## <u>TYÂPHANY</u>

Model Number: TC9FD-18-08 Product Line: Peerless Silver **Transducer Specification Sheet** 

Revision: Rev 1\_0 Date: 10-Sep-09

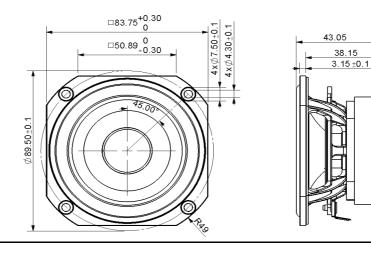
Peerless

Product Description:

This TC family 3.5 inch 8 ohm full-range driver, with ferrite magnet, paper cone and rubber surround, and damped plastic basket, is designed to be a cost-effective high performance full range driver. The cone utilizes Tymphany-patented PentaCut NRSC cone technology to help dampen and control cone resonances, optimizing the listening experience. The motor contains a copper cap to lower inductance and distortion. The product was designed with television and other compact applications in mind.



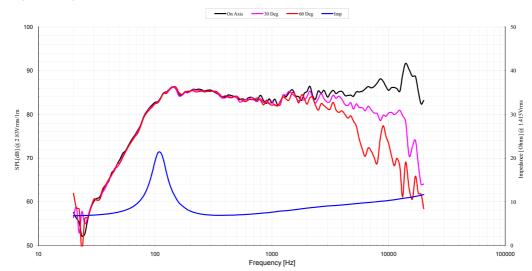
Mechanical 2D Drawing:



## Specifications:

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	evc Ω	6.3	5.0%	Energy Bandwidth Product	EBP	(1/Q <sub>es</sub> )∙f <sub>s</sub>	
Minimum Impedance Z	min Ω	6.9	7.5%	Moving Mass	M <sub>ms</sub>	g	2.60
Voice Coil Inductance	<sub>-e</sub> mH	0.10		Suspension Compliance	C <sub>ms</sub>	um/N	641.9
Resonant Frequency	f <sub>s</sub> Hz	123	15.0%	Effective Cone Diameter	D	cm	6.8
Mechanical Q Factor C	l <sub>ms</sub> -	2.6		Effective Piston Area	SD	cm <sup>2</sup>	36.3
Electrical Q Factor G	Q <sub>es</sub> -	1.50		Equivalent Volume	Vas	L	1.19
Total Q Factor 0	Q <sub>ts</sub> -	0.95		Motor Force Factor	BL	T∙m	2.91
Ratio f <sub>s</sub> / Q <sub>ts</sub>	f <sub>s</sub> / Q <sub>ts</sub>	129		Motor Efficiency Factor	β	(T·m²)/Ω	1.34
Half Space Sensitivity @ 2.83V dB@2.	83V/1m dB	84.5	+/-1.0 <sup>1</sup>	Voice Coil Former Material	VC <sub>fm</sub>	-	Aluminum
Sensitivity @ 1W/1m 1W/1m	//1m dB	83.5	+/-1.0 1	Voice Coil Inner Diameter	VCd	mm	19.4
				Gap Height	Gh	mm	4.0
Rated Noise Power (IEC 2685 18.1)	P W	5		Maximum Linear Excursion	X <sub>max</sub>	mm	2.55
Test Spectrum Bandwidth 120Hz - 10k	0Hz - 10kHz	12 (	dB/Oct	Ferrofluid Type	FF		N/A
·				Transducer Size	-	inch	3.5
				Transducer Mass	-	kg	0.3

## Frequency and Impedance Response:



F088-0713A

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