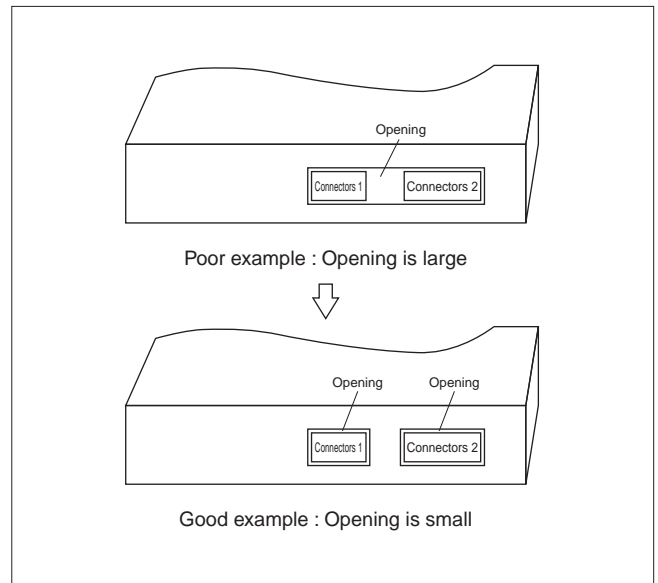


Example of Noise Suppression for Car Navigators 8

Improving the Shielding

Increasing the size of the opening in the metal case causes the shielding effect to decrease. As the opening gets larger, the shielding effect decreases. Large openings should be divided into multiple smaller openings to decrease the length of each opening, making each opening as small as possible.



Installing EMI filters on Interface Cable Ports

For noise suppression in a cable connector, a combination of the NFM series chip EMIFIL® and the BLM series chip ferrite bead provides an enhanced noise suppressing effect. To make full use of the chip EMIFIL®'s noise suppressing effect, reduce the high frequency impedance between the filter GND and the shield case, and intensify the GND condition by screw-mounting the PCB GND to the shield case and connecting them with fingers, and by adding through holes for the filter GND.

If the GND pattern is distant from a connector, noise conduction occurs, resulting in noise emission from a cable. To prevent this problem, mount the filters near the connector terminals.

