**TWFFTFR** 

Copper Cap

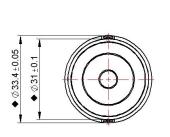
Neodymium Motor

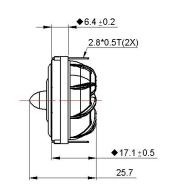
Patented Central Waveguide

Patented Ring Radiator Design

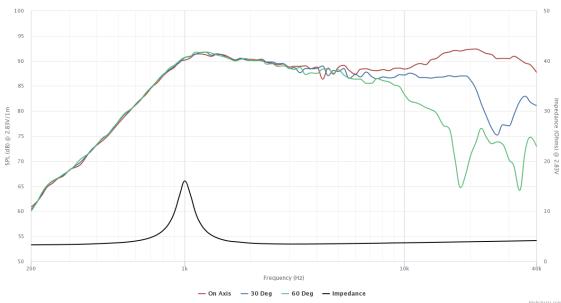
Low Resonance







SPECIFICATIONS			
Transducer Size		19	mm
Impedance		4	Ω
Frequency Range <sup>1</sup>		1000 - 40000	Hz
Sensitivity <sup>2</sup> (2.83V   1W @ 1m)		88.9   85.9	dB
Power Rating (IEC 268-5)		80	W
Voice Coil Size		19.3	mm
Air Gap   Winding Height	H H H vc	2   1.8	mm
Net Weight		0.042	kg
PARAMETERS <sup>3</sup>			
Eff. Piston Area	S <sub>d</sub>	4.52	cm <sup>2</sup>
DC Resistance	R <sub>e</sub>	3.2	Ω
Minimum Impedance	Z <sub>min</sub>	3.5	Ω
Inductance	L <sub>e</sub>	0.014	mH
Resonance Frequency <sup>4</sup>	F <sub>s</sub>	980	Hz
Mechanical Q Factor	Q <sub>ms</sub>	7.27	-
Electrical Q Factor	Q <sub>es</sub>	1.5	-
Total Q Factor	Q <sub>ts</sub>	1.2	-
Moving Mass	M <sub>ms</sub>	1.53	g
Compliance	C <sub>ms</sub>	17	μm/N
Equivalent Volume	V	0.001	L
Motor Force Factor	ВІ	4.44	Tm
Motor Efficiency	β	6.25	$(BI)^2/R_e$
Linear Excursion <sup>5</sup>	X max	0.7	mm



Details on this spec sheet are for reference only and should not be used for setting production limits. Specifications and product cosmetics are subject to change without notice. Peerless is a registered trademark of Tymphany Enterprises. All measurements conducted in test lab at 25°C  $\pm 10$ °C, 50%RH  $\pm 10$ %. <sup>1</sup> Specified by Engineering as linear working range of transducer. <sup>2</sup> Measured at 2.83V at 1m and normalized to 1W with respect to nominal impedance. <sup>3</sup> Measured in Free Air without preconditioning, therefore subject to some deviation. <sup>4</sup> Impedance and Fs value measured under different conditions. <sup>5</sup> Equal/Overhung:  $(H_{vc} - H_{ag})/2 + H_{ag}/3$ . Underhung:  $(H_{ag} - H_{vc})/2 + H_{vc}/3$ . <sup>6</sup> Mechanically limited excursion (e.g. bottoming, spider crash).