

RFI Power Line Filters for DC Applications

DC Series



UL Recognized
CSA Certified
TUV Certified



60DCF6B



15DCF10

DC Series

- General purpose line filters for DC applications up to 125VDC
- Available with or without a circuit breaker
- Available with feedthrough capacitors for added high frequency performance
- Available in both flange mount (DCF) and bulkhead mount (DCB) configuration

Ordering Information



Specifications

- Hipot rating (one minute):**
 Line to Ground: 2250 VDC
 Line to Line: 1450 VDC
- Rated Voltage (max):** 80 VDC
- Rated Current:** 15 to 125A
- Operating Ambient Temperature Range (at rated current I_r):** -10°C to +55°C
 In an ambient temperature (T_a) higher than +55°C the maximum operating current (I_o) is calculated as follows: $I_o = I_r \sqrt{(85-T_a)/30}$

Electrical Schematics

Standard Performance



High Frequency Performance (F & BF Styles)



- Note 1: Depicts redundant style 6 terminals.
 Note 2: Depicts optional circuit breaker.
 Note 3: For 100 & 125A versions delete second coil.
 Note 4: Depicts style 10 terminal versions which have separate ground stud.

RFI Power Line Filters for DC Applications *(continued)*

DC Series

Available Part Numbers

| Standard Performance | | High Performance | |
|----------------------|-----------|------------------|----------|
| 15DCF6 | 15DCF10 | 15DCB10F | 15DCB6F |
| 30DCF6 | 30DCF10 | 30DCB10F | 30DCB6F |
| 60DCF6 | 60DCF10 | 60DCB10F | 60DCB6F |
| 100DCF6 | 100DCF10 | 100DCB10F | 100DCB6F |
| 125DCF6 | 125DCF10 | 125DCB10F | 125DCB6F |
| 15DCF6B | 15DCF10B | 15DCB6BF | |
| 30DCF6B | 30DCF10B | 30DCB6BF | |
| 60DCF6B | 60DCF10B | 60DCB6BF | |
| 100DCF6B | 100DCF10B | 100DCB6BF | |
| 125DCF6B | 125DCF10B | 125DCB6BF | |
| 15DCB6 | 15DCB10 | 15DCB10BF | |
| 30DCB6 | 30DCB10 | 30DCB10BF | |
| 60DCB6 | 60DCB10 | 60DCB10BF | |
| 100DCB6 | 100DCB10 | 100DCB10BF | |
| 125DCB6 | 125DCB10 | 125DCB10BF | |
| 15DCB6B | 15DCB10B | | |
| 30DCB6B | 30DCB10B | | |
| 60DCB6B | 60DCB10B | | |
| 100DCB6B | 100DCB10B | | |
| 125DCB6B | 125DCB10B | | |

Termination Options

Style 6 (15, 30 & 60A)

- Supplied with #10-32 redundant studs
- 0.625 [*15.88*] spacing like polarity
- 0.750 [*19.05*] spacing opposing polarity
- Torque specification: 27 ±3 in-lb.

Style 10 (15 & 30A)

- PHOENIX CONTACT* part number: VDFK4
- Accepts 12 AWG stranded wire
- Wire strip length: 0.315 [*8.0*]
- Torque specification: 5.5 – 7.0 in-lb.
- Ground stud: 8-32

Style 10 (100A)

- PHOENIX CONTACT* part number: HDFK 25-VP
- Accepts 4 AWG stranded wire
- Wire strip length: 0.748 [*19.0*]
- Torque specification: 35.4 – 39.9 in-lb.
- Ground stud: 1/4-20

Style 6 (100 & 125A)

- Supplied with 1/4-20 redundant studs
- 0.750 [*19.05*] spacing like polarity
- 1.00 [*25.4*] spacing opposing polarity
- Torque specification: 45 ±2 in-lb

Style 10 (60A)

- PHOENIX CONTACT* part number: HDFK 16-VP
- Accepts 6 AWG stranded wire
- Wire strip length: 0.630 [*16.0*]
- Torque specification: 17.7 – 21.2 in-lb.
- Ground stud: 10-32

Style 10 (125A)

- PHOENIX CONTACT* part number: HDFK 50-VP
- Accepts 1 AWG stranded wire
- Wire strip length: 0.945 [*24.0*]
- Torque specification: 35.4 – 39.9 in-lb.
- Ground stud: 1/4-20

*PHOENIX CONTACT is a trademark of Phoenix Contact GmbH & Co. KG.

