

Features

- Formerly J.W. Miller® model
- High resistance to heat and humidity
- Resistance to mechanical shock and pressure
- Accurate dimensions for automatic surface mounting
- Wide inductance range (1.0 nH to 1000 µH)
- RoHS compliant*

Applications

- DC/DC converters
- Power supplies
- General use

PM1210 & PM1812 Series SMT Chip Inductors

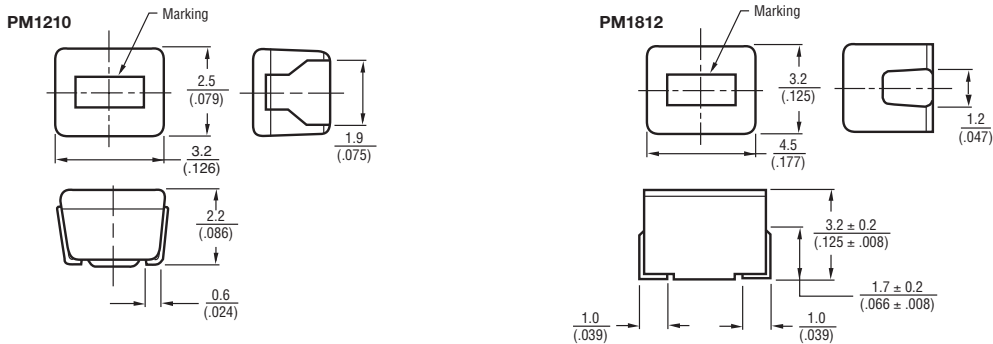
General Specifications

| | |
|------------------------------|-------------------|
| Temperature Rise | 20 °C max. |
| Ambient Temperature | 80 °C max. |
| Operating Temperature..... | -40 °C to +100 °C |
| Storage Temperature..... | -40 °C to +100 °C |
| Resistance to Soldering Heat | |
| PM1210..... | 260 °C, 5 seconds |
| PM1812..... | 245 °C, 5 seconds |

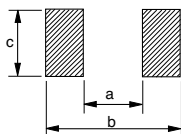
Materials

| | |
|----------------|-------------|
| Ferrite Core | |
| PM1210..... | All |
| PM1812..... | All |
| Coil Type..... | Copper wire |
| Enclosure..... | Epoxy resin |
| Terminal..... | Sn |

Product Dimensions



Recommended Land Pattern Dimensions



| Model | a | b | c |
|--------|------------------------------|------------------------------|------------------------------|
| PM1210 | 1.6 to 2.0 (.063 to .079) | 4.0 to 4.6 (.157 to .181) | 1.9 to 2.4 (.075 to .094) |
| PM1812 | 2.4 to 2.6 (.094 to .102) | 5.5 to 6.0 (.217 to .236) | 2.0 to 3.0 (.079 to .118) |

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

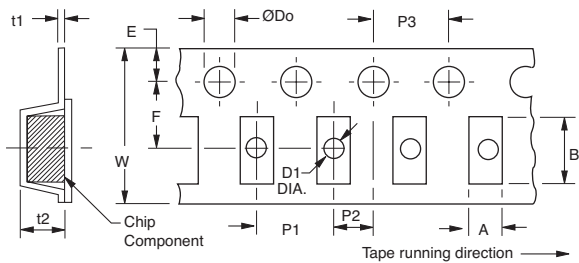
*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011. Specifications are subject to change without notice. Customers should verify actual device performance in their specific applications.

PM1210 & PM1812 Series SMT Chip Inductors

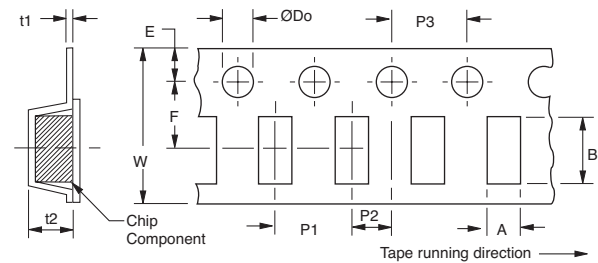
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Packaging Specifications

