## Compact RFI Line Filter with DC Inlet Connector

## **DA Series**

Electronics

*≡* Tvco



UL Recognized CSA Certified TUV Approved

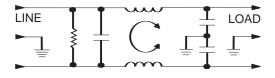
## **DA Series**

The DA Series filters were designed as general purpose line filters for DC applications up to 125VDC. They are compact with a 3-pin inlet connector. They are available in 3, 6, 10 and 15 amp versions. They are flange mount with 1/4" or PCB terminals.

The DA Series addresses the increasing need for DC rated filters with a standard DC power inlet. It was designed and first used for communication oriented customer premises equipment and central office equipment, but is not restricted to that. Any internal DC connection within larger multi-component systems, or external DC connection between user installed components which require filtering will benefit. Some examples include desktop servers, routers, switches, multiplexors, aggregators, concentrators, process control equipment as well as DC powered peripheral equipment.

The DA Series mates with a standard MOLEX connector (HCS Series) which is readily available and better prevents accidental connection to AC power.

## **Electrical Schematic**





**Specifications** 

Hipot rating (one minute):	
line-to-ground	2250 VDC
line-to-line	1450 VDC
Rated voltage (max):	125 VDC
Operating ambient temperature range	
@ rated current I <sub>r</sub> :	-10°C to +55°C

In an ambient, T<sub>a</sub>, higher than +55°C, the maximum operating current, I<sub>0</sub>, is as follows: I<sub>0</sub> = I<sub>r</sub>  $\sqrt{\frac{90 - T_a}{35}}$ 

Minimum insertion loss in dB:

Line-to-ground in 50 ohm circuit

Current				Freq	uen	cy-M	Hz				
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

#### Line-to-line in 50 ohm circuit

Current			l	Freq	uen	cy-M	Hz				
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

For higher amperage versions, contact Tyco Electronics.

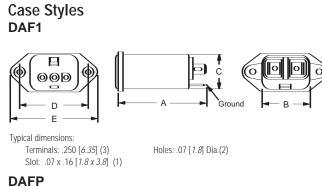
Revised 05-07

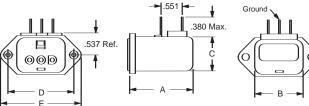
## Compact RFI Line Filter with DC Inlet Connector (Continued)

# **DA Series**

Electronics

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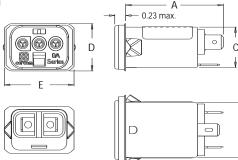




Typical dimensions:

Mounting holes: .132 [*3.35*] Dia. (2) with .260 [*6.60*] Dia. x 90°C countersunk for #4 flathead screw. Pin Size: .031 x .06 ± .003

#### DAS1



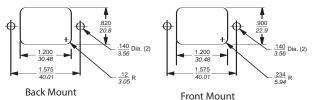
Rear View Typical dimensions:

Terminals: .250 [*6.35*] (3) Slot: .07 x .16 [*1.8 x 3.8*] (1)

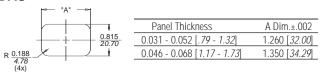
Holes: .07 [1.8] Dia.(2)

## **Recommended Panel Cutout**

#### DAF



DAS



Case Dimensions

A (max)	B (max)	C (max)	D ±.010 ±.25	E (max)
2.15	1.12	0.81	1.575	1.98
54.61	28.45	20.57	40.01	50.29
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
39.12	28.45	20.57	40.01	50.29
	2.15 54.61 1.98 50.29 1.54	(max) (max)   2.15 1.12   54.61 28.45   1.98 1.10   50.29 27.94   1.54 1.12	(max)(max)(max)2.151.120.8154.6128.4520.571.981.100.8150.2927.9420.571.541.120.81	$\begin{array}{c cccc} (max) & (max) & (max) & \frac{\pm .010}{\pm .25} \\ \hline 2.15 & 1.12 & 0.81 & 1.575 \\ \hline 54.61 & 28.45 & 20.57 & 40.01 \\ \hline 1.98 & 1.10 & 0.81 & 0.96^* \\ \hline 50.29 & 27.94 & 20.57 & 24.38 \\ \hline 1.54 & 1.12 & 0.81 & 1.575 \end{array}$

\*represents Max. dimension

## Part Numbers

i ultivullioci 5	
3DAF1	10DAF1
3DAS1	10DAS1
3DAFP	10DAFP
6DAF1	15DAF1
6DAS1	15DAS1
6DAFP	15DAFP
DC Connector No.	GA310

## **Mating Connectors**



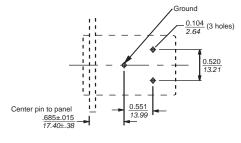
CORCOM Part Number:

**GA310** - Custom connector assembly with 3, 36" long 18 gauge wires to mate with DA Series filter

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

03-12-1036	Connector housing to mate with DA Series
18-12-1222	Female Terminal (3 needed per housing)

#### PCB Layout (board viewed from component side)



Catalog 1654001 Revised 05-07 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.

В

USA Cust. Svc.: 1-800-468-2023 CORCOM Prods: 1-847-680-7400 Germany: 49-89-6089-0 www.corcom.com www.tycoelectronics.com 149