

CLASS CC/CD CCMR SERIES FUSES

POWR-PRO® 600 VAC • Dual Element • Time-Delay • 2/10-60 A



Description

The CCMR series is ideal for space saving protection of motors up to 40 hp*. It was designed specifically to withstand sustained starting currents of small motors. The CCMR 60 fuse is the smallest 60 A fuse available rated at 600 V. Compared to other UL Listed fuses, Class CC fuses are the most current-limiting, rating for rating.

Features/Benefits

- POWR-PRO® Performance
- Extremely current-limiting
- Ratings up to 60 Amps
- 300 kA Interrupting Rating (self-certified)

Applications

- Motor and motor branch circuit protection

Dimensions Inches (mm)



Specifications

| | |
|----------------------------|--|
| Voltage Rating | AC: 600 V DC: 250 V (CCMR 2/10-2 A) (CCMR 4 1/2-10 A) (CCMR 35-60 A) 300 V (CCMR 2 1/4-4 A) 500 V (CCMR 12-30 A) |
| Amperage Rating | 2/10 - 60 A |
| Interrupting Rating | AC: 200 kA rms symmetrical 300 kA Littelfuse self-certified DC: 20 kA |
| Approvals | AC: Standard 248-4, Class CC UL Listed 2/10-30 A (File: E81895) Standard 248, Class CD UL Listed 35-60 A (File: E81895) CSA Certified 2/10-30 A (File: LR29862) DC: Littelfuse self-certified |
| Environmental | RoHS Compliant (except 35-60 A) |
| Country of Origin | Mexico |

Ordering Information

| AMPERAGE RATINGS | | | | | | |
|------------------|--------|--------|--------|-------|--------|----|
| 2/10 | 1 | 2 | 3 1/2 | 6 1/4 | 12 | 35 |
| 1/4 | 1 1/4 | 2 1/4 | 4 | 7 | 15 | 40 |
| 3/10 | 1 4/10 | 2 1/2 | 4 1/2 | 7 1/2 | 17 1/2 | 45 |
| 1/2 | 1 1/2 | 2 8/10 | 5 | 8 | 20 | 50 |
| 6/10 | 1 6/10 | 3 | 5 6/10 | 9 | 25 | 60 |
| 8/10 | 1 8/10 | 3 2/10 | 6 | 10 | 30 | |

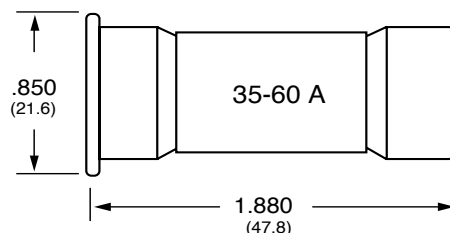
| SERIES | AMPERAGE | ROHS | CATALOG NUMBER | ORDERING NUMBER |
|--------|----------|------|----------------|-----------------|
| CCMR | 10 | • | CCMR020 | CCMR020.TXP |
| CCMR | 45 | | CCMR045 | CCMR045.T |

Web Resources

TC Curves, downloadable CAD drawings and other technical information: Littelfuse.com/ccmr

Recommended Fuse Holders

- LFC600 Series
- L60030C Series
- LPSC Touch-Safe Series



*Consult Motor Protection Tables on www.littelfuse.com or call 800-TEC-FUSE for specific motor sizing information.

