

RoHS COMPLIANT



BOURNS®

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

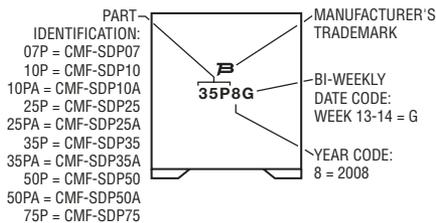
Test Procedures And Requirements For Model CMF-SDP Series

| 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

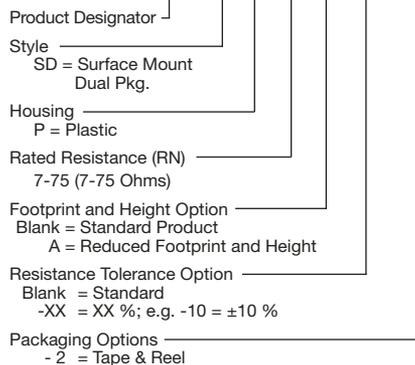
Typical Part Marking

Represents total content. Layout may vary.



How to Order

CMF - SD P 35 A -XX - 2



Asia-Pacific:
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Fax: +886-2 2562-4116

Europe:
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Fax: +41-41 768 5510

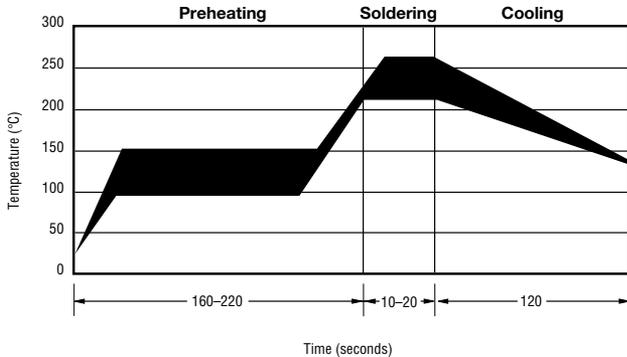
The Americas:
Tel: +1-951 781-5500
Fax: +1-951 781-5700
www.bourns.com

*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



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:

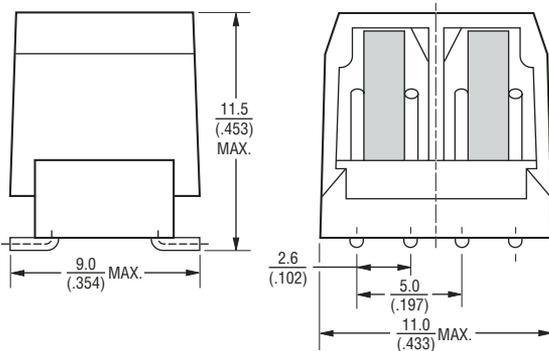
- If reflow temperatures exceed the recommended profile, devices may not meet the performance specifications.

Rework

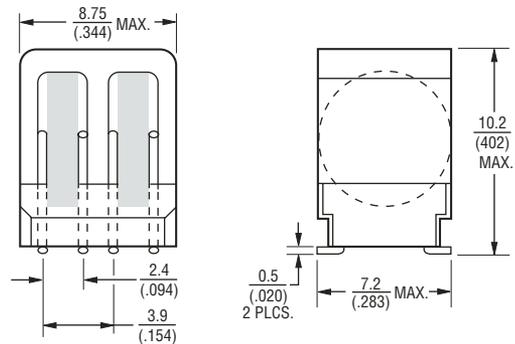
- A device should not be reworked.

Product Dimensions

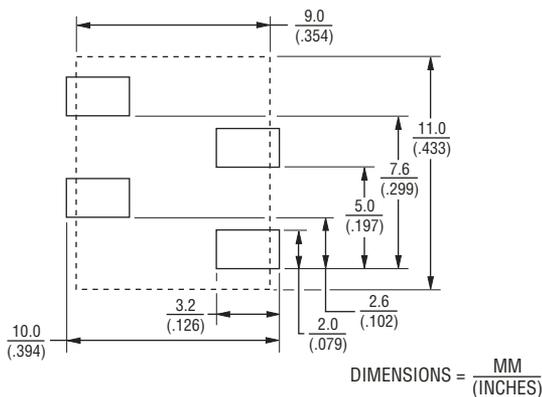
CMF-SDP07, 10, 25, 35, 50 & 75



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

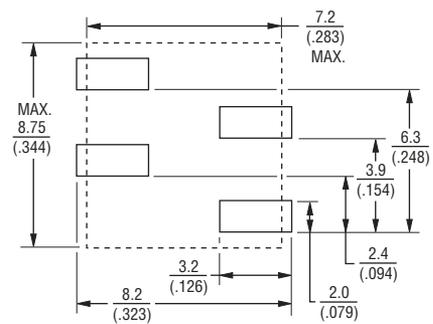


Recommended Pad Layout



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

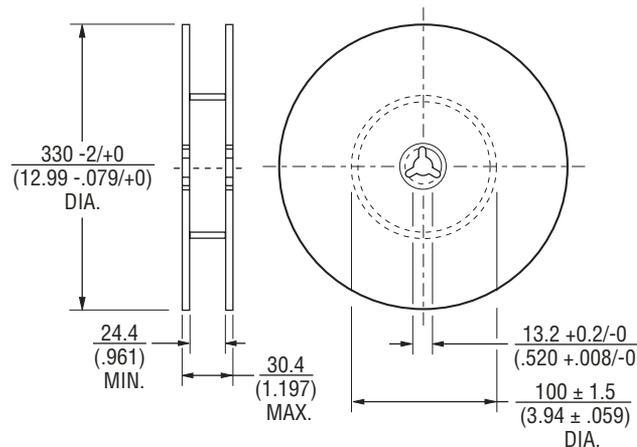
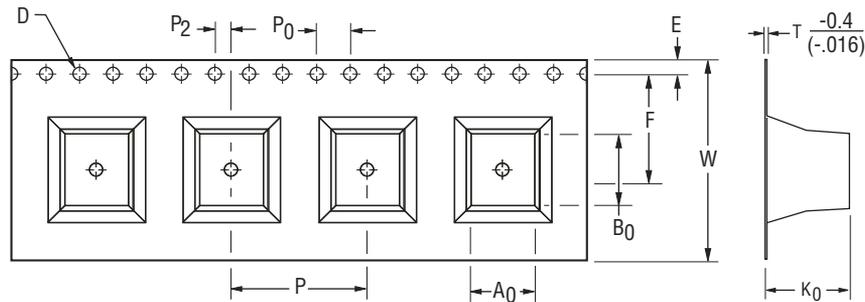
BOURNS®

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 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 | $\frac{9.1 \pm 0.2}{(0.358 \pm 0.008)}$ | $\frac{7.5 \pm 0.2}{(0.295 \pm 0.008)}$ |
| B ₀ | $\frac{11.20 \pm 0.2}{(0.441 \pm 0.008)}$ | $\frac{9.0 \pm 0.2}{(0.354 \pm 0.008)}$ |
| 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 ₀ | $\frac{11.7 \pm 0.2}{(0.433 \pm 0.008)}$ | $\frac{10.0 \pm 0.2}{(0.394 \pm 0.008)}$ |



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

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Customers should verify actual device performance in their specific applications.

AMEYA360

Components Supply Platform

Authorized Distribution Brand :



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Welcome to visit www.ameya360.com

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