

## 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.



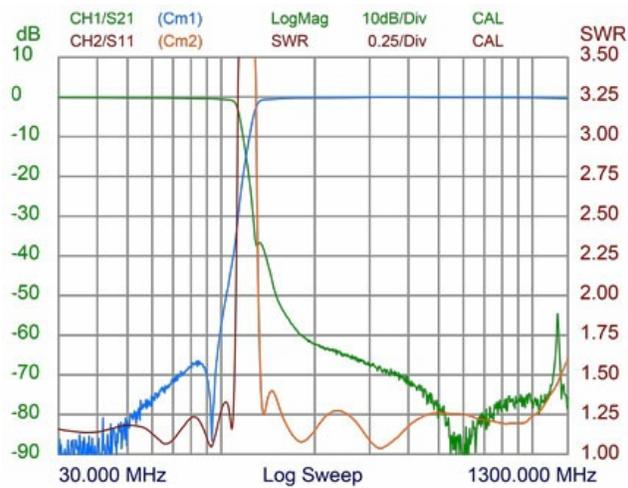
### SPECIFICATIONS

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	

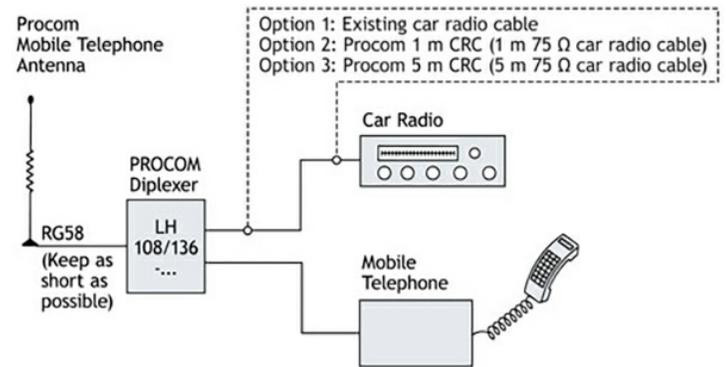
### ORDERING

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).