



## 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	Imax @ 230 VAC	Typical Time to Trip @ Imax/230 VAC
	VAC		Volts	Ohms	Tolerance				Ohms
CMF-SDP07	600	230	7	±20 %	±0.5	0.150	0.350	3.0	0.45
CMF-SDP10	600	230	10	±20 %	±0.5	0.180	0.360	1.0	3.8
CMF-SDP10A	600	230	10	±20 %	±0.5	0.150	0.360	1.0	3.8
CMF-SDP25	600	230	25	±20 %	±0.5	0.130	0.260	2.8	0.2
CMF-SDP25A	600	230	25	±20 %	±0.5	0.130	0.260	2.8	0.3
CMF-SDP35	600	230	35	+15/-20 %	±0.5	0.110	0.230	4.6	0.06
CMF-SDP35A	600	230	35	+15/-20 %	±0.5	0.110	0.230	4.6	0.04
CMF-SDP50	600	230	50	±15 %	±0.5	0.090	0.190	2.5	0.13
CMF-SDP50A	600	230	50	±15 %	±0.5	0.090	0.190	2.5	0.1
CMF-SDP75	600	230	75	±20 %	±1	0.070	0.150	2.5	0.12

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

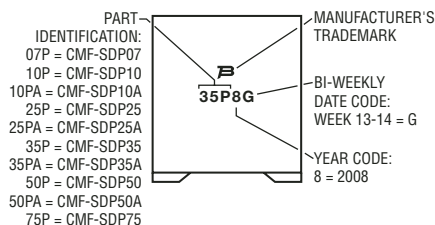
## Test Procedures And Requirements For Model CMF-SDP Series

Test	Primary Protection	Test Condition	Requirements
Mains Power Contact - ITU-T K.20, K.21	None	230 V rms, 10 ohms, 15 Min.	(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		10/100 μs, 25 ohms, 1.5 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.



## 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 Options	-2 = Tape & Reel



**Asia-Pacific:**  
Tel: +886-2 2562-4117  
Fax: +886-2 2562-4116

**Europe:**  
Tel: +41-41 768 5555  
Fax: +41-41 768 5510

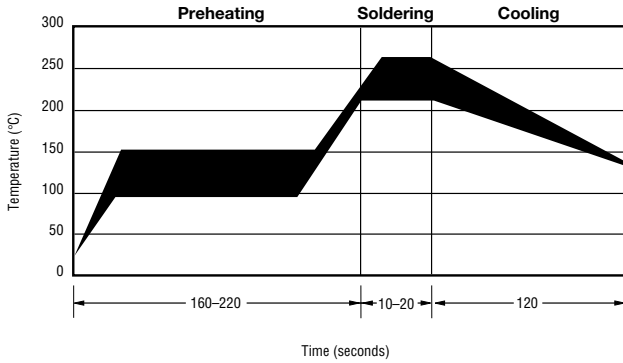
**The Americas:**  
Tel: +1-951 781-5500  
Fax: +1-951 781-5700  
[www.bourns.com](http://www.bourns.com)

\*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-SDP Series - Telecom CPTC Resettable Fuses

**BOURNS®**

## 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:

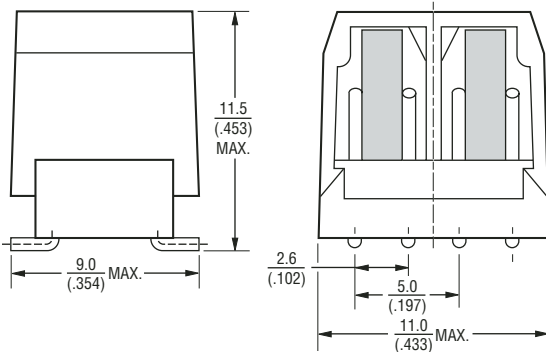
- If reflow temperatures exceed the recommended profile, devices may not meet the performance specifications.