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Electrical Specifications

| ORDERING NUMBER | AMPERAGE RATING | VOLTAGE RATING | | INTERRUPTING RATING | | UPC | WATTS LOSS AT 100% RATED CURRENT (W) | WATTS LOSS AT 80% RATED CURRENT (W) | TOTAL CLEARING I ² T (A ² SEC) 200 kA | AGENCY APPROVALS | | |
|-----------------|-----------------|----------------|-----|---------------------|-------|-------------|--------------------------------------|-------------------------------------|---|------------------|-----|------|
| | | AC | DC | AC | DC | | | | | UL | CSA | RoHS |
| CCMR2.25TXP | 2-1/4 | 600 | 300 | 200 kA | 20 kA | 07945896818 | 1.55 | 0.99 | 351 | • | • | • |
| CCMR02.5TXP | 2-1/2 | 600 | 300 | 200 kA | 20 kA | 07945896819 | 1.99 | 1.26 | 192 | • | • | • |
| CCMR003.TXP | 3 | 600 | 300 | 200 kA | 20 kA | 07945896821 | 1.55 | 1.02 | 286 | • | • | • |
| CCMR004.TXP | 4 | 600 | 300 | 200 kA | 20 kA | 07945896824 | 1.62 | 1.04 | 1870 | • | • | • |
| CCMR005.TXP | 5 | 600 | 250 | 200 kA | 20 kA | 07945896826 | 1.89 | 1.20 | 1060 | • | • | • |
| CCMR6.25TXP | 6-1/4 | 600 | 250 | 200 kA | 20 kA | 07945896829 | 1.72 | 1.08 | 797 | • | • | • |
| CCMR07.5TXP | 7-1/2 | 600 | 250 | 200 kA | 20 kA | 07945896831 | 1.72 | 1.09 | 983 | • | • | • |
| CCMR008.TXP | 8 | 600 | 250 | 200 kA | 20 kA | 07945896832 | 1.39 | 0.83 | 431 | • | • | • |
| CCMR010.TXP | 10 | 600 | 250 | 200 kA | 20 kA | 07945896834 | 1.49 | 0.90 | 1250 | • | • | • |
| CCMR015.TXP | 15 | 600 | 500 | 200 kA | 20 kA | 07945896836 | 1.77 | 1.03 | 1120 | • | • | • |
| CCMR020.TXP | 20 | 600 | 500 | 200 kA | 20 kA | 07945896838 | 2.3 | 1.39 | 918 | • | • | • |
| CCMR030.TXP | 30 | 600 | 500 | 200 kA | 20 kA | 07945896840 | 2.75 | 1.62 | 1790 | • | • | • |

Temperature Derating Curve (Temperature of Air Immediately Surrounding Fuse)



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Current-Limiting Effects

| SHORT CIRCUIT CURRENT* | APPARENT RMS SYMMETRICAL CURRENT FOR VARIOUS FUSE RATINGS | | | | | | | | | | | | | | | | | |
|------------------------|---|------|-----|-----|-------|-------|-------|-------|-------|-------|-------|------|-------|------|-------|-------|-------|-------|
| | 2.25A | 2.5A | 3A | 4A | 5A | 6.25A | 7.5A | 8A | 10A | 12A | 15A | 20A | 30A | 35A | 40A | 45A | 50A | 60A |
| 5,000 | 255 | 280 | 345 | 380 | 540 | 615 | 570 | 555 | 530 | 575 | 660 | 535 | 750 | 1170 | 1,240 | 1,320 | 1,070 | 1,525 |
| 10,000 | 300 | 330 | 410 | 445 | 630 | 720 | 670 | 650 | 625 | 680 | 775 | 635 | 875 | 1480 | 1,565 | 1,670 | 1,355 | 1,930 |
| 15,000 | 330 | 360 | 445 | 485 | 695 | 785 | 730 | 710 | 680 | 735 | 845 | 700 | 950 | 1695 | 1,795 | 1,915 | 1,555 | 2,200 |
| 20,000 | 350 | 380 | 475 | 520 | 745 | 840 | 775 | 770 | 725 | 790 | 900 | 735 | 1,000 | 1870 | 1,980 | 2,110 | 1,710 | 2,430 |
| 25,000 | 365 | 400 | 500 | 545 | 775 | 880 | 815 | 800 | 760 | 830 | 945 | 800 | 1,050 | 2015 | 2,135 | 2,275 | 1,845 | 2,620 |
| 30,000 | 385 | 420 | 520 | 570 | 810 | 905 | 850 | 840 | 790 | 865 | 980 | 815 | 1,125 | 2145 | 2,270 | 2,420 | 1,965 | 2,780 |
| 35,000 | 400 | 435 | 540 | 590 | 840 | 950 | 880 | 870 | 830 | 890 | 1,020 | 840 | 1,175 | 2260 | 2,390 | 2,550 | 2,070 | 2,885 |
| 40,000 | 410 | 445 | 555 | 605 | 865 | 980 | 900 | 890 | 840 | 930 | 1,050 | 860 | 1,200 | 2360 | 2,500 | 2,665 | 2,165 | 3,025 |
| 50,000 | 430 | 473 | 585 | 630 | 905 | 1,025 | 950 | 935 | 890 | 965 | 1,100 | 910 | 1,300 | 2545 | 2,695 | 2,875 | 2,330 | 3,200 |
| 60,000 | 445 | 490 | 610 | 665 | 945 | 1,060 | 1,000 | 970 | 930 | 1,000 | 1,145 | 950 | 1,350 | 2705 | 2,865 | 3,055 | 2,480 | 3,350 |
| 80,000 | 470 | 525 | 648 | 710 | 1,000 | 1,140 | 1,050 | 1,040 | 985 | 1,065 | 1,220 | 1010 | 1,400 | 2985 | 3,160 | 3,365 | 2,730 | 3,540 |
| 100,000 | 500 | 555 | 685 | 740 | 1,060 | 1,195 | 1,110 | 1,100 | 1,030 | 1,130 | 1,285 | 1075 | 1,500 | 3215 | 3,405 | 3,630 | 2,945 | 3,685 |
| 150,000 | 550 | 600 | 750 | 815 | 1,145 | 1,310 | 1,220 | 1,190 | 1,135 | 1,235 | 1,400 | 1150 | 1,600 | 3685 | 3,905 | 4,160 | 3,375 | 4,030 |
| 200,000 | 585 | 650 | 800 | 870 | 1,245 | 1,400 | 1,290 | 1,285 | 1,210 | 1,320 | 1,500 | 1250 | 1,750 | 4060 | 4,300 | 4,580 | 3,720 | 4,230 |

