

#### Introduction

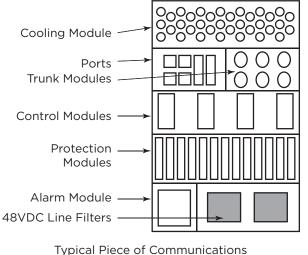
#### STAY CONNECTED WITH CORCOM PRODUCTS

TE Connectivity (TE) is a world leader in EMI-RFI filtering technology. Since 1955, TE has been providing EMI-RFI solutions to leading computer, industrial and telecommunications companies worldwide. Whether you are meeting FCC and international EMC standards on EMI-RFI emissions or developing a newly designed piece of equipment from being disturbed by EMI-RFI in the environment, a power line filter will help your equipment with compliance.

This section highlights TE's product offering of DC rated products. Whether the issues involve filtering noise on the data lines or on the power lines, TE can provide the needed solutions for both susceptibility and to help achieve system emissions and immunity compliance.

As new technologies in the Telecom-Datacom industry are developed and introduced, TE continues to design and develop new products to address the EMI-RFI filtering issues. TE's design engineers are very actively working with telecom and datacom system engineers to solve EMI-RFI issues.

In working with two of the leading North American communications equipment companies, TE engineers solved the EMI-RFI issues present by applying 48 VDC filters at the primary input of the DC power supply. One of the applications was on network routing equipment and required a two-stage 48VDC filter on the input to the DC power supply. TE applied highfrequency attenuating 48VDC filters on the load side of the DC power supplies to solve high-frequency EMI-RFI issues.



Equipment Utilizing 48VDC Filters

TE has provided solutions in both power line filtering and signal line filtering applications for many leading communications companies. As data transmission speeds increase and EMI-RFI issues multiply, TE has developed products to better solve the newer challenges communications companies encounter.

# Corcom DC power line and signal line filters have been included in:

- Network routing equipment
- Servers
- Modems
- Switching equipment
- Wireless cabinets
- Ethernet hubs
- Base stations
- Repeater stations
- Power supplies for all types of communications equipment

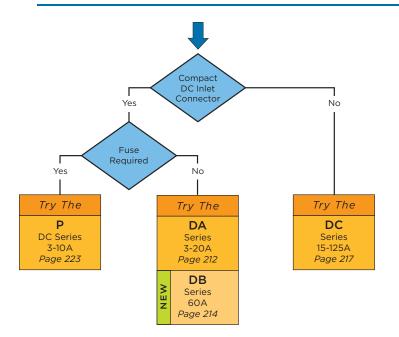
# TE has developed DC filter products specifically for the communications industry including:

- DC power line clean-up filters
- Medium and multiple-stage high-performance DC power line filters
- High frequency DC power line filters (up to 3GHz)
- High current DC power line filters (up to 60A)
- Data-transmission signal line filters

**Corcom DC filters are available in versions that can solve a wide variety of EMI-RFI issues.** TE has solved basic EMI-RFI issues with simple cleanup DC filters and has solved more complex EMI-RFI issues with mid-range and multiple-stage high performing DC filters. TE has also solved high-frequency noise problems (up to 3GHz) encountered with high-speed data transmission and switching power supplies.



#### **Selector Chart**



Series	Input	Output	Mounting	Options	Current Rating	
P	2-pin Inlet	1/4" Terminal	Snap In Panel <i>or</i> Flange Panel	Fuse	3, 6, 10A	
DA / DAS	3-pin Inlet	1/4" Terminal <i>or</i> PC Board	Snap In Panel <i>or</i> Flange Panel	_	3, 6, 10, 15A	
DB	2-pin High Current Inlet	Wire Leads	Flange Panel and Rear Mount	Compact, Standard, Feedthrough & Hi-Performance Filters and Unfiltered Inlet & Plug available Separately	60A	
DC	Redundant Stud Terminal Block	Redundant Stud <i>or</i> Terminal Block	Bulkhead <i>or</i> Flange Chassis	Circuit Breaker <i>and/or</i> High Frequency Performance	15, 30, 60, 100, 125A	

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.