### Rework

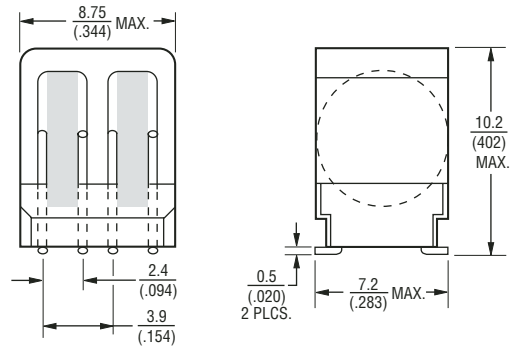
- A device should not be reworked.

## Product Dimensions

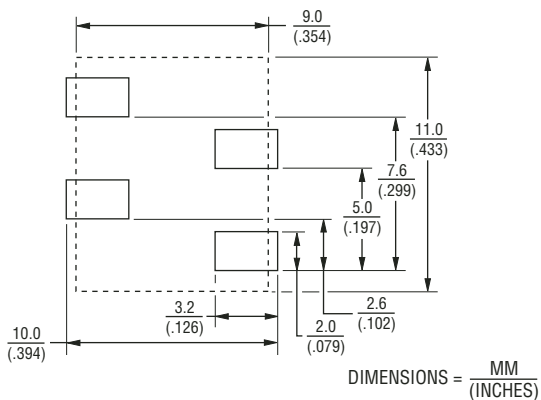
### CMF-SDP07, 10, 25, 35, 50 & 75



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

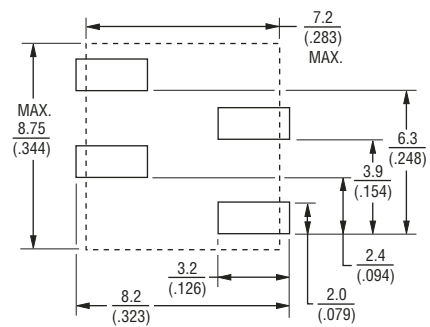


## Recommended Pad Layout



Packaging options: TAPE & REEL: 350 pcs. per reel

## Recommended Pad Layout



Packaging options: TAPE & REEL: 400 pcs. per reel

# CMF-SDP Series Tape and Reel Specifications

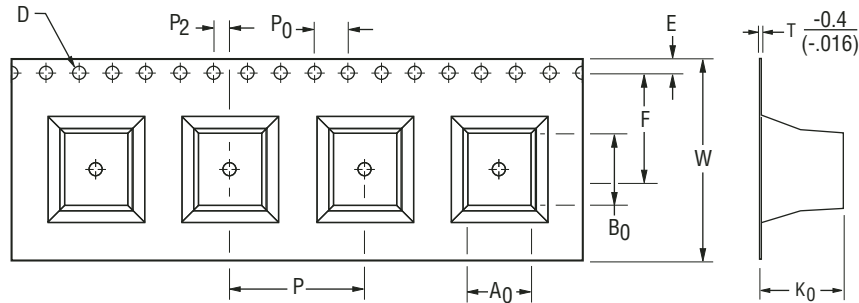
**BOURNS®**

Tape Dimensions per EIA 481-2

CMF-SDP10-2, CMF-SDP25-2,  
CMF-SDP-35-2, 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 <sub>0</sub>	$\frac{4.0}{(0.157)}$	$\frac{4.0}{(0.157)}$
P	$\frac{16.0}{(0.630)}$	$\frac{16.0}{(0.630)}$
P <sub>2</sub>	$\frac{2.0}{(0.079)}$	$\frac{2.0}{(0.079)}$
A <sub>0</sub>	$\frac{9.1 \pm 0.2}{(0.358 \pm 0.008)}$	$\frac{7.5 \pm 0.2}{(0.295 \pm 0.008)}$
B <sub>0</sub>	$\frac{11.20 \pm 0.2}{(0.441 \pm 0.008)}$	$\frac{9.0 \pm 0.2}{(0.354 \pm 0.008)}$
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 <sub>0</sub>	$\frac{11.7 \pm 0.2}{(0.433 \pm 0.008)}$	$\frac{10.0 \pm 0.2}{(0.394 \pm 0.008)}$



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

Specifications are subject to change without notice.  
Customers should verify actual device performance in their specific applications.