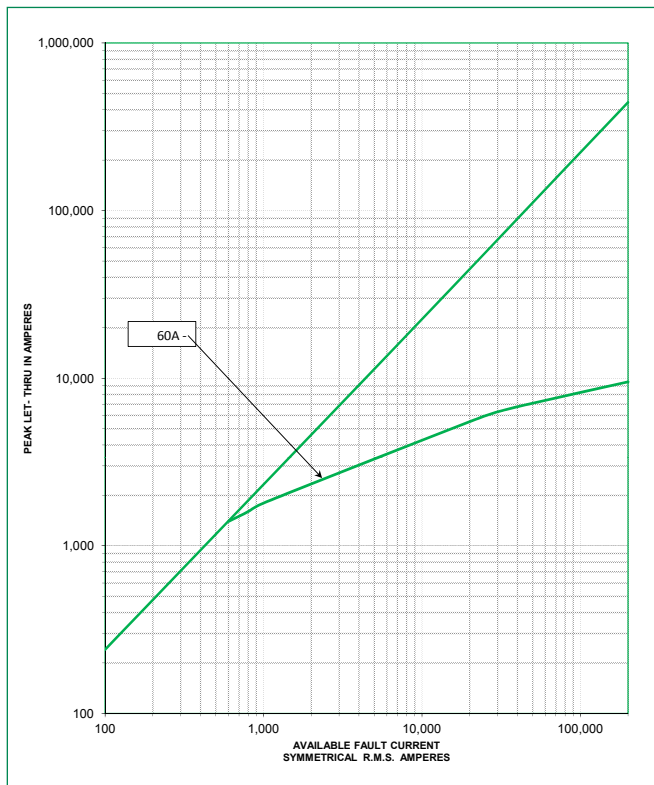
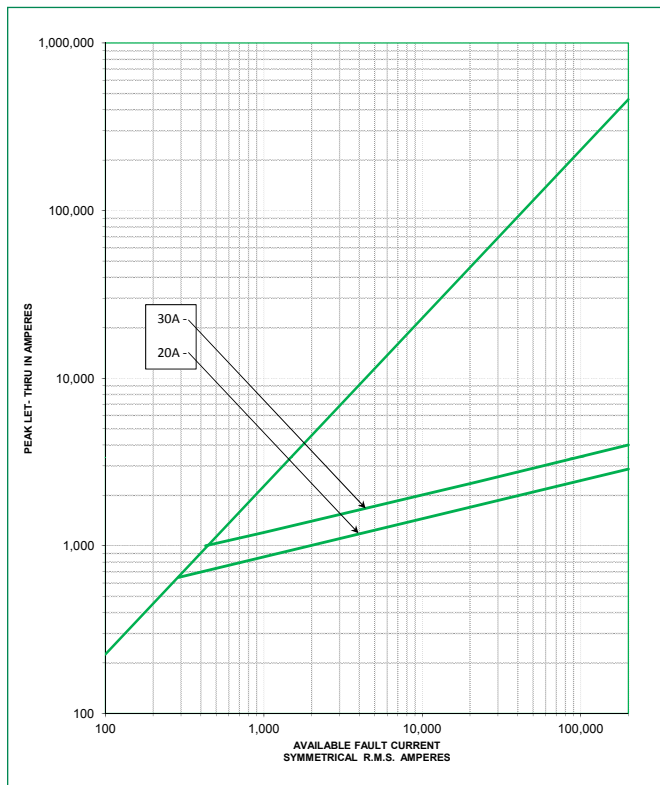
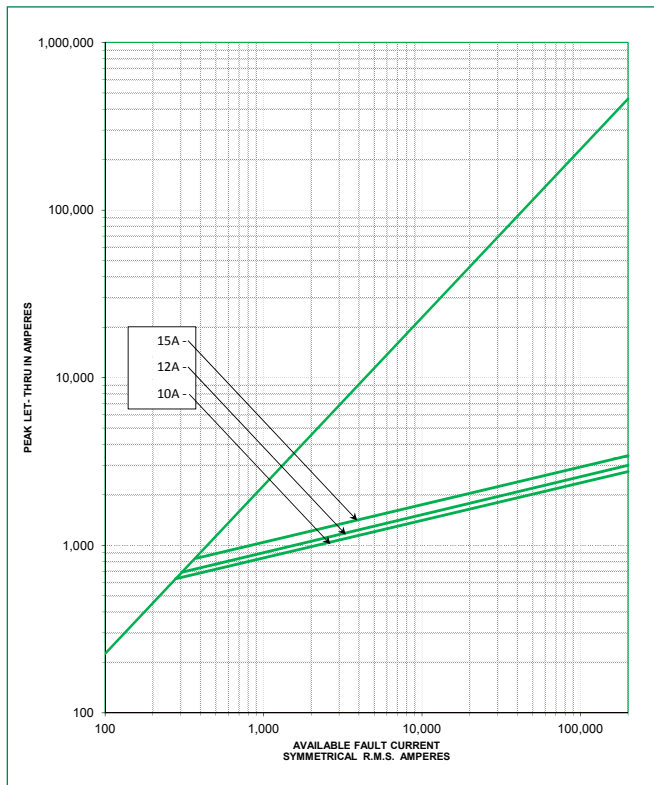