PM1210 Series



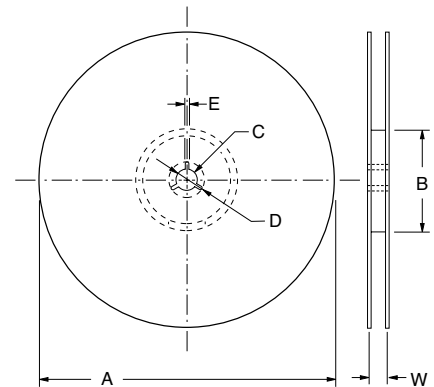
PM1812 Series



| Model | A | B | W | F | E | P1 | P2 | P3 | øD0 | øD1 | t1 | t2 |
|--------|----------------|----------------|-----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----|----------------|----------------|
| PM1210 | 2.80 (.110) | 3.60 (.142) | 8.00 (.315) | 3.50 (.138) | 1.75 (.069) | 4.00 (.157) | 2.00 (.079) | 4.00 (.157) | 1.50 (.059) | — | 0.25 (.010) | 2.40 (.094) |
| PM1812 | 3.60 (.142) | 4.90 (.193) | 12.00 (.472) | 5.50 (.217) | 1.75 (.069) | 8.00 (.315) | 2.00 (.079) | 4.00 (.157) | 1.50 (.059) | — | 0.30 (.012) | 3.50 (.138) |

Reel Dimensions

| Model | A | B | C | D | E | W |
|--------|----------------|---------|--------------|--------------|-------------|--------------|
| PM1210 | 178 (7.008) | 60 min. | 13 (.512) | 21 (.827) | 2 (.079) | 9 (.354) |
| PM1812 | 178 (7.008) | 60 min. | 13 (.512) | 21 (.827) | 2 (.079) | 13 (.512) |



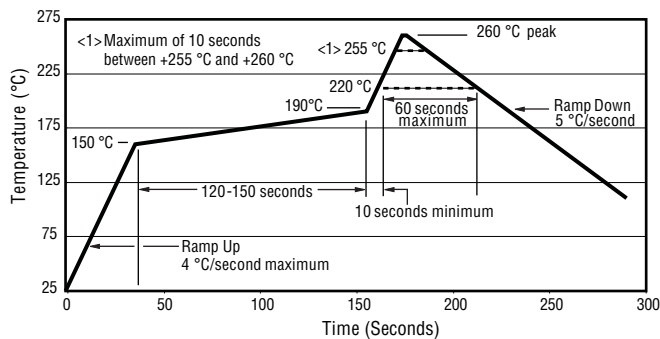
Packaging

| Model | Quantity | Weight |
|--------|-----------|--------|
| PM1210 | 2000 pcs. | 190 g |
| PM1812 | 500 pcs. | 100 g |

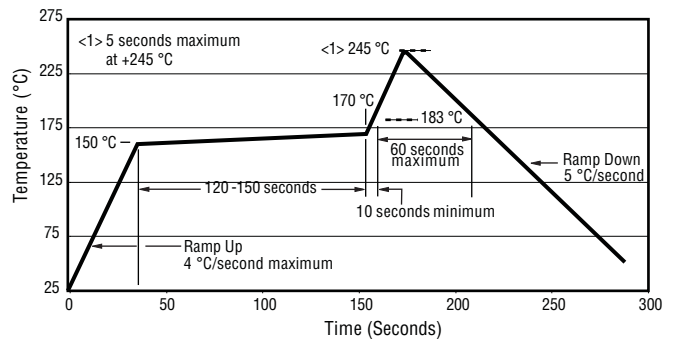
DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

Soldering Profiles

PM1210 Series



PM1812 Series



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PM1210 & PM1812 Series SMT Chip Inductors

