

Diplexer for Car Radio and Mobile Telephone

DESCRIPTION

- Diplexer for simultaneous operation of mobile telephone and car radio on a common mobile telephone antenna.
- Diplexer for Car Radio 0 - 108 MHz and Mobile Telephone bands with 3 options:
 - LH 108/136-1G covers 136 - 1000 MHz
 - LH 108/136-2G covers 136 - 2300 MHz
 - LH 108/136-2G-3FME covers 136 - 2300 MHz
- Extremely small dimensions.
- Quick installation using dual-adhesive pad provided.
- FME-connections on antenna and transceiver terminals
- 75 Ω (M10 x 0.75) or 50 Ω FME connector on the car radio terminal.
- 1 m or 5 m Procom 75 Ohm car radio cable available as an option.



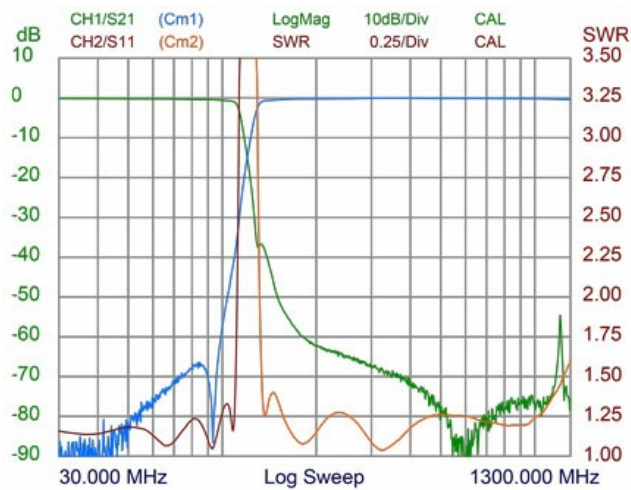
SPECIFICATIONS

| Electrical | | |
|-----------------------------|---|---|
| Model | LH 108/136-1G | LH 108/136-2G |
| Frequency | Mobile telephone : 136 MHz - 1000 MHz Car radio : 0 - 108 MHz | Mobile telephone : 136 MHz - 2300 MHz Car radio : 0 - 108 MHz |
| Max. Input Power | 136 - 500 MHz : < 35 W 500 - 1000 MHz : < 15 W | 136 - 500 MHz : < 35 W 500 - 1500 MHz : < 15 W 1500 - 2300 MHz : < 10W |
| Insertion Loss | 0 - 108 MHz : ≤ 2.0 dB 136 - 144 MHz : ≤ 0.8 dB 144 - 1000 MHz : ≤ 0.7 dB | 0 - 108 MHz : ≤ 2.0 dB 136 - 144 MHz : ≤ 0.8 dB 144 - 2300 MHz : ≤ 0.7 dB |
| Impedance | COM : 50 Ω, VSWR < 1.5:1 Radio : 75 Ω CRC or 50 Ω FME, VSWR < 1.5:1 | |
| Isolation | ≥ 40 dB typ. ≥ 45 dB RADIO to COM: > 38 dB at 108 and 136 MHz | |
| Mechanical | | |
| Connection(s) | COM : FME Radio : CRC-Connector (M10 x 0.75) or FME Antenna : FME | |
| Dimensions | 50 x 21 x 60 mm / 1.97 x 0.83 x 2.36 in. | |
| Weight | Approx. 0.068 kg / 0.15 lb. | |
| Accessories | Car radio cable Type 1 m CRC (length 1 m) Type 5 m CRC (length 5 m) | |
| Environmental | | |
| Operating temperature range | -30 °C to +70 °C | |

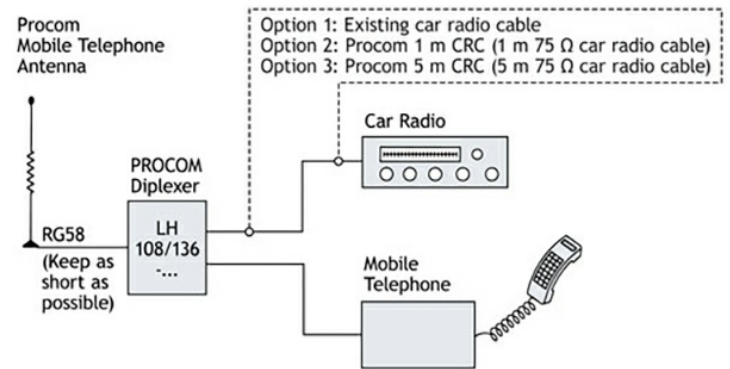
ORDERING

| Model | Product No. | Description |
|--------------------|-------------|-------------------|
| LH 108/136-1G | 200000769 | 1 x CRC + 2 x FME |
| LH 108/136-2G | 200000762 | 1 x CRC + 2 x FME |
| LH 108/136-1G-3FME | 200000767 | 3 x FME |
| LH 108/136-2G-3FME | 200001709 | 3 x FME |

TYPICAL RESPONSE CURVE



APPLICATION



INSTALLATION NOTES

- The 50 Ω cable between antenna and diplexer should be kept as short as possible (preferably not over 1 m).
- Some communication antennas have insufficient height to ensure satisfactory broadcast reception. Only antenna whips with a height of at least 25 cm are acceptable.
- Tuning: The antenna is tuned for best VSWR at the operating frequency as usual. The filter is factory-tuned and ready for installation. The car radio is tuned for optimum reception on the MW-band by means of the antenna tuning screw (if present).