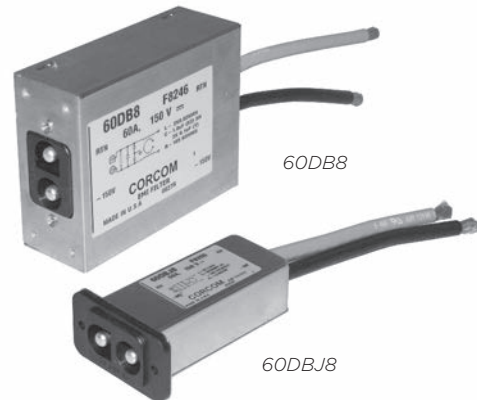


## Compact RFI High Current DC Inlet Connection

# DB Series



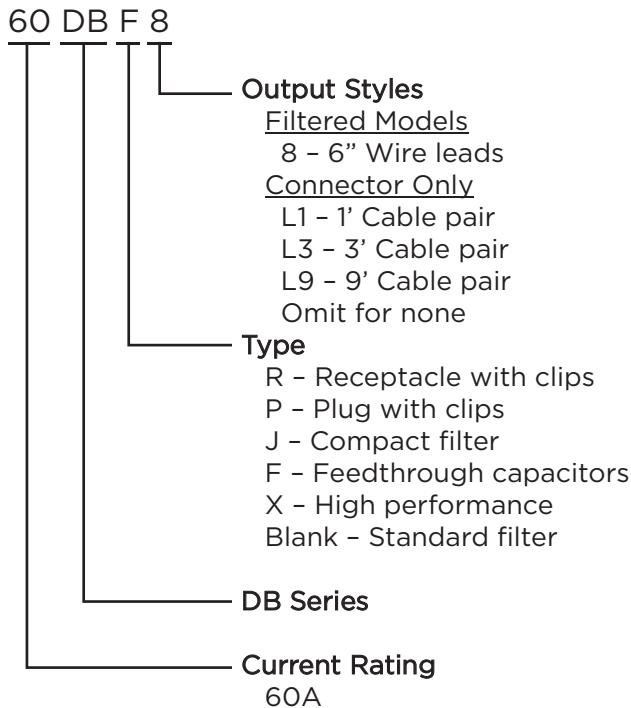
UL Recognized  
CSA Certified  
TUV Certified



## 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:** 60A (all versions)

### 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:  $I_o = I_r \sqrt{(85 - T_a)/30}$

\*Certified to 120V for TUV

## Available Part Numbers

| Filtered Models |         |
|-----------------|---------|
| 60DB8           | 60DBJ8  |
| 60DBF8          | 60DBX8  |
| Connectors Only |         |
| 60DBR           | 60DBP   |
| 60DBRL1         | 60DBPL1 |
| 60DBRL3         | 60DBPL3 |
|                 | 60DBPL9 |

### WARNING

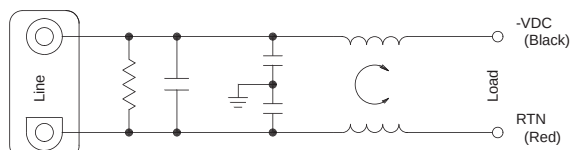
This is not approved for hot swap or current interruption in DC applications. Doing so will result in irreparable damage to contacts.

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

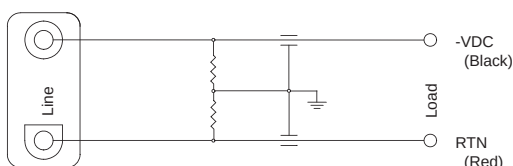
# DB Series

## Electrical Schematics

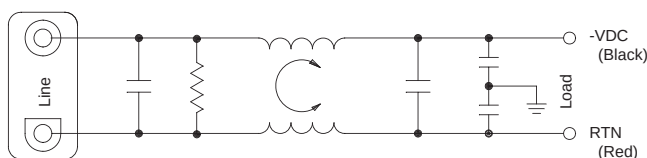
### DB8 & DBJ8



### DBF8



### DBX8



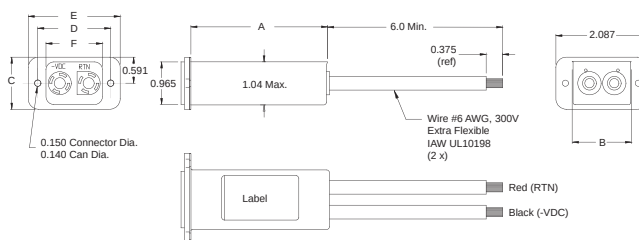
60DBPL

60DBRL

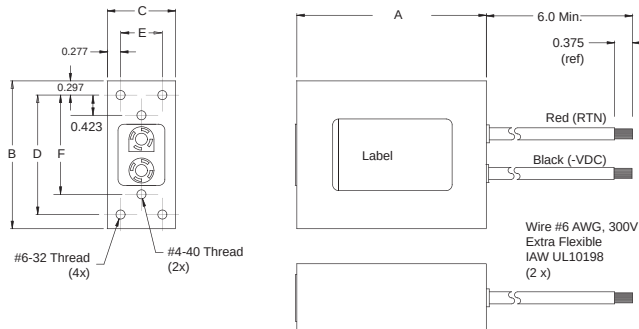
Available as connector only (shown)  
or with pre-installed 6AWG 300V Extra Flexible wire

