %
Lightning Surge		10/1000 μs, 60 ohms, 1.5 kV, 30 Tests, every 3 Min.	(R _i -R _f) / R _i < ±10 %

R_i = R initial

R_f = R final

Typical Part Marking

Represents total content. Layout may vary.

PART IDENTIFICATION: 07P = CMF-SDP07 10P = CMF-SDP10 10PA = CMF-SDP10A 25P = CMF-SDP25 25PA = CMF-SDP25A 35P = CMF-SDP35 35PA = CMF-SDP35A 50P = CMF-SDP50 50PA = CMF-SDP50A 75P = CMF-SDP75		MANUFACTURER'S TRADEMARK BI-WEEKLY DATE CODE: WEEK 13-14 = G YEAR CODE: 8 = 2008
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How to Order

CMF - SD P 35 A -XX - 2

Product Designator	CMF - SD P 35 A -XX - 2
Style	SD = Surface Mount Dual Pkg.
Housing	P = Plastic
Rated Resistance (RN)	7-75 (7-75 Ohms)
Footprint and Height Option	Blank = Standard Product A = Reduced Footprint and Height
Resistance Tolerance Option	Blank = Standard -XX = XX %; e.g. -10 = ±10 %
Packaging	- 2 = Tape & Reel

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*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

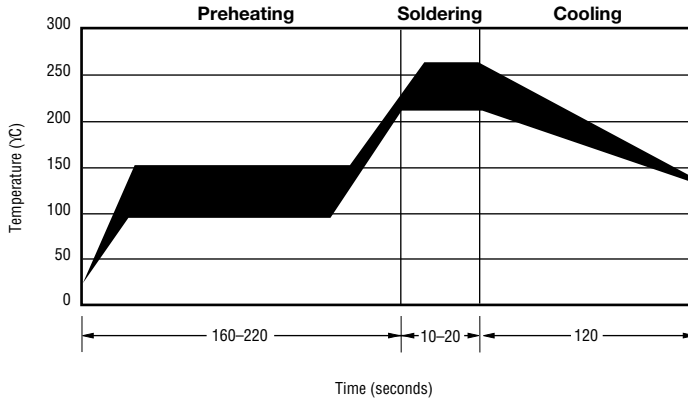
Specifications are subject to change without notice.

The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Users should verify actual device performance in their specific applications.

CMF-SDP Series - Telecom CPTC Resettable Fuses

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Solder Reflow Recommendations



Solder reflow

- Recommended reflow methods: IR, vapor phase oven, hot air oven.
- Devices are not designed to be wave soldered to the bottom side of the board.
- Gluing the devices is not recommended.
- Recommended maximum paste thickness is 0.25 mm (.010 inch).
- Devices can be cleaned using standard industry methods and solvents.

Note:

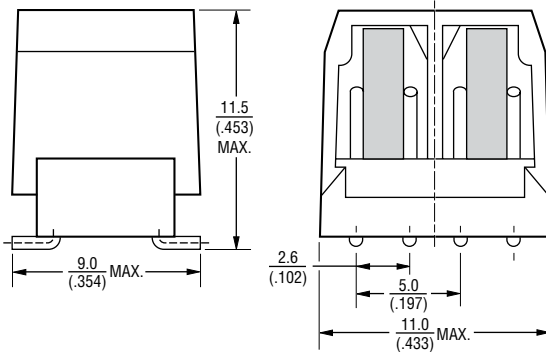
- If reflow temperatures exceed the recommended profile, devices may not meet the performance requirements.

Rework

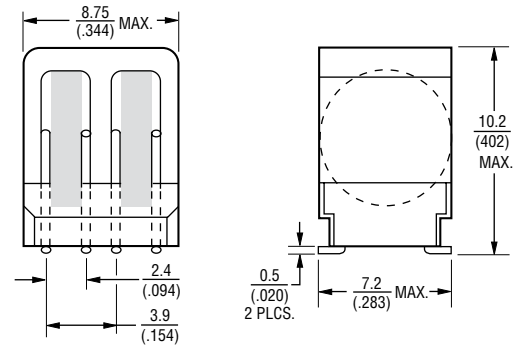
- A device should not be reworked.

