RFI Filter for Power Factor Corrected Power Supplies

U Series



UL Recognized CSA Certified VDE Approved

U Series

- Designed for equipment using power factor corrected power supplies
- Offers high impedance circuit to mismatch the power supply's impedance characteristics
- Available in PC board mountable version
- All models meet low leakage current requirements



Specifications

Maximum leakage current each Line to Ground:								
@ 120 VAC 60 Hz:	.30 mA							
@250 VAC 50 Hz:	.50 mA							
Hipot rating (one minute):								
Line to Ground:	2250 VAC							
Line to Line:	1450 VDC							
Rated Voltage (max):	250 VAC							
Operating Frequency:	50/60 Hz							
Rated Current:	6A							
Operating Ambient Temperature Range								
(at rated current I _r):	-10°C to +40°C							
In an ambient temperature (T_a) higher than +40°C								

In an ambient temperature (T_a) higher than +40°C the maximum operating current (I₀) is calculated as follows: I₀ = I_r $\sqrt{(85-Ta)/45}$

Electrical Schematic



Ordering Information



6EUP

6EU1



RFI Filter for Power Factor Corrected Power Supplies (continued)

U Series

Case Styles

6EU1





Typical Dimensions:

Line/Load Terminals (4): 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

Recommended PC Board Layout



Case Dimensions

Part No.	A (max)	B (max)	C (max)	D <u>± .015</u> ± .38	E (max)
6EU1	4.95 125.73	2.27 57.66	1.80 45.72	4.060 103.12	4.47 113.54
6EUP	4.70 119.4	2.51 66.8	1.22 31.0	-	-

Performance Data

Typical Insertion Loss

Measured in closed 50 Ohm system



Common Mode / Asymmetrical (L-G) — Differential Mode / Symmetrical (L-L)

Minimum Insertion Loss

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Common Mode / Asymmetrical (Line to Ground)

Current	Frequency – MHz							
Rating	.05	.1	.15	.5	1	5	10	30
6A	4	30	40	70	70	70	65	50

Differential Mode / Symmetrical (Line to Line)

Current	Frequency – MHz							
Rating	.05	.1	.15	.5	1	5	10	30
6A	10	35	45	70	70	70	65	55

RFI Power Line 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.

85