# HS251

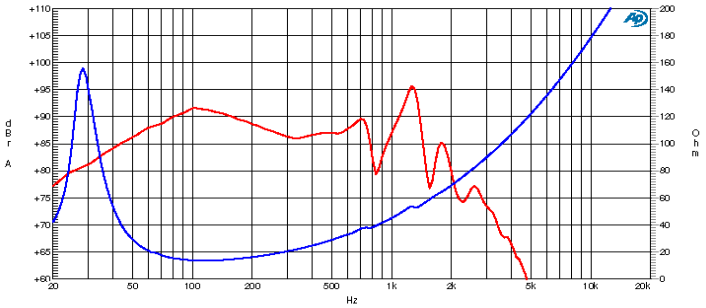
## 10'' Ceramic Subwoofer

| | |
|---|---|
| **Program Power** | **200+200 W** |
| **Rated impedance** | **8+8 Ohm** |
| **Nominal diameter** | **10''- 250 mm** |
| **Sensitivity (2,83V/1m)** | **89 dB** |
| **Voice coil diameter** | **2 in - 50 mm** |
| **Frequency Range** | **25-600 Hz** |

## SPECIFICATIONS

| | |
|---|---|
| Nominal Diameter | 10''- 250 mm |
| Rated Impedance | 8+8 Ohm |
| Nominal Power Handling [1] | 100+100 W |
| Program Power [2] | 200+200 W |
| Sensitivity [3] | 89 dB |
| Frequency Range [4] | 25-600 Hz |
| Minimum Impedance | - |
| Gasket Material | Aluminum |
| Magnet Material | Ferrite |
| Cone Material | Treated Cellulose |
| Cone Shape | - |
| Surround | Rubber |
| Suspension | - |
| Voice Coil Diameter | 2 in - 50 mm |
| Voice Coil Winding Material | - |
| Voice Coil Length | 24 mm - 0,94 in |
| Voice Coil Former Material | Kapton |
| Connection type | - |
| Ferrofluid | No |
| Magnetic Gap Height | 8 mm - 0,31 in |
| Max. Peak to Peak Excursion | - |
| Efficiency Bandwidth Product EBP | 70 |
| Recommended Loading | Vented Box |
| Volume / Tuning frequency | 62 Lt (dm³) - 2,19 cuft / 30 Hz |
| Maximum recommended frequency | - |

## FREQUENCY RESPONSE AND IMPEDANCE CURVE [6] [7]

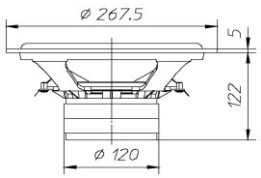



## T/S PARAMETERS

**8+8 Ohm**

* Parameters measured with voice coils connected in series

| | | |
|---|---|---|
| Resonance frequency | Fs | 30 Hz |
| DC Resistance | Re | 5,8+5,8 Ohm |
| Mechanical Q Factor | Qms | 7,21 |
| Electrical Q Factor | Qes | 0,43 |
| Total Q Factor | Qts | 0,4 |
| Bl Factor | Bl | 19,91 Tm |
| Effective Moving Mass | Mms | 79,13 g |
| Equivalent Cas air loaded | Vas | 63,2 lt (dm³) - 2,23 cuft |
| Suspension Compliance | Cms | 0,38 mm/N |
| Effective Piston Diameter | D | 210 mm - 8,27 in |
| Effective piston area | Sd | 346 cm² - 53,63 sq in |
| Max. Linear Excursion [5] | Xmax | 10 mm - 0,39 in |
| Voice Coil Inductance @ 1kHz | Le | 4,03 mH |
| Half-space Efficency | ŋ0 | 0,36 % |




## MOUNTING AND SHIPPING INFORMATION

| | |
|---|---|
| Overall Diameter | 267,5 mm - 10,53 in |
| Baffle Cutout Diameter | 235 mm - 9,25 in |
| Flange and Gasket Thickness | 5 mm - 0,2 in |
| Total Depth | 127 mm - 5 in |
| Bolt Circle Diameter | 253 mm - 9,96 in |
| Bolt Holes Quantity and Diameter | 8 / 5 mm - 0,2 in |
| Net Weight | 4,2 Kg - 9,25 lb |
| Shipping Units | 6 Pcs |

### NOTES

[1] Nominal power is determined according to AES2-1984 (r2003) standard.
[2] Program Power is defined as 3 dB greater than the Nominal rating.
[3] Sensitivity represents the averaged value of acoustic output as measured on the forward central axis of cone, at distance 1m, when connected to 2,83V sine wave test signal.
[4] Frequency range is given as the band of frequencies delineated by the lower and upper limits where the output level drops by 10 dB below the rated sensitivity in half space environment.
[5] Linear Math. Xmax is calculated as (Hvc-Hg)/2 + Hg/4 where Hvc is the coil depth and Hg is the gapdepth.
[6] Frequency response curve is measured on infinite baffle conditions.
[7] Impedance curve is measured in free air conditions at small signals.