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**DC** Filters



#### **Compact RFI Line Filter with DC Inlet Connection**

# **DA Series**

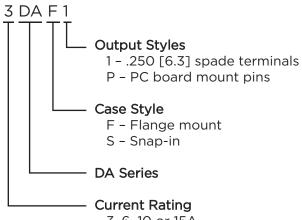


UL Recognized CSA Certified TUV Certified

## **DA Series**

- General purpose line filters for DC applications up to 125VDC.
- Compact with a 3-pin inlet connector
- Available in 3, 6, 10 and 15A versions
- Flange mount with 1/4" or PCB terminals
- Mates with a standard MOLEX\* connector (HCS Series)

# **Ordering Information**



3, 6, 10 or 15A

### **Available Part Numbers**

3DAF1	10DAF1
3DAS1	10DAS1
3DAFP	10DAFP
6DAF1	15DAF1
6DAS1	15DAS1
6DAFP	15DAFP

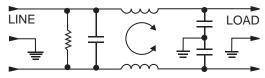


# Specifications

Hipot rating (one minute): Line to Ground: LIne to Line:	2250 VDC 1450 VDC
Rated Voltage (max):	125 VDC
Rated Current:	3 to 15A
Operating Ambient Temperature Range	

(at rated current  $I_r$ ): In an ambient temperature ( $T_a$ ) higher than +55°C the maximum operating current ( $I_o$ ) is calculated as follows:  $I_o = I_r \sqrt{(85-Ta)/45}$ 

# **Electrical Schematic**



# Accessories



**GA310** – (shown above) Pre-assembled connector housing and terminals with three 36" long 18 gauge wires to mate with DA Series filters

#### MOLEX\* connector part numbers:

03-12-1036	Connector housing for DA Series
18-12-1222	Female terminals (3 per connector)

\*MOLEX is a trademark of MOLEX Incorporated

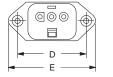


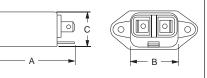
#### Compact RFI Line Filter with DC Inlet Connection (continued)

# **DA Series**

### **Case Styles**

#### DAF1

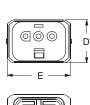


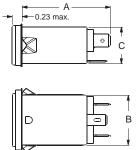


Typical Dimensions:

Load Terminals (2): Ground Terminal (1): Mounting Holes (2): .250 [6.3] with .07 [1.8] Dia. hole .250 [6.3] with .07 x .16 [1.8 x 3.8] slot .187 ± .008 [4.75 ± .20 ] Dia. 90° countersunk for # 4 flathead screw

# DAS1





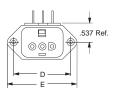
.250 [6.3] with .07 [1.8] Dia. hole

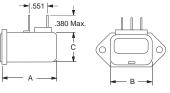
.250 [6.3] with .07 x .16 [1.8 x 3.8] slot

Rear View

Typical Dimensions: Load Terminals (2): Ground Terminal (1):

DAFP

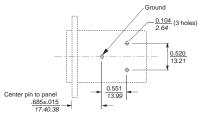




Typical Dimensions: Pins (3): Mounting Holes (2):

.031 x .06 ± .003 (2): 0.187 ± .008 [4.75 ± .20 ] Dia. 90° countersunk for # 4 flathead screw

# **PC Board Layout**

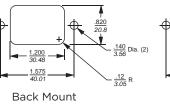


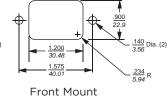
# **Case Dimensions**

Dart No.	Α	В	С	D	Е
Part No.	(max.)	(max.)	(max.)	<u>±.010</u> ±.25	(max.)
	2.15	1.12	0.81	1.575	1.98
DAF1	54.61	28.45	20.57	40.01	50.29
DAS1	1.98	1.10	0.81	0.96*	1.41
	50.29	27.94	20.57	24.38	35.81
	1.54	1.12	0.81	1.575	1.98
DAFP	39.12	28.45	20.57	40.01	50.29
			*Rep	presents max	. dimension

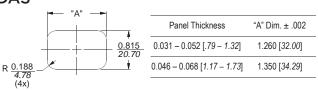
### **Recommended Panel Cutouts**







#### DAS



# **Performance Data**

## **Minimum Insertion Loss**

Measured in closed 50 Ohm system

Common Mode / Asymmetrical (Line to Ground)

			-								
Current				Fr	equ	ency	/ – N	lHz			
Rating	.05	.1	.15	.5	1	3	5	10	30	100	200
3A	6	9	11	26	41	48	52	55	46	22	16
6A	2	4	6	18	30	37	42	48	42	-	-
10A	-	1	4	8	17	25	30	36	38	21	11
15A	-	-	-	3	5	13	19	25	29	10	14

Differential Mode / Symmetrical (Line to Line)

	-	,	. 5				-		- /		
Current				Fr	equ	ency	/ – N	IHz			
Rating	.05	.1	.15	.5	1	3	5	10	30	100	200
3A	-	4	7	16	18	37	47	50	43	31	36
6A	-	4	7	19	21	27	40	53	41	-	-
10A	2	4	6	17	22	23	32	48	38	30	26
15A	-	-	2	17	19	29	33	37	37	31	28

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.

