

CORCOM Product Guide

Electronics

For UL544 Health Care Equipment

# EAH, EBH Series



UL Recognized CSA Certified VDE Approved

# **EAH Series**

This is a new generation of compact medical RFI filters with an IEC socket. A new design in internal structure and manufacturing process makes this series cost effective. This health care series supersedes the H series by providing superior differential mode performance while still maintaining a maximum leakage current of 2 micro amps.

# **EBH Series**

Also a compact medical RFI filter with IEC socket, the EBH series is a cost effective alternative to the H series. Electrically the EBH provides enhanced differential mode performance compared to both the EAH and the H series. These filters provide RFI common and differential mode performance while still allowing medical equipment to meet UL leakage current specifications for medical and dental equipment.

Additional information on UL544 specification is listed in Appendix C.

Note: When using the models with an IEC connector, remember that the leakage current of the companion line cord, GA400, is more significant than that of the filter - which may disqualify this line cord from use in patient care applications.

# **Electrical Schematic**



Resistor location for reference only



### Specifications

### Maximum leakage current, each line-to-ground

J	
@ 120 VAC 60 Hz:	2 μΑ
@ 250 VAC 50 Hz:	5 μΑ
Hipot rating (one minute):	
line-to-ground line-to-line	1500 VAC 1450 VDC
Operating frequency:	50/60 Hz
Rated voltage (max.):	250 VAC

#### Minimum insertion loss in dB:

Line-to-ground in 50 ohm circuit

Current				Fre	eque	ncy-N	/Hz		
Rating	.01	.05	.1	.15	.5	1	5	10	30
EAH Mode	els								
1A	8	21	29	32	42	45	32	30	19
3A	-	5	10	15	25	27	30	27	22
6A	-	-	5	6	19	21	24	20	15
10A	-	-	1	5	9	12	12	12	12
EBH Mode	els								
1A	8	21	29	32	42	45	32	25	19
3A	-	5	10	15	25	27	30	27	22
6A	-	-	5	8	17	20	24	23	18
10A	-	-	-	3	8	12	12	12	12

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

Current	Frequency-MHz					
Rating	1	1.	5.	5	10	30
EAH Models						
1A	5	13		28	32	25
3A	4	6	1	20	27	28
6A	2	5		19	25	27
10A	1	5		15	22	27
Current	Frequency-MHz					
Rating	.15	.5	1	5	10	30
EBH Models						
All Ratings	1	10	18	30	31	31

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Catalog 1654001 Revised 04-06 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. USA Cust. Svc.: 1-800-468-2023 CORCOM Prods: 1-847-680-7400 Germany: 49-89-6089-0 www.corcom.com www.tycoelectronics.com



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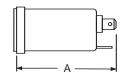
Electronics

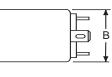
For UL544 Health Care Equipment (Continued)

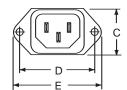
# EAH, EBH Series

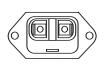
Case Style

# EAH1/EBH1





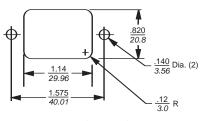




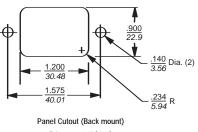
Typical dimensions: Terminals: .250 [*6.35*] (5) Slot: .07 x .16 [*1.8 x 4.1*]

Holes: .07 [*1.8*] Dia.(2) Mounting Holes: .132 [*3.35*] Dia. (2) with .260 Dia. x 90° countersunk for #4 Flathead Screw

# **Recommended Panel Cutouts**



Panel Cutout (Front mount) Tolerance ±.005 [0.13]



Tolerance ±.005 [0.13]

# **Case Dimensions**

Part No.	A (max)	B (max)	C (max)	D <u>±.010</u> ±.25	E (max)
EAH1	<b>2.15</b>	<b>1.12</b>	<b>.90</b>	<b>1.575</b>	<b>1.98</b>
	54.61	28.45	22.86	40.01	50.29
EBH1	<b>2.15</b>	<b>1.12</b>	<b>.90</b>	<b>1.575</b>	<b>1.98</b>
	54.61	28.45	22.86	40.01	50.29

# Part Numbers

1EAH1	1EBH1
3EAH1	3EBH1
6EAH1	6EBH1
10EAH1	10EBH1
Line Cord No.	GA400
Insulating Boot No.	FA601



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