TYMPHANY

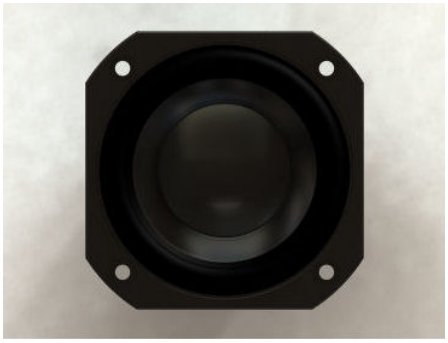
2″ Full Range

Peerless

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 cupper cap on the pole piece ensures control the system impedance, thereby extending the upper frequency range.

Specs: *Preliminary*

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^2
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

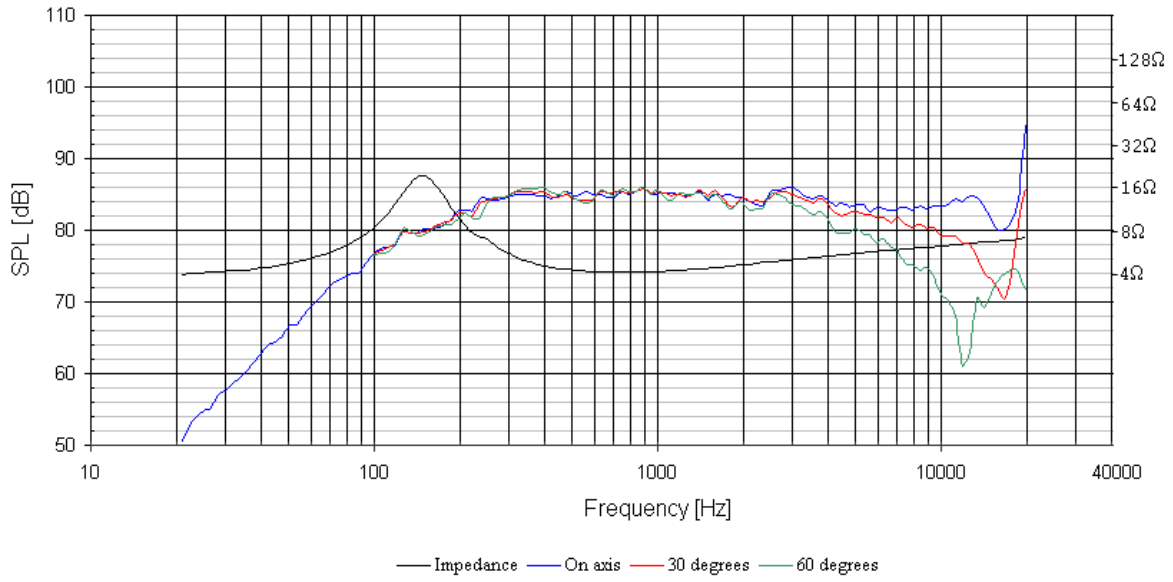
Misc. Parameters

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

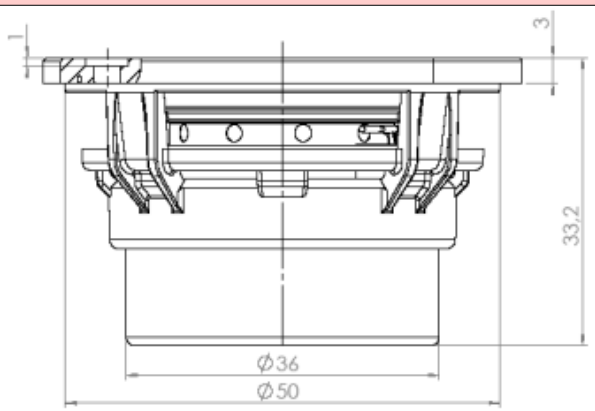
Notes:
IEC specs refer to IEC 60268-5 third edition.
All Tymphany products are RoHS compliant.

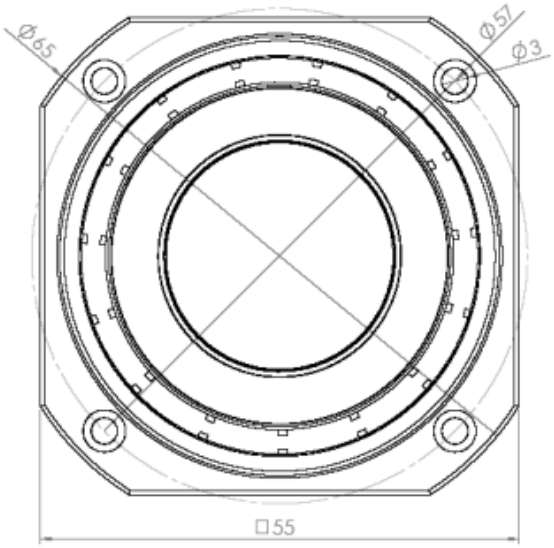
OEM PRELIMINARY

Frequency: *Preliminary*



Mechanical Dimensions:





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