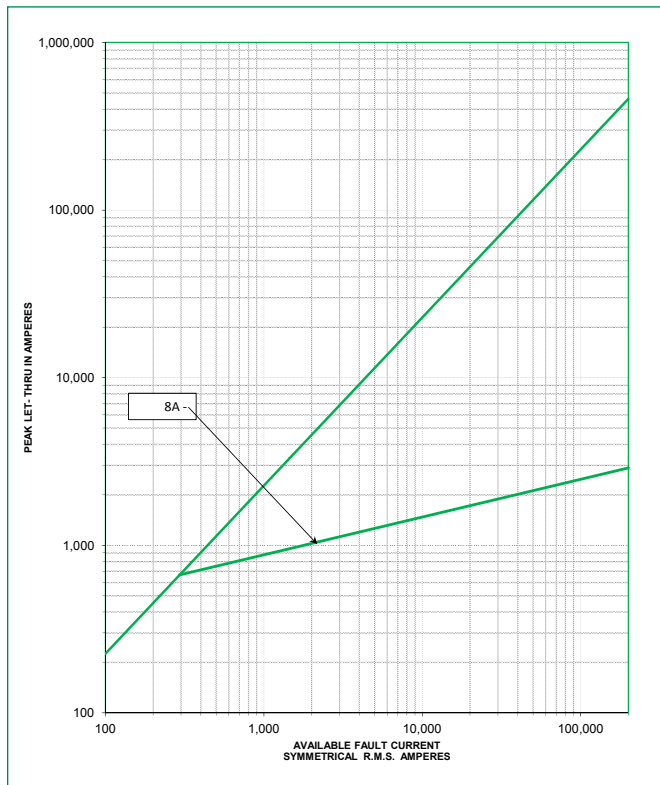
*Prospective RMS Symmetrical Amperes Short-Circuit Current
Note: Data Derived from Peak Let-Thru Curves