### Compact RFI High Current DC Inlet Connection

# **DB** Series



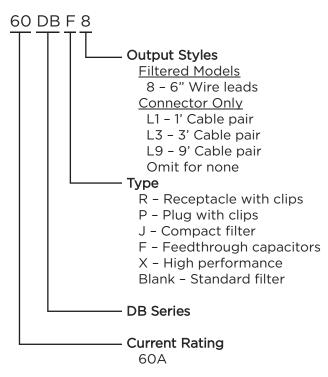
UL Recognized CSA Certified TUV Certified

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### **DB Series**

- Compact connector for high-current DC applications
- Reliable performance in a compact assembly
- Polarized mating scheme
- Easy customer termination of power source
- Plug and receptacle available pre-terminated in standard wire lengths
- Available filtered or unfiltered

# **Ordering Information**



# Specifications

#### Hipot rating (one minute):

	Filtered Models	DBR & DBP
Line to Ground:	2121 VDC	n/a
Line to Line:	1768 VDC	1600 VAC
Rated Voltage (max):	150VDC*	300 VDC

#### **Rated Current:**

#### Operating Ambient Temperature Range

(at rated current I<sub>r</sub>): -10°C to +55°C In an ambient temperature (T<sub>a</sub>) higher than +55°C the maximum operating current (I<sub>0</sub>) is calculated as follows: I<sub>0</sub> = I<sub>r</sub>  $\sqrt{(85-Ta)/30}$ 

\*Certified to 120V for TUV

60A (all versions)

# **Available Part Numbers**

Filtered Models						
60DB8 60DBJ8						
60DBF8	60DBX8					

# Connectors Only60DBR60DBP

OUDDR	OUDBP
60DBRL1	60DBPL1
60DBRL3	60DBPL3
	60DBPL9

#### WARNING

This is not approved for hot swap or current interruption in DC applications. Doing so will result in irreparable damage to contacts.  -VDC (Black)

Load

ORTN (Red)



### Compact RFI High Current DC Inlet Filter (continued)

# **DB** Series

# **Electrical Schematics**

### **DB8 & DBJ8**

DBF8

DBX8

(O)

Line

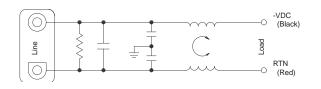
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O

Line

0

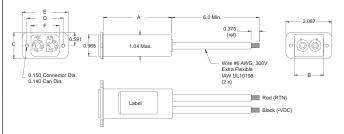
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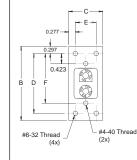
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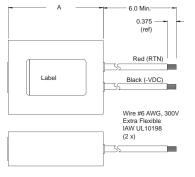






## **DB8 & DBF8**







DC Filters

# DBX8

-VDC

O RTN (Red)

(Black)

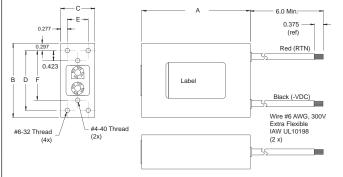
0

Load

Ŧ



Available as connector only (shown) or with pre-installed 6AWG 300V Extra Flexible wire



# 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.

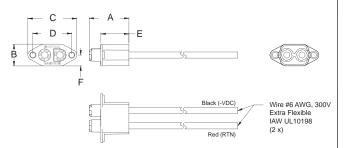
For email, phone or live chat, please go to te.com/help corcom.com



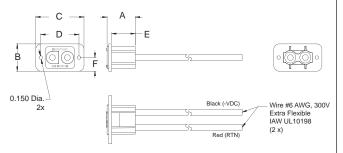
#### Compact RFI High Current DC Inlet Filter (continued)