RFI Power Line Filters for DC Applications *(continued)*

DC Series

Recommended Panel Cutouts

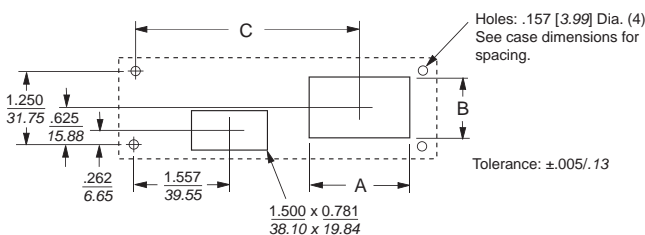
DCB6(F) & DCB10(F)



DCB6B(F) & DCB10B(F) 15 to 60A



DCB6B(F) & DCB10B(F) 100 to 125A



Cutout Dimensions

DCB6(F) & DCB10(F)

| Part No. | A | B | C |
|-------------|--------------|--------------|--------------|
| 15DCB6(F) | 1.375 | 1.249 | 3.472 |
| 30DCB6(F) | 34.93 | 31.72 | 88.19 |
| 15DCB10(F) | 1.250 | 1.000 | 3.472 |
| 30DCB10(F) | 31.75 | 25.40 | 88.19 |
| 60DCB6(F) | 1.375 | 1.249 | 3.472 |
| | 34.93 | 31.72 | 88.19 |
| 60DCB10(F) | 1.674 | 1.010 | 3.443 |
| | 42.52 | 25.65 | 87.45 |
| 100DCB6(F) | 1.700 | 1.549 | 3.472 |
| 125DCB6(F) | 43.18 | 39.34 | 88.19 |
| 100DCB10(F) | 1.954 | 1.500 | 2.830 |
| | 49.63 | 38.10 | 71.20 |
| 125DCB10(F) | 2.250 | 1.590 | 2.725 |
| | 57.15 | 40.39 | 69.22 |

DCB6B(F) & DCB10B(F) 15 to 60A

| Part No. | A | B | C | D | E | F |
|-------------|-------------|--------------|--------------|--------------|--------------|--------------|
| 15DCB6B(F) | 1.50 | 0.781 | 1.308 | 3.472 | 1.375 | 1.249 |
| 15DCF6B | 38.10 | 19.84 | 33.22 | 88.19 | 34.93 | 31.72 |
| 15DCB10B(F) | 1.50 | 0.781 | 1.308 | 3.472 | 1.250 | 1.00 |
| 15DCF10B | 38.10 | 19.84 | 33.22 | 88.19 | 31.75 | 25.40 |
| 30DCB6B(F) | 1.50 | 0.781 | 1.308 | 3.472 | 1.375 | 1.249 |
| 30DCF6B | 38.10 | 19.84 | 33.22 | 88.19 | 34.93 | 31.72 |
| 30DCB10B(F) | 1.50 | 0.781 | 1.308 | 3.472 | 1.250 | 1.00 |
| 30DCF10B | 38.10 | 19.84 | 33.22 | 88.19 | 31.75 | 25.40 |
| 60DCB10B(F) | 1.50 | 0.781 | 1.308 | 3.443 | 1.674 | 1.010 |
| 60DCF10B | 38.10 | 19.84 | 33.22 | 87.45 | 42.52 | 25.65 |
| 60DCF6B(F) | 1.50 | 0.781 | 1.308 | 3.472 | 1.375 | 1.249 |
| 60DCF6B | 38.10 | 19.84 | 33.22 | 88.19 | 34.93 | 31.72 |

DCB6B(F) & DCB10B(F) 100 to 125A

| Part No. | A | B | C |
|--------------|--------------|--------------|--------------|
| 100DCB6B(F) | 1.70 | 1.549 | 4.222 |
| 100DCF6B | | | |
| 125DCB6B(F) | 43.18 | 39.34 | 107.23 |
| 125DCF6B | | | |
| 100DCB10B(F) | 1.954 | 1.50 | 4.295 |
| 100DCF10B | 49.63 | 38.10 | 109.09 |
| 125DCB10B(F) | 2.25 | 1.59 | 4.147 |
| | 57.15 | 40.39 | 105.33 |
| 125DCF10B | 2.25 | 1.59 | 2.725 |
| | 57.15 | 40.39 | 105.33 |

RFI Power Line Filters for DC Applications *(continued)*

DC Series

Case Styles

DCB6 & DCB6B



DCB10 & DCB10B (60 to 125A)



DCF6



DCF10 (15 & 30A)



DCF6B



DCF10 (60 to 125A)



DCB10 & DCB10B (15 to 30A)



DCF10B (15 & 30A)



RFI Power Line Filters for DC Applications *(continued)*

DC Series

Case Styles *(continued)*

DCF10B (60 TO 125A)



