DB15HD-FIL Connector Filters

This document is for the following part number:

- QCI-D15HD-FIL

Product Overview

The filter is a 470 pF in line “T” filter. The filters reduce the system’s susceptibility to EMI and ESD by shunting the high frequency energy directly to the housing. The in-connector design minimizes series inductance to provide wide band filtering.

Applications with high EMI and ESD will require a filter to increase system’s reliability and run time.

How to use

In any I-Grade system, there are two places where EMI and ESD could enter and disrupt system’s reliability. The first place is the motor/encoder interface. The filter should go inside the pin connector of QCI-D15P-D15S-nn (nn = length) cable before attaching to controller. The second place is the SilverLode Multifunction Interface (SMI) port (DB15HD connector for power, I/Os, and communication). Note, if your application does not use the SMI port, then this second filter is not required.

Note: placing the filter on the motor will NOT give the optimal performance. The insert filter should be inside the cable near the controller end to protect the sensitive controller/driver electronics.

The filters are inserted gold side down (pins insert through gold side first). Using your fingers, place the filter level across all the pins and then gently press the filter down until the pins just start to poke through. Use the connector to push the filter the rest of the way down.

CAUTION: The filters are thin and will break if roughly handled.