



NXP Sound Solutions high-performance, space-efficient rectangular receiver with patented front resonator and extremely robust spring connector

Smallest rectangular receiver

Designed to maximize space efficiency and audio performance in small, slim-profile mobile phones, this rectangular receiver measures only 10 x 4.8 x 2.0 mm and delivers an excellent performance-to-size ratio.

Key features

- ▶ Industry-leading dimensions: 10 x 4.8 x 2.0 mm
- ▶ Optimized for use in mobile handsets
 - Patented front resonator for superior performance
 - Maximum power handling capacity: 70 mW
- ▶ Extremely robust spring connector
- ▶ Manufactured to the highest standards
 - 100% in-line measurement of all specified acoustical and electrical parameters

With a form factor of 10 x 4.8 x 2.0 mm, the rectangular receiver from NXP Sound Solutions is the world's smallest handset receiver. It has a breadth of less than 5 mm, so it is ideal of use above the display in a "candy-bar" or flip-phone handset.

Compared to other products with a larger area and volume, such as 8-mm round receivers or rectangular ones that measure 7 x 11 x 2.2 mm, this rectangular receiver provides the same or even higher maximum sound pressure.

The receiver has been optimized of use in a mobile phone. A patented front-resonator solution produces outstanding sound performance despite the limited space of the typical handset. Depending on the customer's requirements, the resonator can be tailored to a wide- or narrow-band application.

The receiver is also tuned for the electronics of a mobile phone, handling a maximum input power of 70 mW.

Applications

- ▶ Candy-bar handsets
- ▶ Flip-phone handsets

A special design for the spring connector makes the receiver more robust. To avoid damage from unintended deflection during the handling process, the ends of the spring connector are protected.

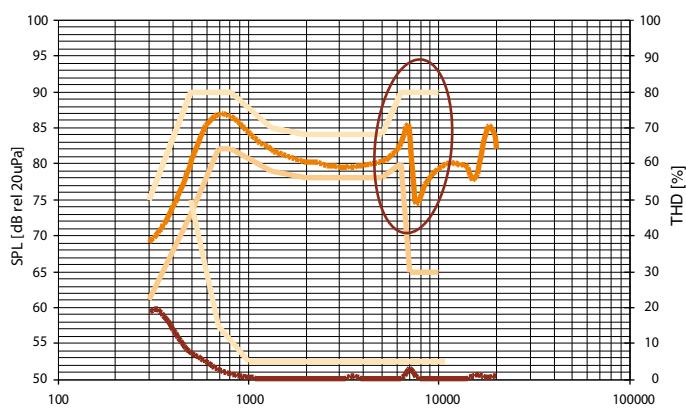
Also, the contacts are pre-loaded to provide immediate electrical contact within the optimal gas-tight force interval.

To guarantee the highest standards of quality, the receiver is manufactured in a production process that uses 100% in-line measurement of all specified acoustical and electrical parameters.

To ensure excellent durability as well as high performance, the receiver builds on more than 75 years of leadership in acoustics and sound algorithms.

NXP Sound Solutions

NXP Sound Solutions has produced more than two billion mobile-phone speakers and receivers and is the market leader in mini-acoustic solutions for telecom applications. With manufacturing sites and application support centers in Beijing and Vienna, NXP Sound Solutions offers fully automated, high-volume production for standard products and semi-automated or manual production for low-volume, specialty products.



Typical frequency response measured on baffle
(Distance [d] = 1 cm, without back cavity at 10 mW)