

## WF166TU01 6½" neodymium dia cast car mid-woofer, 4 ohm

WF166TU01 is a mid/woofer designed for demanding bass and midrange applications. It works equally well for most applications but is designed especially for automotive high-end sound. The very rigid die cast alu chassis follows the common standard dimensions for easy installation in cars

WF166TU01 is powered by a dual neodymium magnet structure that ensures good efficiency and optimized T/S parameters.

The large 32mm voice coil and the special heat sink ensure high power handling - thermally and mechanically

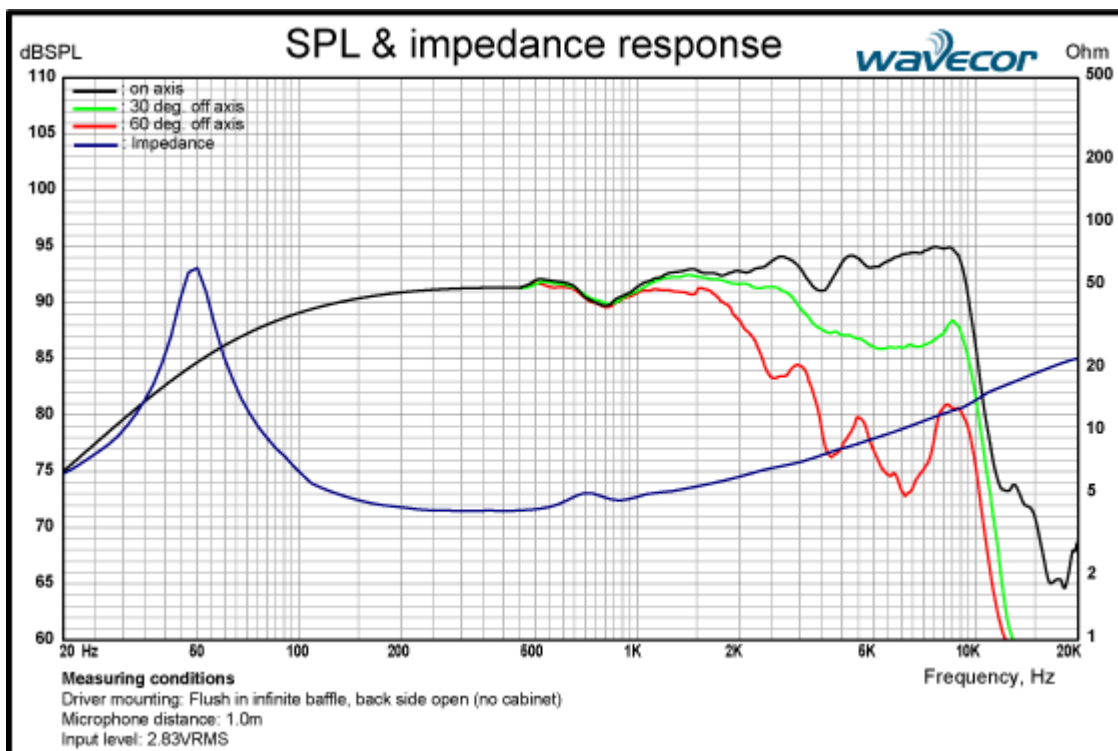
The optimized paper cone ensures wide bandwidth and low distortion. Distortion is further reduced by efficient venting of chassis and voice coil. WF166TU01 is an obvious choice for 2-way high-end car speaker systems.



### FEATURES

- Heat sink for increased heat transfer obtaining high long-term power handling
- Vented voice coil former for reduced distortion and compression
- Vented chassis for lower air flow speed reducing audible distortion
- Heavy-duty black fiber glass voice coil bobbin to increase power handling and reduce mechanical losses resulting in better dynamic performance and low-level details
- Large motor system with 1¼" voice coil diameter and dual neodymium magnet for better control and efficiency
- Long linear stroke motor for reduced distortion at high levels
- Linear suspension with specially designed CONEX damper (spider) for long durability under extreme operating conditions
- Gold plated terminals to prevent oxidation for long-term reliable connection - important in a car environment

