

Model No.: SBS-250F38CP01-04  
 Product Line: Tymphany

Rev: 1  
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## Product Description

This 10inch 4ohm subwoofer, a member of the new SBS product family, with a coated paper cone, with NBR surround and steel basket, the motor features a double ferrite magnet motor. The product offers high power handling capacity, geared towards operation in smaller sealed, powered system.



## Mechanical Drawing



## Specifications

|                               |             |        |       |           |                            |      |              |       |
|-------------------------------|-------------|--------|-------|-----------|----------------------------|------|--------------|-------|
| DC Resistance                 | Revc        | Ohms   | 3.89  | 5.0%      | Energy Bandwidth Product   | EBP  | (1/Qes)*fs   |       |
| Minimum Impedance             | Zmin        | Ohms   | 6.26  | 7.5%      | Moving Mass                | Mms  | g            | 90.5  |
| Voice Coil Inductance         | Le          | mH     | 1.16  |           | Suspension Compliance      | Cms  | um/N         | 112.1 |
| Resonant Frequency            | Fs          | Hz     | 49.96 | 15%       | Effective Cone diameter    | D    | cm           | 20.8  |
| Mechanical Q Factor           | Qms         |        | 4.46  |           | Effective Piston Area      | Sd   | cm^2         | 339.8 |
| Electrical Q Factor           | Qes         | 0.93   |       |           | Effective Volume           | Vas  | L            | 18.18 |
| Total Q Factor                | Qts         |        | 0.77  |           | Motor Force Factor         | BL   | Tm           | 10.88 |
| Ratio Fs/Qts                  | F           | Fs/Qts | 64.72 |           | Motor Efficiency Factor    | β    | (T*M^2)/Ohms | 30.4  |
| Half Space Sensitivity @2.83V | db@2.83V/1M | dB     | 86.61 | +/- 1.0db | Voice coil former Material | VCfm |              | ASV   |
| Half Space Sensitivity @1W/1M | db@1W/1M    | dB     | 85.5  | +/- 1.0db | Voice coil inner diameter  | VCd  | mm           | 38.75 |
| Gap Height                    | Gh          | mm     | 8     |           | Rated Noise Power          | P    | W            | 200   |
| Maximum Linear Excursion      | Xmax        | mm     | 10.5  |           | Test Spectrum Bandwidth    |      | 40Hz-200Hz   |       |
| Ferrofluid Type               | FF          |        |       |           | Driver Size                | Inch | 10 in        |       |
| Driver Mass                   | Kg          |        | 3.16  |           |                            |      |              |       |

## Frequency and Impedance Response