Product Dimensions

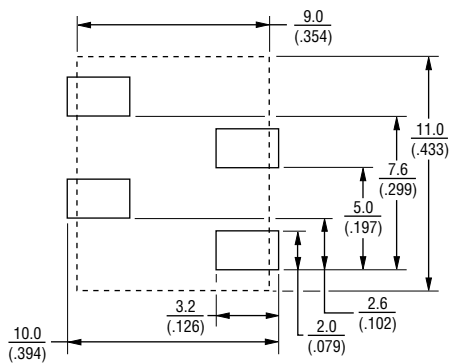
CMF-SDP05, 07, 10, 25, 35, 50 & 75



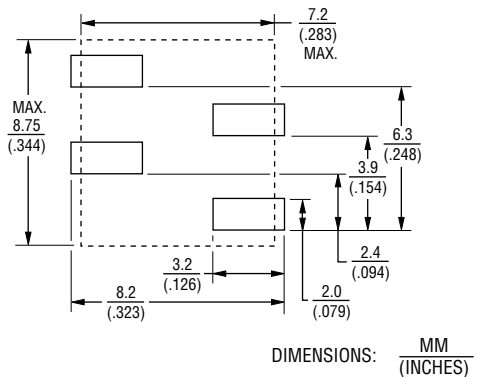
CMF-SDP10A, 25A, 35A, 50A & 75A



Recommended Pad Layout



Packaging - Tape and Reel: 350 pcs. per reel



Packaging - Tape and Reel: 350 pcs. per reel

CMF-SDP SERIES, REV. E, 07/16

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CMF-SDP Series Tape and Reel Specifications

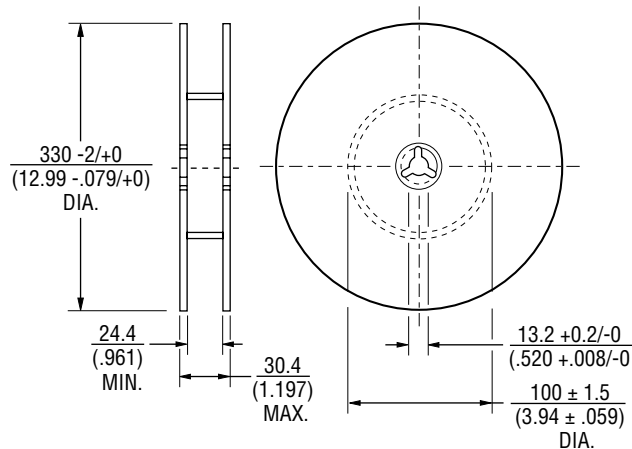
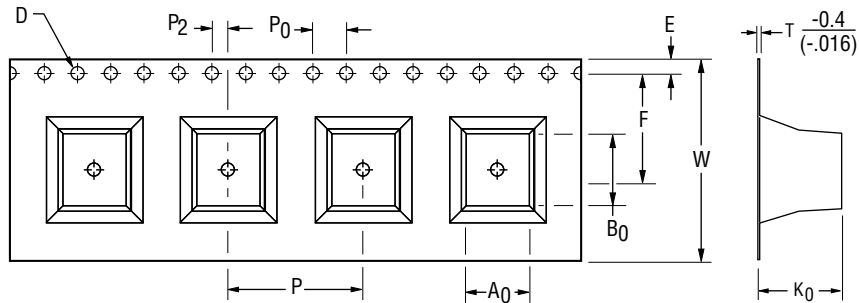
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Tape Dimensions per EIA 481-2

CMF-SDP10-2, CMF-SDP25-2, CMF-SDP35-2, CMF-SDP50-2, CMF-SDP75-2

CMF-SDP10A-2, CMF-SDP25A-2, CMF-SDP35A-2, CMF-SDP50A-2

W	$\frac{24.0 \pm 0.5}{(0.945 \pm 0.020)}$	$\frac{24.0 \pm 0.5}{(0.945 \pm 0.020)}$
P ₀	$\frac{4.0}{(0.157)}$	$\frac{4.0}{(0.157)}$
P	$\frac{16.0}{(0.630)}$	$\frac{16.0}{(0.630)}$
P ₂	$\frac{2.0}{(0.079)}$	$\frac{2.0}{(0.079)}$
A ₀	$\frac{9.2 \pm 0.2}{(0.362 \pm 0.008)}$	$\frac{7.5 \pm 0.2}{(0.295 \pm 0.008)}$
B ₀	$\frac{11.0 \pm 0.2}{(0.441 \pm 0.008)}$	$\frac{9.0 \pm 0.2}{(0.354 \pm 0.008)}$
D	$\frac{1.5}{(0.059)}$	$\frac{1.5}{(0.059)}$
F	$\frac{11.5}{(0.453)}$	$\frac{11.5}{(0.453)}$
E	$\frac{1.75}{(0.069)}$	$\frac{1.75}{(0.069)}$
t	$\frac{0.5 \pm 0.15}{(0.020 \pm 0.006)}$	$\frac{0.5 \pm 0.15}{(0.020 \pm 0.006)}$
K ₀	$\frac{11.5 \pm 0.2}{(0.453 \pm 0.008)}$	$\frac{10.0 \pm 0.2}{(0.394 \pm 0.008)}$



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

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