



# CORCOM MRI LED LIGHTING FILTER

TE Connectivity's (TE) Corcom MRI LED lighting filters target MRI Rooms that are using Class II LED drivers to power the LED lights in an MRI room. MRI LED lighting filters will be located outside the shielded MRI room and will clean up conducted Electromagnetic interference (EMI) noise between 10KHz and 1GHz with a powerful 3 stage attenuation circuit that will bring insertion loss to 100dB. The electrical power within the MRI room needs to be supplied by clean power, allowing OEM light fixture manufacturers to comply with the low noise levels required by MRI equipment manufacturers.

MRI LED lighting filters are also available to installers for drop-in replacements and come in 2, 3, and 4 channel versions providing the scalability needed in developing fixtures for their customers. This also allows contractors the flexibility to choose the correct number of circuits to accommodate a specific installation.

#### **BENEFITS**

- Available options are scalable and price sensitive
- Compatible with 40V, 3A drivers
- Offers both differential and common mode noise filtering
- Attenuates EMI in a wide frequency range
- Filter is protected against radiated noise
- Excellent choice for high noise drivers

# **APPLICATIONS**

• MRI rooms

**MATERIALS** 

· Steel enclosure

· Steel threaded pipe

# **ELECTRICAL**

- Class II output 100W
- 3A / up to 40VDC

### **SPECIFICATIONS**

- Insertion Loss (typical):
  -100dB between 10Khz 1Ghz
- Operating temperature rating: -10°C to +60°C



1-1609091-3



1-1609091-4

# MECHANICAL (dimensions - inches)

• Easy connect terminal blocks

| Catalog Part Number | Length | Width | <b>Depth</b> (add 2.52" for metal pipe) |
|---------------------|--------|-------|-----------------------------------------|
| MRI23100W           | 8.70   | 3.98  | 1.93                                    |
| MRI33100W           | 8.70   | 5.35  | 1.93                                    |
| MRI43100W           | 8.70   | 6.73  | 1.93                                    |

## PRODUCT INFORMATION

| Description              | <b>Catalog Part Number</b> | Part Number |
|--------------------------|----------------------------|-------------|
| 2 Channel MRI LED Filter | MRI23100W                  | 1-1609091-3 |
| 3 Channel MRI LED Filter | MRI33100W                  | 1-1609091-4 |
| 4 Channel MRI LED Filter | MRI43100W                  | 1-1609091-5 |



1-1609091-5

## **INSERTION LOSS DATA**

## 50 $\Omega$ to 50 $\Omega$ (Minimum) Insertion Loss

| Frequency              | 10<br>kHz | 50<br>kHz | 100<br>kHz | 500<br>kHz | 1<br>MHz | 5<br>MHz | 50<br>MHz | 100<br>MHz | 500<br>MHz | 1<br>GHz |
|------------------------|-----------|-----------|------------|------------|----------|----------|-----------|------------|------------|----------|
| Common Mode (dB)       | 90        | 100       | 100        | 100        | 100      | 100      | 100       | 100        | 100        | 100      |
| Differential Mode (dB) | 90        | 100       | 100        | 100        | 100      | 100      | 100       | 100        | 100        | 100      |

## te.com

Corcom, TE Connectivity, TE Connectivity (logo) and Every Connection Counts are trademarks. All other logos, products and/or company names referred to herein might be trademarks of their respective owners.

While TE has made every reasonable effort to ensure the accuracy of the information in this brochure, TE does not guarantee that it is error-free, nor does TE make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. TE reserves the right to make any adjustments to the information contained herein at any time without notice. TE expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose. The dimensions in this catalog are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice. Consult TE for the latest dimensions and design specifications.

© 2018 TE Connectivity. All Rights Reserved.

1-1773953-8 11/18 JN