Typical Dimensions:
Mounting Slots (4): .260 x .39 [6.6 x 9.9]

Case Dimensions

| Part No. | A (max) | B (max) | C (max) | D ± 0.20 $\pm .51$ | E (max) | F ± 0.20 $\pm .51$ |
|-------------|------------|------------|------------|------------------------------|------------|------------------------------|
| 15DCB6(F) | 5.69 | 5.06 | 1.48 | 4.50 | 4.06 | 0.950 |
| 15DCB6B(F) | 7.69 | 5.06 | 1.48 | 4.50 | 6.06 | 0.950 |
| 15DCB10(F) | 5.06 | 5.06 | 1.48 | 4.50 | 4.06 | 0.950 |
| 15DCB10B(F) | 7.06 | 5.06 | 1.48 | 4.50 | 6.06 | 0.950 |
| 15DCF6 | 5.33 | 3.10 | 1.78 | 2.677 | 3.70 | 2.00 |
| 15DCF6B(F) | 7.69 | 5.06 | 1.48 | 5.740 | 6.06 | 3.52 |
| 15DCF10 | 4.75 | 3.10 | 1.78 | 2.677 | 3.70 | 2.0 |
| 15DCF10B(F) | 7.06 | 5.06 | 1.48 | 5.740 | 6.06 | 3.520 |
| 30DCB6(F) | 7.69 | 5.06 | 1.48 | 4.50 | 6.06 | 0.95 |
| 30DCB6B(F) | 8.69 | 5.06 | 1.48 | 4.50 | 7.06 | 0.95 |
| 30DCB10(F) | 7.06 | 5.06 | 1.48 | 4.50 | 6.06 | 0.95 |
| 30DCB10B(F) | 8.06 | 5.06 | 1.48 | 4.50 | 7.06 | 0.95 |
| 30DCF6 | 6.19 | 3.96 | 2.18 | 3.50 | 4.56 | 2.00 |
| 30DCF6B | 8.69 | 5.0 | 1.48 | 5.74 | 7.06 | 4.52 |
| 30DCF10 | 5.56 | 3.96 | 2.18 | 3.5 | 4.56 | 2.0 |
| 30DCF10B | 8.06 | 5.06 | 1.48 | 5.74 | 7.06 | 4.52 |

Case Dimensions *(continued)*

| Part No. | A (max) | B (max) | C (max) | D ± 0.20 $\pm .51$ | E (max) | F ± 0.20 $\pm .51$ |
|--------------|------------|------------|------------|------------------------------|------------|------------------------------|
| 60DCB6(F) | 8.69 | 5.06 | 1.48 | 4.50 | 7.06 | 0.95 |
| 60DCB6B(F) | 10.69 | 5.06 | 1.48 | 4.50 | 9.06 | 0.95 |
| 60DCF6 | 7.56 | 5.48 | 2.55 | 4.92 | 5.94 | 2.756 |
| 60DCF6B | 10.69 | 5.06 | 1.48 | 5.74 | 9.06 | 6.52 |
| 60DCF10 | 8.56 | 5.48 | 2.55 | 4.92 | 5.94 | 2.576 |
| 60DCF10B | 11.75 | 5.06 | 1.48 | 5.74 | 9.06 | 6.52 |
| 100DCB6(F) | 10.31 | 5.06 | 1.78 | 4.50 | 8.06 | 1.25 |
| 100DCB6B(F) | 12.31 | 6.06 | 1.78 | 5.50 | 10.06 | 1.25 |
| 100DCB10(F) | 11.13 | 5.06 | 1.78 | 4.50 | 8.06 | 1.25 |
| 100DCB10B(F) | 13.13 | 6.06 | 1.78 | 5.50 | 10.06 | 1.25 |
| 100DCF6 | 10.60 | 6.30 | 2.52 | 5.70 | 8.46 | 4.52 |
| 100DCF6B | 12.31 | 6.06 | 1.78 | 6.74 | 10.06 | 7.52 |
| 100DCF10 | 11.50 | 6.30 | 2.52 | 5.70 | 8.46 | 4.52 |
| 100DCF10B | 13.13 | 6.06 | 1.78 | 6.74 | 10.06 | 7.52 |
| 125DCB6(F) | 10.31 | 5.06 | 1.78 | 4.50 | 8.06 | 1.25 |
| 125DCB6B(F) | 12.31 | 6.06 | 1.78 | 5.50 | 10.06 | 1.25 |
| 125DCB10(F) | 11.50 | 5.06 | 1.78 | 4.50 | 8.06 | 1.25 |
| 125DCB10B(F) | 13.50 | 6.06 | 1.78 | 5.50 | 10.06 | 1.25 |
| 125DCF6 | 10.60 | 6.30 | 2.52 | 5.70 | 8.46 | 4.52 |
| 125DCF6B | 12.31 | 6.06 | 1.78 | 6.74 | 10.06 | 7.52 |
| 125DCF10 | 11.86 | 6.30 | 2.52 | 5.70 | 8.46 | 4.52 |
| 125DCF10B | 13.50 | 6.06 | 1.78 | 6.74 | 10.06 | 7.52 |

