

## 2" Full Range

Type Number: 830970

### Features:

Peerless full range drivers set the standard for quality audio in products including flat panel televisions and sound bars, MP3 and cell phone docking stations, and multimedia PCs. With their high power handling, smooth, even dispersion and low distortion, the Peerless full range drivers can be paired with the Tymphany LAT250 for great bass performance.

Features include: A Neodymium motor structure and double-venting system that helps keep dynamic range intact, as the transducer can handle more power and dissipate excess heat efficiently. An anodized aluminum dome provides superior sound dispersion and off-axis response. A semi-progressive surround reduces distortion, especially at high output through long excursion. The drivers' direct connected dome dust cap (connected to the magnet system voice coil) improves dispersion at high frequencies, providing superior sound on the high notes. The inserted copper cap on the pole piece ensures control the system impedance, thereby extending the upper frequency range.



### Specs:

#### Electrical Data

|                       |      |      |     |
|-----------------------|------|------|-----|
| Nominal impedance     | Zn   | 4    | ohm |
| Minimum impedance     | Zmin | 4    | ohm |
| Maximum impedance     | Zo   | 20.3 | ohm |
| DC resistance         | Re   | 3.8  | ohm |
| Voice coil inductance | Le   | 0.2  | mH  |

#### T-S Parameters

|                         |     |       |                 |
|-------------------------|-----|-------|-----------------|
| Resonance Frequency     | fs  | 147.5 | Hz              |
| Mechanical Q factor     | Qms | 3.06  |                 |
| Electrical Q factor     | Qes | 0.7   |                 |
| Total Q factor          | Qts | 0.57  |                 |
| Force factor            | Bl  | 2.8   | Tm              |
| Mechanical resistance   | Rms | 0.47  | Kg/s            |
| Moving mass             | Mms | 1.5   | g               |
| Suspension compliance   | Cms | 0.76  | mm/N            |
| Effective cone diameter | D   | 4.1   | cm              |
| Effective piston area   | Sd  | 13    | cm <sup>2</sup> |
| Equivalent volume       | Vas | 0.2   | ltrs            |
| Sensitivity (2.83V/1m)  |     | 85    | dB              |
| Sensitivity (1W/1m)     |     | 82    | dB              |
| Ratio BL/√(Re)          |     | 1.4   |                 |
| Ratio fs/Qts            | F   | 259   |                 |

#### Power handling

|                                |    |   |
|--------------------------------|----|---|
| Rated Noise Power (IEC 18.1)   | 7  | W |
| Long-term Max Power (IEC 18.3) | 60 | W |

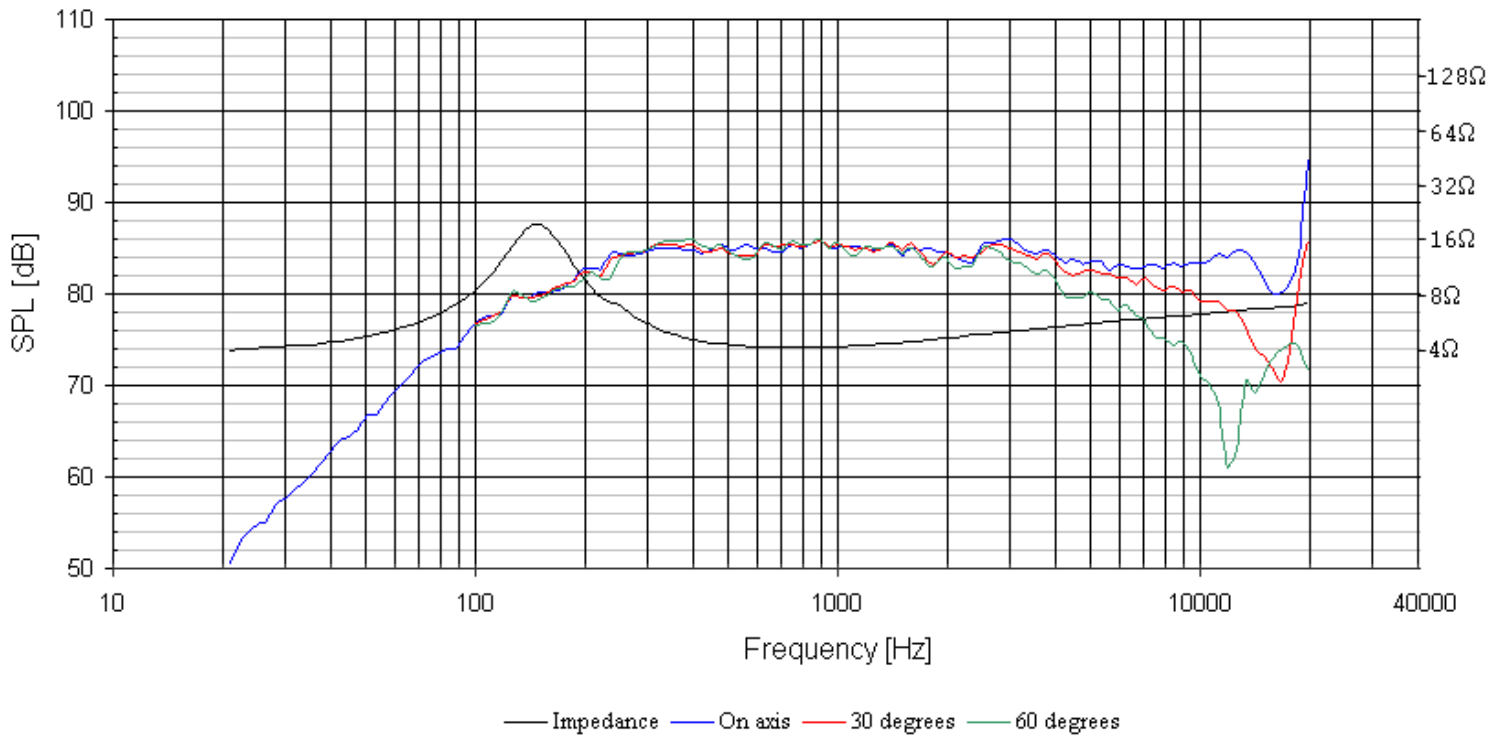
**Note:** Power handling measurement conducted free air with 4th order HP filter at 150 Hz. Crossover, enclosure, spectral content, and crest factor may vary results.

#### Misc. Parameters

|                                      |       |       |
|--------------------------------------|-------|-------|
| Effective Frequency range (IEC 21.2) | 150-  | Hz    |
| Frame dimensions                     | 20k   | mm    |
| Total Mass                           | 55x55 | grams |
| Frequency at ka=2                    | 132   | Hz    |
|                                      | 4655  | Hz    |

**Notes:**  
IEC specs refer to IEC 60268-5 third edition.  
All Tymphany products are RoHS compliant.

Frequency: 830970



Mechanical Dimensions:830970