# **DB Series**

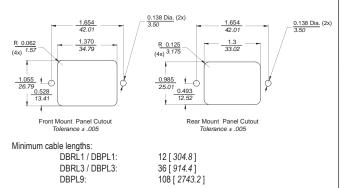
Case Styles (continued) DBPL



DBRL



## **Recommended Panel Cutout**



# Accessories / Tooling

Insertion/Extraction Tool:	1643922-1*
Crimp per TE spec:	114-13206
Crimp tool:	M22520/23-01
Indenter head:	M22520/23-04
Locator:	M22520/23-11
Connector system locking kit <sup>1</sup> :	
	Contact TE

## **Case Dimensions**

	Α	В	С	D	Е	F
Part No.	(max)	(max)	<u>±.025</u> ±.635	<u>±.025</u> ±.635	<u>±.025</u> ±.635	<u>±.025</u> ±.635
60DBJ8	3.2	1.36	1.181	1.654	2.087	1.28
0000000	81.28	34.544	29.997	42.012	53.01	32.512
60DB8	4.06	3.20	1.45	2.50	0.875	2.077
60DBF8	103.12	81.28	36.83	63.50	22.23	52.76
60DBX	6.06	3.50	1.45	2.876	0.875	2.265
OUDBX	153.92	88.90	36.83	73.05	22.23	57.53
	1.22*	1.181*	2.087	1.654	1.023	0.591
60DBRL	30.99*	29.99	53.009	42.011	25.984	15.011
	1.695*	0.93*	2.08	1.654	1.195	0.465
60DBPL	43.05*	23.62*	52.832	42.011	30.353	11.811
					*± 0.	025 [0.635]

# **Performance Data**

#### **Minimum Insertion Loss**

Measured in closed 50 Ohm system

Common Mode / Asymmetrical (Line to Ground)

	Frequency – MHz										
Part No.	0.1	0.15	0.5	1	5	1	20	30	50	100	
60DBJ8	-	-	-	1	13	21	30	40	30	20	

	Frequency – MHz												
Part No.	0.05	0.1	0.15	.5	1	3	5	10	20	30			
60DB8	2	7	10	23	30	48	38	28	20	16			
60DBF8	15	22	25	35	42	50	58	54	38	36			
60DBX8	-	10	16	40	48	54	60	51	40	36			

#### Differential Mode / Symmetrical (Line to Line)

Frequency – MHz											
Part No.	0.1	0.15	0.5	1	5	1	20	30	50	100	
60DBJ8	5	8	19	26	34	26	20	16	-	-	

	Frequency – MHz												
Part No.	0.05	0.1	0.15	.5	1	3	5	10	20	30			
60DB8	20	26	29	43	53	30	30	24	20	18			
60DBF8	9	15	18	30	34	40	44	44	48	52			
60DBX8	31	30	30	70	70	54	50	60	54	50			

\*for DBR / DBP Only

<sup>1</sup>Tool required to disengage mated connector when using locking kit

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#### **RFI Power Line Filters for DC Applications**

# **DC** Series



UL Recognized CSA Certified TUV Certified

# **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 mound (DCF) and bulkhead mount (DCB) configuration



60DCF6B

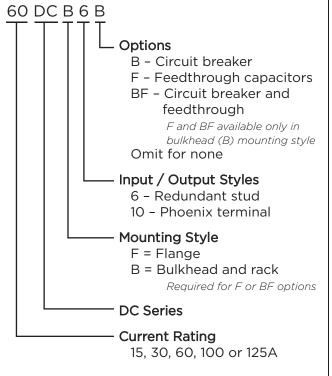
15DCF10

# Specifications

Hipot rating (one minute): Line to Ground: LIne to Line:	2250 VDC 1450 VDC
Rated Voltage (max):	80 VDC
Rated Current:	15 to 125A
Operating Ambient Temperature Range	

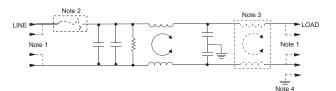
(at rated current I<sub>r</sub>): In an ambient temperature (T<sub>a</sub>) higher than +55°C the maximum operating current (I<sub>o</sub>) is calculated as follows: I<sub>o</sub> = I<sub>r</sub>  $\sqrt{(85-Ta)/30}$ 

# **Ordering Information**

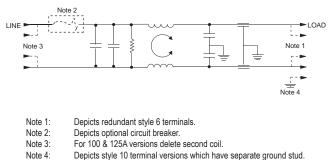


# **Electrical Schematics**

## **Standard Performance**



# High Frequency Performance (F & BF Styles)



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.