Peak Let-Thru Curves



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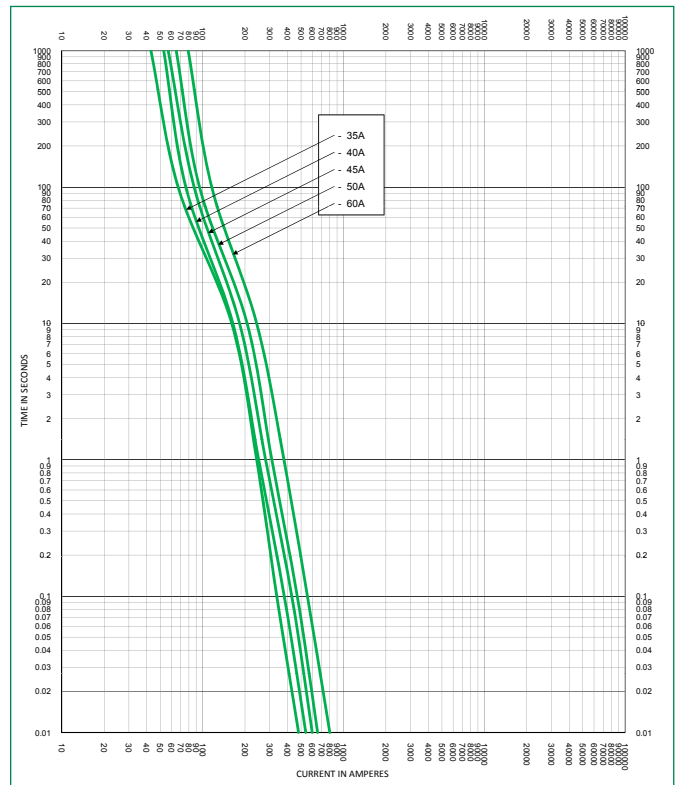
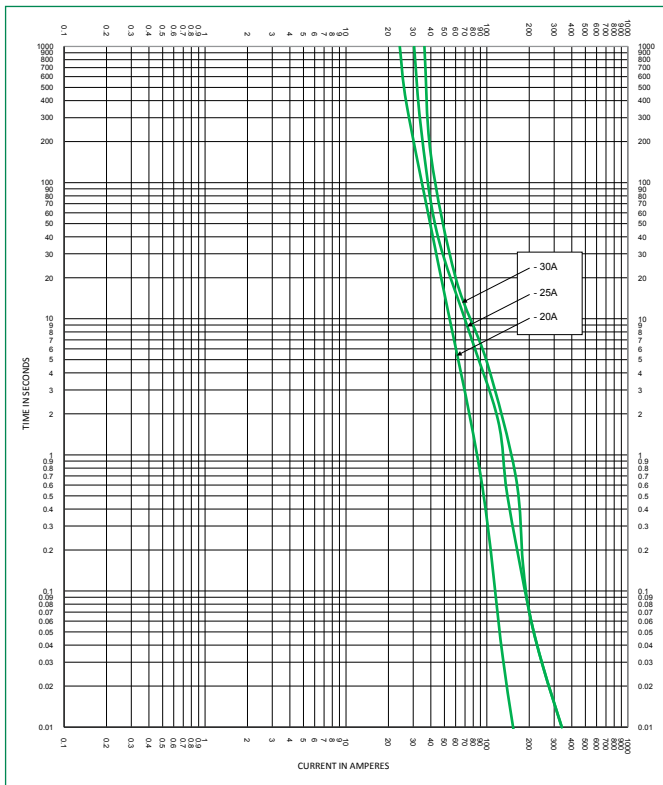
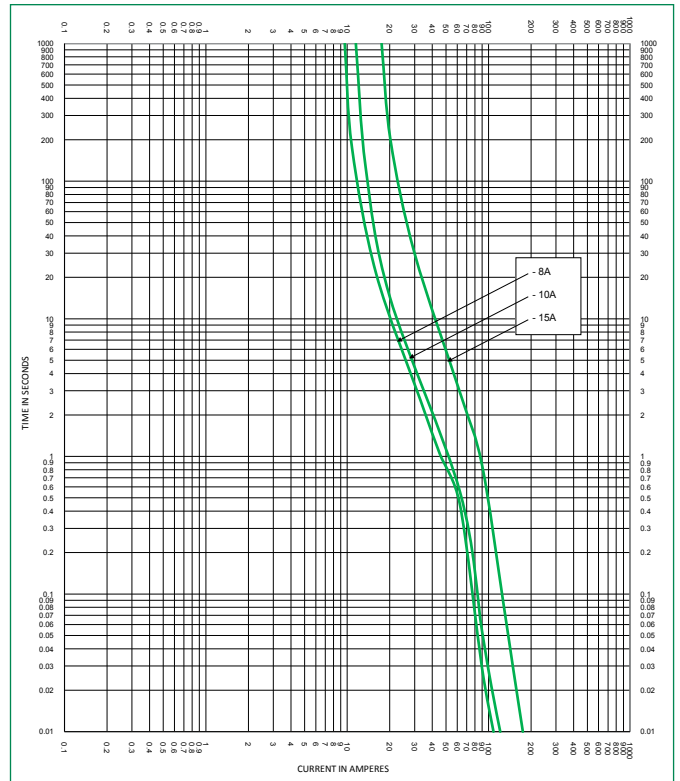