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PM1210 Series

| RoHS Compliant 1210 Size Part Number | Inductance μ H | Tolerance | Q min. | Test Frequency MHz | SRF min. MHz | RDC ohms max. | IDC mA max. |
|--|-----------------------|-----------|-----------|-----------------------|-----------------|------------------|----------------|
| PM1210-1R0J-RC | 1.0 | $\pm 5\%$ | 30 | 7.96 | 115 | 0.69 | 230 |
| PM1210-1R2J-RC | 1.2 | $\pm 5\%$ | 30 | 7.96 | 100 | 0.75 | 215 |
| PM1210-1R5J-RC | 1.5 | $\pm 5\%$ | 30 | 7.96 | 90 | 0.75 | 210 |
| PM1210-1R8J-RC | 1.8 | $\pm 5\%$ | 30 | 7.96 | 85 | 0.82 | 200 |
| PM1210-2R2J-RC | 2.2 | $\pm 5\%$ | 30 | 7.96 | 80 | 0.95 | 190 |
| PM1210-2R7J-RC | 2.7 | $\pm 5\%$ | 30 | 7.96 | 75 | 1.1 | 180 |
| PM1210-3R3J-RC | 3.3 | $\pm 5\%$ | 30 | 7.96 | 65 | 1.2 | 180 |
| PM1210-3R9J-RC | 3.9 | $\pm 5\%$ | 30 | 7.96 | 60 | 1.3 | 175 |
| PM1210-4R7J-RC | 4.7 | $\pm 5\%$ | 30 | 7.96 | 55 | 1.5 | 165 |
| PM1210-5R6J-RC | 5.6 | $\pm 5\%$ | 30 | 7.96 | 50 | 1.6 | 160 |
| PM1210-6R8J-RC | 6.8 | $\pm 5\%$ | 30 | 7.96 | 45 | 1.8 | 150 |
| PM1210-8R2J-RC | 8.2 | $\pm 5\%$ | 30 | 7.96 | 40 | 2.0 | 140 |
| PM1210-100J-RC | 10 | $\pm 5\%$ | 30 | 2.52 | 36 | 2.1 | 140 |
| PM1210-120J-RC | 12 | $\pm 5\%$ | 30 | 2.52 | 33 | 2.5 | 125 |
| PM1210-150J-RC | 15 | $\pm 5\%$ | 30 | 2.52 | 30 | 2.8 | 120 |
| PM1210-180J-RC | 18 | $\pm 5\%$ | 30 | 2.52 | 27 | 3.3 | 110 |
| PM1210-220J-RC | 22 | $\pm 5\%$ | 30 | 2.52 | 25 | 3.7 | 105 |
| PM1210-270J-RC | 27 | $\pm 5\%$ | 30 | 2.52 | 22 | 5.0 | 90 |
| PM1210-330J-RC | 33 | $\pm 5\%$ | 30 | 2.52 | 20 | 5.6 | 85 |
| PM1210-390J-RC | 39 | $\pm 5\%$ | 30 | 2.52 | 20 | 6.4 | 80 |
| PM1210-470J-RC | 47 | $\pm 5\%$ | 30 | 2.52 | 15 | 7.0 | 75 |
| PM1210-560J-RC | 56 | $\pm 5\%$ | 30 | 2.52 | 15 | 8.0 | 70 |
| PM1210-680J-RC | 68 | $\pm 5\%$ | 30 | 2.52 | 15 | 9.0 | 65 |
| PM1210-820J-RC | 82 | $\pm 5\%$ | 30 | 2.52 | 11 | 10 | 60 |
| PM1210-101J-RC | 100 | $\pm 5\%$ | 20 | 0.796 | 10 | 10 | 60 |
| PM1210-121J-RC | 120 | $\pm 5\%$ | 20 | 0.796 | 10 | 11 | 55 |
| PM1210-151J-RC | 150 | $\pm 5\%$ | 20 | 0.796 | 8 | 15 | 50 |
| PM1210-181J-RC | 180 | $\pm 5\%$ | 20 | 0.796 | 7 | 17 | 50 |
| PM1210-221J-RC | 220 | $\pm 5\%$ | 20 | 0.796 | 7 | 21 | 45 |