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# **DC Series**

### **Available Part Numbers**

Standard P	erformance	High Per	formance
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

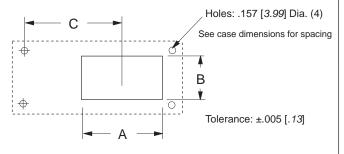
\*PHOENIX CONTACT is a trademark of Phoenix Contact GmbH & Co. KG.



# **DC Series**

## **Recommended Panel Cutouts**

# DCB6(F) & DCB10(F)

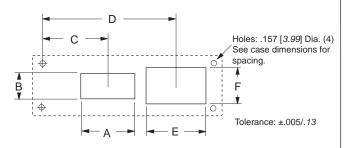


# **Cutout Dimensions**

# DCB6(F) & DCB10(F)

Part No.	Α	В	с
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
	1.375	1.249	3.472
60DCB6(F)	34.93	31.72	88.19
	1.674	1.010	3.443
60DCB10(F)	42.52	25.65	87.45
100DCB6(F)	1.700	1.549	3.472
125DCB6(F)	43.18	39.34	88.19
1000 0010/5	1.954	1.500	2.830
100DCB10(F)	49.63	38.10	71.20
1050 0010(5)	2.250	1.590	2.725
125DCB10(F)	57.15	40.39	69.22

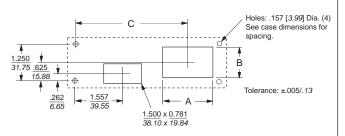
# DCB6B(F) & DCB10B(F) 15 to 60A



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

Part No.	Α	в	С	D	Е	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



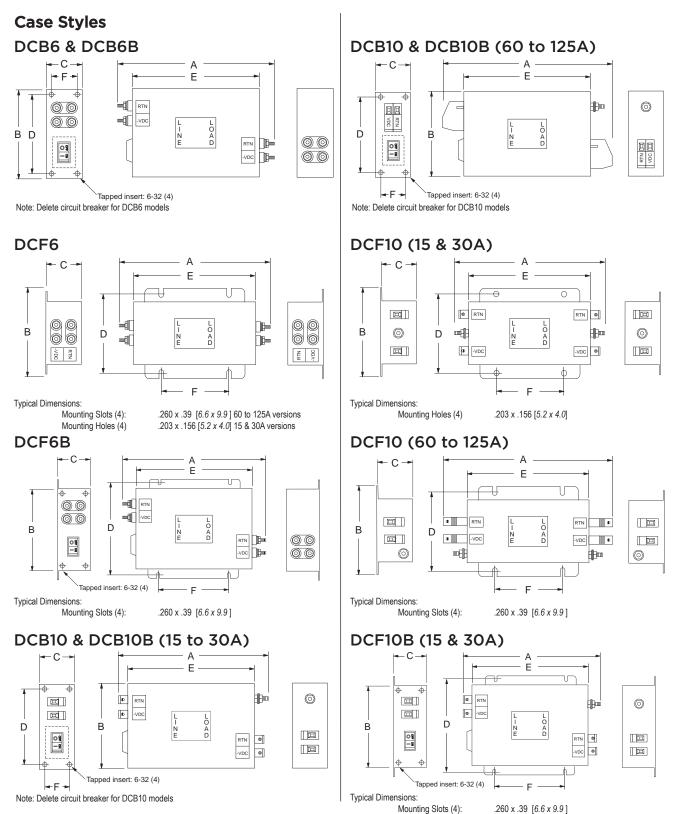
# DCB6B(F) & DCB10B(F) 100 to 125A

	• •	•	
Part No.	Α	В	С
100DCB6B(F) 100DCF6B	1.70	1.549	4.222
125DCB6B(F) 125DCF6B	43.18	39.34	107.23
100DCB10B(F) 100DCF10B	<b>1.954</b> 49.63	<b>1.50</b> 38.10	<b>4.295</b> 109.09
125DCB10B(F)	<b>2.25</b> 57.15	<b>1.59</b> 40.39	<b>4.147</b> 105.33
125DCF10B	<b>2.25</b> 57.15	<b>1.59</b> 40.39	<b>2.725</b> 105.33

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.



