

Catalog: 1654001 Issue Date: 06.2011

#### **Multi-purpose Medical Filter for Power Line Noise Protection**

# **MV Series**



UL Recognized CSA Certified VDE Approved



#### **MV Series**

- Multi-purpose medical filter
- Improved Line to Ground performance
- A good solution to emission or immunity problems
- Meets leakage current requirements of UL2601 for health care equipment

# **Specifications**

Maximum leakage current each Line to Ground:

@ 120 VAC 60 Hz: .07 mA @250 VAC 50 Hz: .13 mA

Hipot rating (one minute):

Line to Ground: 2250 VDC
Line to Line: 1450 VDC

Rated Voltage (max): 250 VAC

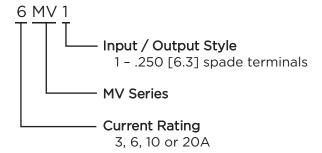
Operating Frequency: 50/60 Hz

Rated Current: 3 to 20A

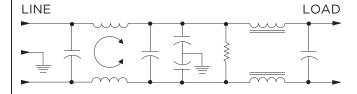
**Operating Ambient Temperature Range** 

(at rated current  $I_r$ ): -10°C to +40°C In an ambient temperature ( $I_a$ ) higher than +40°C the maximum operating current ( $I_o$ ) is calculated as follows:  $I_o = I_r \sqrt{(85-Ta)/45}$ 

# **Ordering Information**



# **Electrical Schematic**



#### **Available Part Numbers**

3MV1	6MV1
10MV1	20MV1

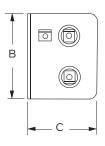


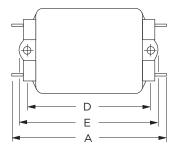
Multi-purpose Medical Filter for Power Line Noise Protection (continued)

# **MV Series**

## **Case Styles**

**MV1** (3, 6, 10A)

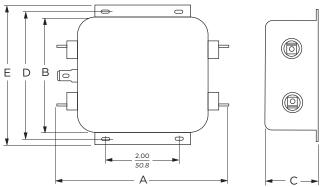




#### Typical Dimensions:

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 .188 [4.78] Dia.

### 20MV1



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 .188 [4.78] Dia.

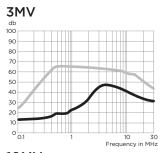
# **Case Dimensions**

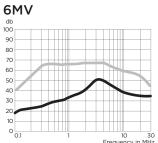
Part No.	Α	В	С	D	Е
Part No.	(max)	(max)	(max)	<u>± .015</u> ± .38	(max)
3MV1	3.36	1.82	1.28	2.375	2.78
	85.3	46.2	32.5	60.33	70.6
6MV1	3.86	2.08	1.53	2.938	3.34
	98.0	52.8	38.9	74.63	84.8
10MV1	3.86	2.08	1.53	2.938	3.34
	98.0	52.8	38.9	74.63	84.8
20MV1	5.23	3.38	1.53	3.75	4.20
	132.8	85.9	38.9	95.25	106.7

#### **Performance Data**

## **Typical Insertion Loss**

Measured in closed 50 Ohm system

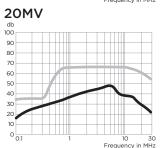




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# 10MV db 100 90 80 70 60 50 40 30 20 10 0 0 11 10 30 Frequency in MHz



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

#### Minimum Insertion Loss

Measured in closed 50 Ohm system

Common Mode / Asymmetrical (Line to Ground)

Current	Frequency – MHz							
Rating	.15	.5	1	2	5	10	20	30
3A	14	19	20	30	46	40	34	31
6A	19	27	30	38	50	40	35	35
10A	15	25	26	34	46	50	44	42
20A	18	30	34	34	46	40	36	20

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

	,	- 5					- /	
Current	Frequency – MHz							
Rating	.15	.5	1	2	5	10	20	30
3A	33	65	65	65	65	60	53	50
6A	40	65	65	65	65	60	57	55
10A	33	65	65	65	65	65	55	55
20A	25	65	65	65	65	60	57	45