PM1210 & PM1812 Series SMT Chip Inductors

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PM1812 Series

| RoHS Compliant 1812 Size Part Number | Inductance μ H | Tolerance | Q min. | Test Freq. MHz | SRF min. MHz | RDC ohms max. | IDC mA max. |
|--|-----------------------|-----------|-----------|-------------------|-----------------|------------------|----------------|
| PM1812-R10K-RC | 0.10 | ±10 % | 35 | 25.2 | 300 | 0.18 | 800 |
| PM1812-R12K-RC | 0.12 | ±10 % | 35 | 25.2 | 280 | 0.2 | 770 |
| PM1812-R15K-RC | 0.15 | ±10 % | 35 | 25.2 | 250 | 0.22 | 730 |
| PM1812-R18K-RC | 0.18 | ±10 % | 35 | 25.2 | 220 | 0.24 | 700 |
| PM1812-R22K-RC | 0.22 | ±10 % | 40 | 25.2 | 200 | 0.25 | 665 |
| PM1812-R27K-RC | 0.27 | ±10 % | 40 | 25.2 | 180 | 0.26 | 635 |
| PM1812-R33K-RC | 0.33 | ±10 % | 40 | 25.2 | 165 | 0.28 | 605 |
| PM1812-R39K-RC | 0.39 | ±10 % | 40 | 25.2 | 150 | 0.30 | 575 |
| PM1812-R47K-RC | 0.47 | ±10 % | 40 | 25.2 | 145 | 0.32 | 545 |
| PM1812-R56K-RC | 0.56 | ±10 % | 40 | 25.2 | 140 | 0.36 | 520 |
| PM1812-R68K-RC | 0.68 | ±10 % | 40 | 25.2 | 135 | 0.40 | 500 |
| PM1812-R82K-RC | 0.82 | ±10 % | 40 | 25.2 | 130 | 0.45 | 475 |
| PM1812-1R0J-RC | 1.0 | ±5 % | 50 | 7.96 | 100 | 0.50 | 450 |
| PM1812-1R2J-RC | 1.2 | ±5 % | 50 | 7.96 | 80 | 0.55 | 430 |
| PM1812-1R5J-RC | 1.5 | ±5 % | 50 | 7.96 | 70 | 0.60 | 410 |
| PM1812-1R8J-RC | 1.8 | ±5 % | 50 | 7.96 | 60 | 0.65 | 390 |
| PM1812-2R2J-RC | 2.2 | ±5 % | 50 | 7.96 | 55 | 0.70 | 380 |
| PM1812-2R7J-RC | 2.7 | ±5 % | 50 | 7.96 | 50 | 0.75 | 370 |
| PM1812-3R3J-RC | 3.3 | ±5 % | 50 | 7.96 | 45 | 0.80 | 355 |
| PM1812-3R9J-RC | 3.9 | ±5 % | 50 | 7.96 | 40 | 0.90 | 330 |
| PM1812-4R7J-RC | 4.7 | ±5 % | 50 | 7.96 | 35 | 1.00 | 315 |
| PM1812-5R6J-RC | 5.6 | ±5 % | 50 | 7.96 | 33 | 1.10 | 300 |
| PM1812-6R8J-RC | 6.8 | ±5 % | 50 | 7.96 | 27 | 1.2 | 285 |
| PM1812-8R2J-RC | 8.2 | ±5 % | 50 | 7.96 | 25 | 1.4 | 270 |
| PM1812-100J-RC | 10 | ±5 % | 50 | 2.52 | 20 | 1.6 | 250 |
| PM1812-120J-RC | 12 | ±5 % | 50 | 2.52 | 18 | 2 | 225 |
| PM1812-150J-RC | 15 | ±5 % | 50 | 2.52 | 17 | 2.5 | 200 |
| PM1812-180J-RC | 18 | ±5 % | 50 | 2.52 | 15 | 2.8 | 190 |
| PM1812-220J-RC | 22 | ±5 % | 50 | 2.52 | 13 | 3.2 | 180 |
| PM1812-270J-RC | 27 | ±5 % | 50 | 2.52 | 12 | 3.6 | 170 |
| PM1812-330J-RC | 33 | ±5 % | 50 | 2.52 | 11 | 4 | 160 |
| PM1812-390J-RC | 39 | ±5 % | 50 | 2.52 | 10 | 4.5 | 150 |
| PM1812-470J-RC | 47 | ±5 % | 50 | 2.52 | 10 | 5 | 140 |
| PM1812-560J-RC | 56 | ±5 % | 50 | 2.52 | 9 | 5.5 | 135 |
| PM1812-680J-RC | 68 | ±5 % | 50 | 2.52 | 9 | 6 | 130 |
| PM1812-820J-RC | 82 | ±5 % | 50 | 2.52 | 8 | 7 | 120 |
| PM1812-101J-RC | 100 | ±5 % | 40 | 2.52 | 8 | 8 | 110 |
| PM1812-121J-RC | 120 | ±5 % | 40 | 0.796 | 6 | 8 | 110 |
| PM1812-151J-RC | 150 | ±5 % | 40 | 0.796 | 5 | 9 | 105 |
| PM1812-181J-RC | 180 | ±5 % | 40 | 0.796 | 5 | 9.5 | 102 |
| PM1812-221J-RC | 220 | ±5 % | 40 | 0.796 | 4 | 10 | 100 |
| PM1812-271J-RC | 270 | ±5 % | 40 | 0.796 | 4 | 12 | 92 |
| PM1812-331J-RC | 330 | ±5 % | 40 | 0.796 | 3.5 | 14 | 85 |
| PM1812-391J-RC | 390 | ±5 % | 40 | 0.796 | 3 | 18 | 80 |
| PM1812-471J-RC | 470 | ±5 % | 40 | 0.796 | 3 | 26 | 62 |
| PM1812-561J-RC | 560 | ±5 % | 30 | 0.796 | 3 | 30 | 50 |
| PM1812-681J-RC | 680 | ±5 % | 30 | 0.796 | 3 | 30 | 50 |
| PM1812-821J-RC | 820 | ±5 % | 30 | 0.796 | 2.5 | 35 | 30 |
| PM1812-102J-RC | 1000 | ±5 % | 30 | 0.252 | 2.5 | 40 | 30 |

REV. 07/10

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Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)

Факс: 8 (812) 320-02-42

Электронная почта: org@eplast1.ru

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.