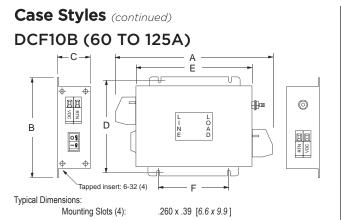
# **DC Series**



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.



# **DC Series**



#### **Case Dimensions**

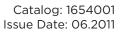
	Α	в	С	D	Е	F
Part No.	(max)	(max)	(max)	<u>±.020</u> ±.51	(max)	<u>±.020</u> ±.51
15DCB6(F)	<b>5.69</b> 144.5	<b>5.06</b> 128.5	<b>1.48</b> 37.6	<b>4.50</b> 114.3	<b>4.06</b> 103.1	<b>0.950</b> 24.13
15DCB6B(F)	7.69	5.06	1.48	4.50	6.06	0.950
	195.3	128.5	37.6	114.3	153.9	24.13
	<b>5.06</b>	<b>5.06</b>	<b>1.48</b>	<b>4.50</b>	<b>4.06</b>	0.950
15DCB10(F)	<b>5.06</b>	<b>5.06</b>	<b>1.40</b>	<b>4.50</b>	<b>4.00</b>	<b>0.950</b>
	128.5	128.5	37.6	114.3	103.1	24.13
15DCB10B(F)	<b>7.06</b>	<b>5.06</b>	<b>1.48</b>	<b>4.50</b>	<b>6.06</b>	<b>0.950</b>
	179.3	128.5	37.6	114.3	153.9	24.13
15DCF6	<b>5.33</b>	<b>3.10</b>	<b>1.78</b>	<b>2.677</b>	<b>3.70</b>	<b>2.00</b>
	135.4	78.7	45.2	68.0	94.0	50.80
15DCF6B(F)	<b>7.69</b>	<b>5.06</b>	<b>1.48</b>	<b>5.740</b>	<b>6.06</b>	<b>3.52</b>
	195.3	128.5	37.6	145.8	153.9	89.41
15DCF10	<b>4.75</b> 120.7	<b>3.10</b> 78.7	<b>1.78</b> 45.2	<b>2.677</b> 68.0	<b>3.70</b> 94.0	<b>2.0</b> 50.8
15DCF10B(F)	<b>7.06</b>	<b>5.06</b>	<b>1.48</b>	<b>5.740</b>	<b>6.06</b>	<b>3.520</b>
	179.3	128.5	37.6	145.80	153.9	89.41
30DCB6(F)	<b>7.69</b>	<b>5.06</b>	<b>1.48</b>	<b>4.50</b>	<b>6.06</b>	<b>0.95</b>
	195.3	128.5	37.6	114.3	153.9	24.13
30DCB6B(F)	<b>8.69</b> 220.7	<b>5.06</b> 128.5	<b>1.48</b> 37.6	<b>4.50</b> 114.3	<b>7.06</b> 179.3	<b>0.95</b> 24.13
30DCB10(F)	<b>7.06</b>	<b>5.06</b>	<b>1.48</b>	<b>4.50</b>	<b>6.06</b>	<b>0.95</b>
	179.3	128.5	37.6	114.3	153.9	24.13
30DCB10B(F)	<b>8.06</b>	<b>5.06</b>	<b>1.48</b>	<b>4.50</b>	<b>7.06</b>	<b>0.95</b>
	204.7	128.5	37.6	114.3	179.3	24.13
30DCF6	<b>6.19</b>	<b>3.96</b>	<b>2.18</b>	<b>3.50</b>	<b>4.56</b>	<b>2.00</b>
	157.2	100.6	55.4	88.9	115.8	50.8
30DCF6B	<b>8.69</b>	<b>5.0</b>	<b>1.48</b>	<b>5.74</b>	<b>7.06</b>	<b>4.52</b>
	220.73	127.0	37.6	145.8	179.3	114.81
30DCF10	<b>5.56</b>	<b>3.96</b>	<b>2.18</b>	<b>3.5</b>	<b>4.56</b>	<b>2.0</b>
	141.2	100.58	55.4	88.9	115.8	50.8
30DCF10B	<b>8.06</b>	<b>5.06</b>	<b>1.48</b>	<b>5.74</b>	<b>7.06</b>	<b>4.52</b>
	204.7	128.52	37.6	145.8	179.3	114.81