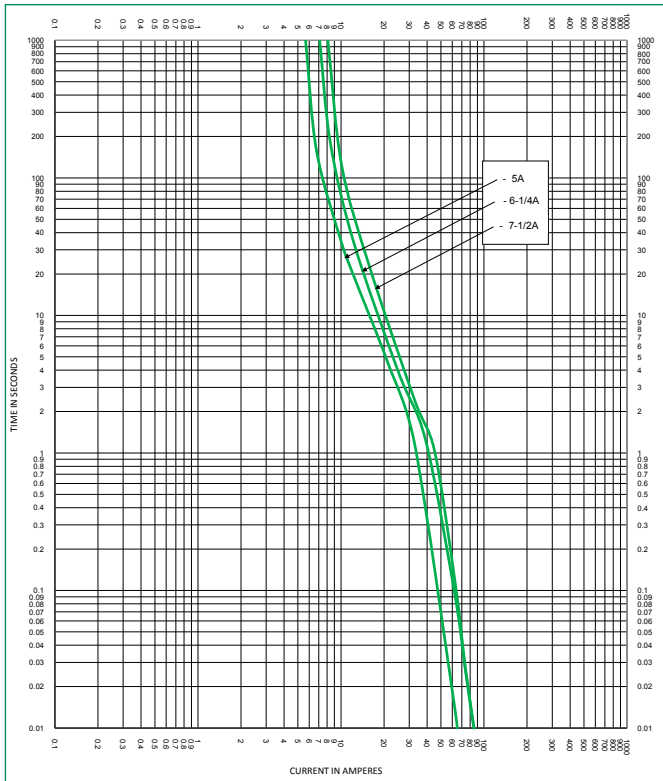
Peak Let-Thru Curves



Time Current Curves



Time Current Curves





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.