

# Mobile Loudspeakers and Receivers

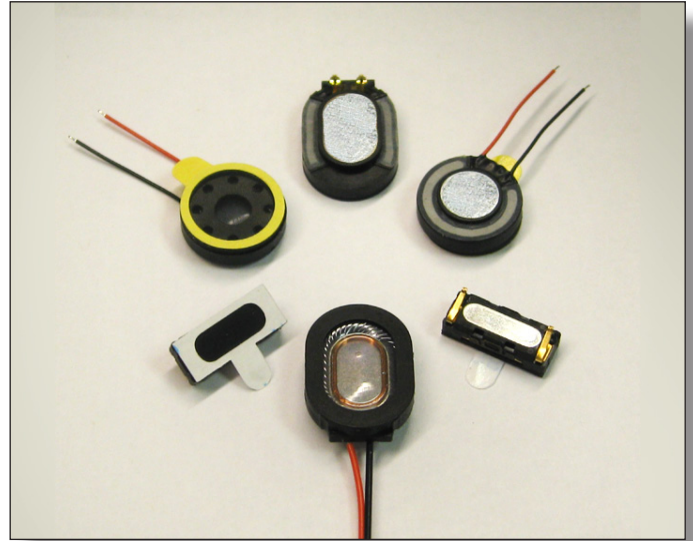


## Overview

Introducing MWM's newest innovation in acoustic components for mobile products. Lightweight and miniature, our mobile speakers and receivers are rated among the top in their class for high sensitivity, low distortion, and flat frequency response. A summary of highlighted specifications can be found on the back for your convenience.

MWM Acoustics, the provider of choice of the world's most discerning audio companies, introduces a series of Mobile Loudspeakers (MLS) and Mobile Telephone Receivers (MTR). The MLS and MTR series was developed in response to the emerging demand for audio excellence in personal, connected devices.

MWM analyzed technology and human experience trends in establishing new benchmarks of performance for a complete line of miniature drivers that will improve speech intelligibility and media enjoyment in smart phones, tablets, E-book readers, and other consumer electronics, a \$340.4 billion industry. The new line delivers on the promise of better audio at lower cost for a wide range of applications and leading edge products. These products, coupled with the in depth design support MWM is world famous for, will allow leading companies to deliver next generation products that provide High Definition audio performance.

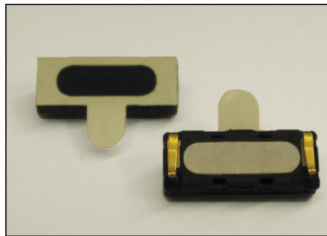


## MTR Series

**Component:**  
Mobile Telephone  
Receivers

**Optimal design:**  
Specifically for  
mobile devices  
with high acoustic  
leakage to the ear

**Applications:**  
Mobile Phones  
Smart Phones

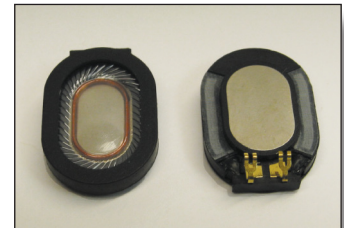


## MLS Series

**Component:**  
Mobile Loudspeakers

**Optimal design:**  
Specifically designed  
for small form factor  
devices that require  
high performance

**Applications:**  
Smart Phones  
Tablets  
E-book Readers





# MLS & MTR High Level Specs

Sound Smarter.®



## Mobile Loudspeakers

MWM P/N	Size (mm)	Impedance* (ohm)	SPL (dB/0.1m/0.1w)	Fo (Hz)	Rated/Max Power (W)	Application
MLS151135-C-LF	15*11	8	89	450	0.5/0.6/1.0	all
MLS181230-A-LF	18*12	8	91	850	0.8/1.2	cell phone
MLS181234-A-LF	18*12	8	92	800	0.8/1.2	cell phone
MLS201430-A-LF	20*14	8	87	900	0.5/1.0	cell phone
MLS201440-B-LF	20*14	8	87.5	750	0.5/1.0	cell phone
MLS201440-A-LF	20*14	8	87.5	750	0.5/1.0	cell phone
MLS302045-A-LF	30*20	8	90	600	0.5/1.0	all
MLS1533-A-LF	Φ15	8	87	900	0.5/0.8	digital
MLS1630-A-LF	Φ16	8	87	800	0.5/0.8	cell phone
MLS1637-A-LF	Φ16	8	87	750	0.7/1.0	cell phone
MLS1640-A-LF	Φ16	8	89	800	0.5/0.7	cell phone
MLS1751-A-LF	Φ17	8	91	800	0.8/1.2	cell phone, digital
MLS1836-A-LF	Φ18	8	89	750	0.8/1.0	cell phone
MLS2031-A-LF	Φ20	8	88	700	0.5/0.8	phone

\*Typically impedances of 16ohms are also available in each form factor

## Mobile Telephone Receivers

MWM P/N	Size (mm)	Impedance* (ohm)	SPL (dB/179mV)	Rated/Max Power (W)	Application
MTR110722-A-LF	11*7	32	106	0.01/0.03	cell phone
MTR120623-B-LF	12*6	32	112	0.03/0.05	cell phone
MTR120623-C-LF	12*6	32	112	0.04/0.07	cell phone
MTR150625-A-LF	15*6	32	112	0.01/0.03	cell phone
MTR1043-A-LF	Φ10	32	111	0.01/0.02	blue tooth handset

\*Typically impedances of 16ohms and 8ohms are also available in each form factor

All speakers and receivers listed are lead-free.

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