#### Case Dimensions (continued)

	А	в	с	D	Е	F
Part No.	(max)	(max)	(max)	<u>±.020</u> ±.51	(max)	<u>±.020</u> ±.51
	8.69	5.06	1.48	4.50	7.06	0.95
60DCB6(F)	220.73	128.52	37.6	114.3	179.3	24.13
60DCB6B(F)	10.69	5.06	1.48	4.50	9.06	0.95
		128.52	37.6	114.3	230.1	24.13
60DCF6	7.56	5.48	2.55	4.92	5.94	2.756
	192.0	139.2	64.8	124.97	150.9	70.0
60DCF6B	10.69	5.06	1.48	5.74	9.06	6.52
		128.52	37.6	145.8	230.1	165.61
60DCF10	8.56	5.48	2.55	4.92	5.94	2.576
	217.4	139.2	64.8	124.97	150.9	65.43
60DCF10B	11.75	5.06	1.48	5.74	9.06	6.52
	298.5	128.5	37.6	145.8	230.1	165.61
100DCB6(F)	10.31	<b>5.06</b>	1.78	4.50	8.06	1.25
	261.9	128.5	45.2	114.3	204.7	31.75
100DCB6B(F)	<b>12.31</b> 312.7	<b>6.06</b> 153.9	<b>1.78</b> 45.2	<b>5.50</b> 139.7	<b>10.06</b> 255.5	<b>1.25</b> 31.75
	<u>11.13</u>	<b>5.06</b>	40.2 <b>1.78</b>	<b>4.50</b>	<u>200.0</u> 8.06	<b>1.25</b>
100DCB10(F)	282.6	<b>5.00</b> 128.5	45.2	<b>4.30</b> 114.3	204.7	31.75
-	13.13	6.06	1.78	5.50	10.06	1.25
100DCB10B(F)	333.5	153.9	45.2	139.7	255.5	31.75
	10.60	6.30	2.52	5.70	8.46	4.52
100DCF6	269.2	160.0	64.0	144.78	214.9	114.81
10000500	12.31	6.06	1.78	6.74	10.06	7.52
100DCF6B	312.7	153.9	45.2	171.2	255.5	191.01
100DCF10	11.50	6.30	2.52	5.70	8.46	4.52
	292.1	160.0	64.0	144.78	214.9	114.81
100DCF10B	13.13	6.06	1.78	6.74	10.06	7.52
	333.5	153.9	45.2	171.2	255.5	191.01
125DCB6(F)	10.31	5.06	1.78	4.50	8.06	1.25
	261.9	128.5	45.2	114.3	204.7	31.75
125DCB6B(F)	<b>12.31</b> 312.7	<b>6.06</b> 153.9	1.78	<b>5.50</b> 139.7	<b>10.06</b> 255.5	<b>1.25</b>
	<u>11.50</u>	<b>5.06</b>	45.2 <b>1.78</b>	<b>4.50</b>	200.0 8.06	31.75 <b>1.25</b>
125DCB10(F)	292.1	128.5	45.2	<b>4.30</b> 114.30	204.7	31.75
-	13.50	6.06	1.78	5.50	10.06	1.25
125DCB10B(F)	342.9	153.9	45.2	139.7	255.5	31.75
	10.60	6.30	2.52	5.70	8.46	4.52
125DCF6	269.2	160.0	64.0	144.78		114.81
1050.0500	12.31	6.06	1.78	6.74	10.06	7.52
125DCF6B	312.7	153.9	45.2	171.2		191.01
12500510	11.86	6.30	2.52	5.70	8.46	4.52
125DCF10	301.2	160.0	64.0	144.78	214.9	114.81
125DCF10B	13.50	6.06	1.78	6.74	10.06	7.52
	342.9	153.9	45.2	171.2	255.5	191.01

4

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.





# **DC** Series

Performance Data (continued)

#### **Minimum Insertion Loss**

Measured in closed 50 Ohm system

### **Standard Performance**

Current	Frequency – MHz										
Rating	.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	

Common Mode / Asymmetrical (Line to Ground)

Differential Mode / Symmetrical (Line to Line)

Current		Frequency – MHz										
Rating	.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		Frequency – MHz										
Rating	.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		Frequency – MHz										
Rating	.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		

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.