### FREQUENCY RESPONSE

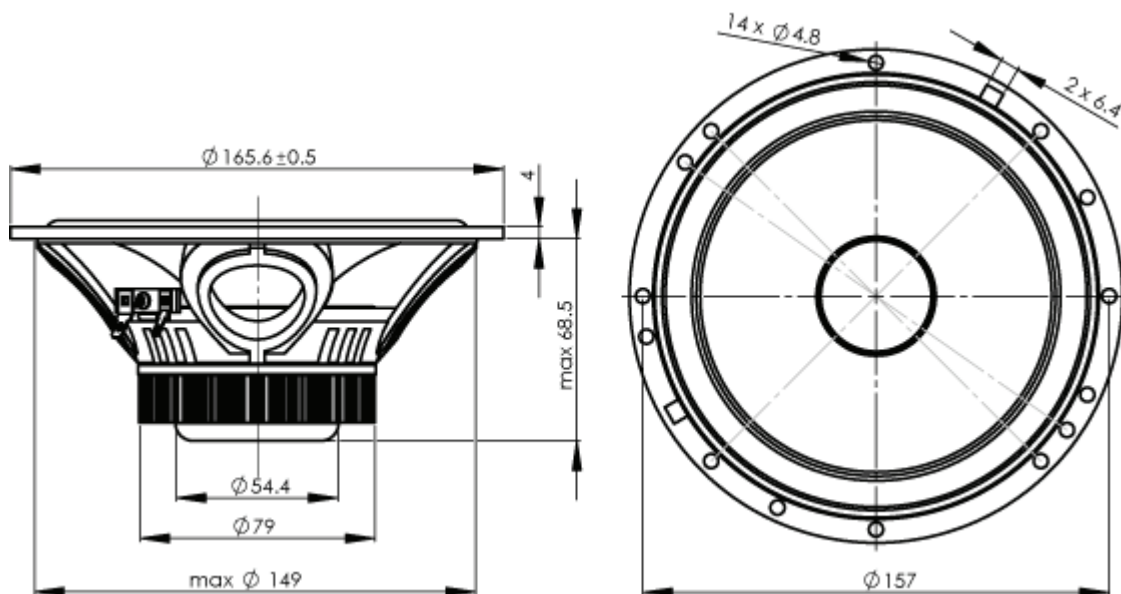


## NOMINAL SPECIFICATIONS

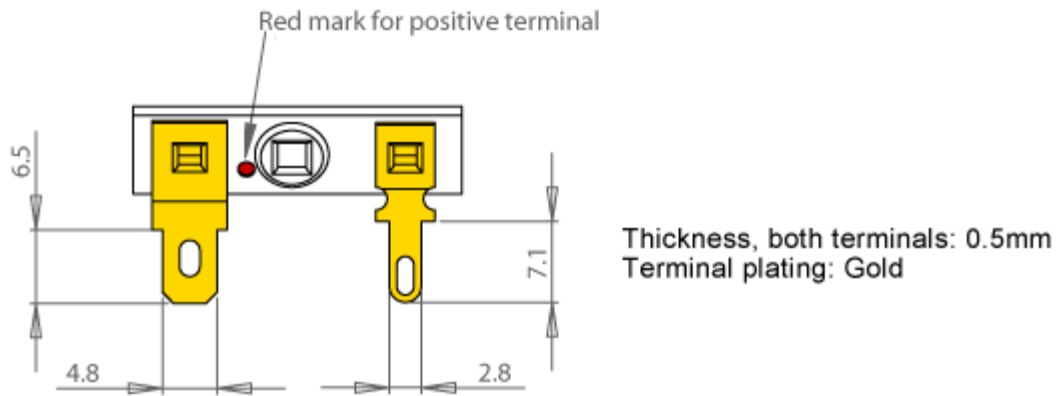
|  |             |
|--|-------------|
| Nominal size                                 | 6½ [inch.]  |
| Nominal impedance                            | 4 [ohm]     |
| Recommended upper frequency limit            | 3.5 [kHz]   |
| Sensitivity, 2.83V/1m, (average 200-2,000Hz) | 91.5 [dB]   |
| Voice coil diameter                          | 32.5 [mm]   |
| Voice coil height                            | 11 [mm]     |
| Air gap height                               | 4.0 [mm]    |
| Voice coil resistance, $R_{DC}$              | 3.2 [ohm]   |
| Voice coil inductance                        | 0.16 [mH]   |
| Magnet weight (dual neodymium)               | 102 [g]     |
| Effective radiating area, $S_d$              | 139 [sq.cm] |
| Power handling, continuous, IEC 268-5        | 60 [W]      |
| Resonance freq., $F_s$                       | 50 [Hz]     |
| Moving mass, incl. air                       | 12.5 [g]    |
| Force factor, $B\ell$                        | 5.2 [Tm]    |
| Mechanical Q, $Q_m$                          | 11 -        |
| Electrical Q, $Q_e$                          | 0.47 -      |
| Total Q, $Q_t$                               | 0.45 -      |
| Suspension compliance, $C_{ms}$              | 0.85 [mm/N] |
| Equiv. air volume, $V_{as}$                  | 23.2 [lit.] |
| Total unit net weight                        | 0.71 [kg]   |

*Specifications are before burn-in*

## OUTLINE DRAWING AND NOMINAL DIMENSIONS (mm)



## TERMINAL NOMINAL DIMENSIONS (mm)



## PACKAGING INFORMATION

|                       |  |
|-----------------------|--|
| Part no. WF166TU01-01 | Individual packaging (one piece per box) |
| Part no. WF166TU01-02 | Bulk packaging                           |

Specifications are subject to change without any further notice.  
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