## Case Styles

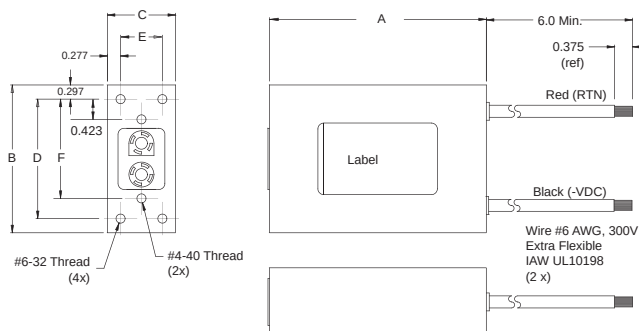
### DBJ8



### DB8 & DBF8



### DBX8



4

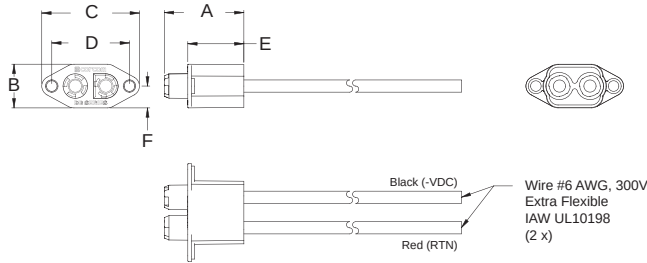
DC Filters

Compact RFI High Current DC Inlet Filter (continued)

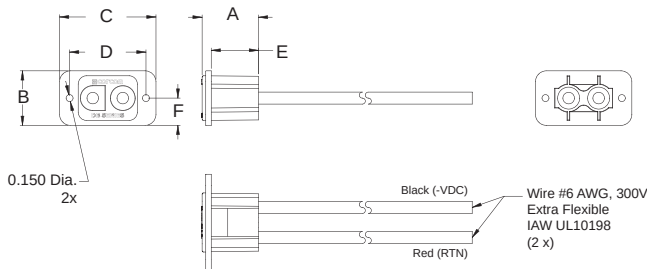
# DB Series

## Case Styles (continued)

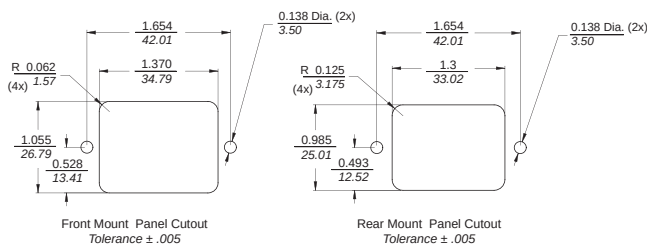
### DBPL



### DBRL



## Recommended Panel Cutout



Minimum cable lengths:  
DBRL1/DBPL1: 12 [ 304.8 ]  
DBRL3/DBPL3: 36 [ 914.4 ]  
DBPL9: 108 [ 2743.2 ]

## 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   |

\*for DBR / DBP Only

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

## Case Dimensions

| Part No. | A<br>(max) | B<br>(max) | C<br>$\pm .025$<br>$\pm .635$ | D<br>$\pm .025$<br>$\pm .635$ | E<br>$\pm .025$<br>$\pm .635$ | F<br>$\pm .025$<br>$\pm .635$ |
|----------|------------|------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| 60DBJ8   | 3.2        | 1.36       | 1.181                         | 1.654                         | 2.087                         | 1.28                          |
| 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                         |
| 60DBRL   | 1.22*      | 1.181*     | 2.087                         | 1.654                         | 1.023                         | 0.591                         |
| 60DBPL   | 1.695*     | 0.93*      | 2.08                          | 1.654                         | 1.195                         | 0.465                         |
|          | 43.05*     | 23.62*     | 52.832                        | 42.011                        | 30.353                        | 11.811                        |

\* $\pm 0.025$  [0.635]

## Performance Data

### Minimum Insertion Loss

Measured in closed 50 Ohm system

Common Mode / Asymmetrical (Line to Ground)

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

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

Differential Mode / Symmetrical (Line to Line)

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

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