#### The CHAMELEON Adaptable Module for DC Applications

# **P** Series



UL Recognized CSA Certified TUV Certified

• Full flexibility of design in the most compact

General purpose designed for DC applications
Mates with a standard MOLEX\* connector (HCS Series) which prevents accidental connection to

Shield Options

Current Rating 3 = 3A 6 = 6A

X = 10A

Filter Type

Fuse Options D = Dual fuse S = Single fuse

D = DC version

• Input Voltage Select 0 = Single voltage

Switch Options O = No switch Extender Options O = None

Mounting Style

E = Mounting ears

D = Complete Shield

(DC Version)

**P** Series

package

AC Power

PS000DD3D

**Ordering Information** 

# Specifications

Hipot rating (one Line to Ground: LIne to Line:		e):	2250 VDC 1450 VDC
Rated Voltage (m	ax):		80 VDC
Rated Current:			3 to 10A
Fuseholder*:			.25 x 1.25" or 5 x 20 mm
		070540	

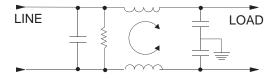
Terminals: .187 x .032 [4.8 x .81] terminal tabs

#### **Operating Ambient Temperature Range**

(at rated current I<sub>r</sub>): -10°C to +40°C In an ambient temperature (T<sub>a</sub>) higher than +40°C the maximum operating current (I<sub>0</sub>) is calculated as follows: I<sub>0</sub> = I<sub>r</sub>  $\sqrt{(85-Ta)/45}$ 

\*Holds one or two fuses. Conversion clip provided on fuseholder for single fuse models.

## **Electrical Schematic**



## **Available Part Numbers**

PE000DD3D	PS000DD3D
PE000DD6D	PS000DD6D
PEOOODDXD	PSOOODDXD
PE000SD3D	PS000SD3D
PE000SD6D	PS000SD6D
PE000SDXD	PSOOOSDXD

\*MOLEX is a trademark of MOLEX Incorporated

# S = Snap-in 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.

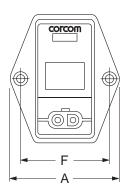


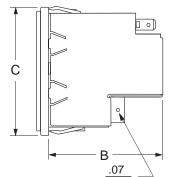
#### The CHAMELEON Adaptable Module for DC Applications (continued)

# **P** Series

**Case Styles** 

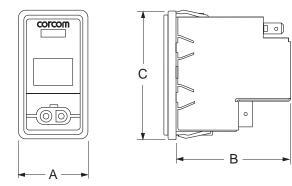
PE





1.78 min. Radius Ground connection

PS



### Accessories



**GA210** – (shown above) Pre-assembled connector housing with two 36" long 18 gauge wires to mate with P Series DC filters

#### **MOLEX Part Numbers:**

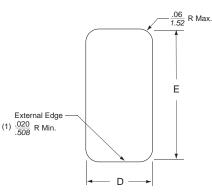
03-12-1026	DC Connector housing for P Series
18-12-1222	Female terminals (2 per connector)

#### **Case Dimensions**

Part No.	Α	В	С	D	Е	F
Part NO.	(max.)	(max.)	(max.)	*see note	*see note	(ref.)
PE	1.98	2.13	2.31	1.12	2.201	1.575
	50.29	54.10	58.67	28.45	55.91	40.0
PS	1.24	2.13	2.31	1.06	2.201	
	31.50	54.10	58.67	26.93	55.91	-

\*+ .008 / - .000 [ +.20 / - .00 ]

#### **Recommended Panel Cutouts**



Note: The external edges (installation side) on the "D" sides of the cutout should have a minimum .020" radius. For optimal retention against extraction, the corresponding inner edge should be sharp, without paint or coatings. Edge coatings, including anodization are also discouraged for good shield contact.

# **Performance Data**

-

#### **Minimum Insertion Loss**

Measured in closed 50 Ohm system

Common Mode / Asymmetrical (Line to Ground)

Current		Frequency – MHz									
Rating	.03	.1	.15	.5	1	3	5	10	30		
3A	7	17	21	27	33	40	44	50	32		
6A	-	8	12	17	23	32	36	44	30		
15A	-	3	5	10	13	23	27	35	27		

Differential Mode / Symmetrical (Line to Line)

Current	Frequency – MHz									
Rating	.1	.15	.5	1	3	5	10	30		
3A	2	4	12	15	30	48	50	45		
6A	2	4	12	15	22	42	55	45		
15A	2	4	12	15	22	42	55	45		