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DC Filters

Dimensions are in inches and millimeters unless otherwise specified. Values in italics are metric equivalents. Dimensions are shown for reference purposes only. Specifications subject to change.

For email, phone or live chat, please go to te.com/help
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RFI Power Line Filters for DC Applications *(continued)*

DC Series

Performance Data *(continued)*

Minimum Insertion Loss

Measured in closed 50 Ohm system

Standard Performance

Common Mode / Asymmetrical (Line to Ground)

| Current Rating | Frequency – MHz | | | | | | | | | |
|----------------|-----------------|-----|----|-----|----|----|----|----|----|----|
| | .01 | .05 | .1 | .15 | .5 | 1 | 3 | 5 | 10 | 30 |
| 15A | - | 1 | 12 | 20 | 41 | 45 | 61 | 63 | 47 | 39 |
| 30A | - | 4 | 15 | 23 | 47 | 59 | 64 | 56 | 44 | 36 |
| 60A | - | - | 9 | 17 | 38 | 40 | 59 | 50 | 39 | 34 |
| 100A | - | - | 10 | 18 | 38 | 39 | 53 | 50 | 35 | 21 |
| 125A | - | - | 12 | 18 | 30 | 32 | 44 | 49 | 29 | 18 |

Differential Mode / Symmetrical (Line to Line)

| Current Rating | Frequency – MHz | | | | | | | | | |
|----------------|-----------------|-----|----|-----|----|----|----|----|----|----|
| | .01 | .05 | .1 | .15 | .5 | 1 | 3 | 5 | 10 | 30 |
| 15A | 7 | 22 | 27 | 30 | 30 | 36 | 56 | 49 | 38 | 31 |
| 30A | 7 | 22 | 28 | 31 | 32 | 59 | 56 | 51 | 41 | 28 |
| 60A | 15 | 30 | 36 | 40 | 40 | 35 | 60 | 51 | 39 | 32 |
| 100A | 14 | 29 | 35 | 39 | 33 | 30 | 53 | 53 | 41 | 30 |
| 125A | 14 | 24 | 35 | 39 | 40 | 28 | 53 | 60 | 42 | 33 |

High Frequency Performance (F & BF Styles)

Common Mode / Asymmetrical (Line to Ground)

| Current Rating | Frequency – MHz | | | | | | | | | | | |
|----------------|-----------------|-----|----|-----|----|----|----|----|----|----|-----|------|
| | .01 | .05 | .1 | .15 | .5 | 1 | 3 | 5 | 10 | 20 | 300 | 3000 |
| 15A | - | 1 | 12 | 20 | 41 | 45 | 55 | 50 | 45 | 25 | 50 | 30 |
| 30A | - | 4 | 15 | 20 | 46 | 58 | 60 | 60 | 48 | 35 | 50 | 30 |
| 60A | - | - | 9 | 16 | 38 | 42 | 52 | 60 | 48 | 26 | 40 | 30 |
| 100A | - | - | 9 | 16 | 38 | 42 | 52 | 60 | 42 | 26 | 40 | 30 |
| 125A | - | - | 9 | 16 | 28 | 34 | 46 | 54 | 34 | 34 | 40 | 30 |

Differential Mode / Symmetrical (Line to Line)

| Current Rating | Frequency – MHz | | | | | | | | | |
|----------------|-----------------|-----|----|-----|----|----|----|----|----|----|
| | .01 | .05 | .1 | .15 | .5 | 1 | 3 | 5 | 10 | 20 |
| 15A | 7 | 22 | 27 | 30 | 30 | 50 | 60 | 60 | 60 | 36 |
| 30A | 7 | 22 | 27 | 30 | 33 | 56 | 60 | 60 | 60 | 40 |
| 60A | 15 | 30 | 36 | 40 | 37 | 26 | 46 | 54 | 48 | 30 |
| 100A | 14 | 29 | 35 | 39 | 33 | 30 | 56 | 53 | 41 | 30 |
| 125A | 14 | 29 | 35 | 39 | 40 | 28 | 53 | 60 | 42 | 33 |

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

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- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
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- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

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- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



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