

Model Number: TC7FD00-04  
Product Line: Peerless Silver

Revision: Rev 1\_0  
Date: 22-Dec-10

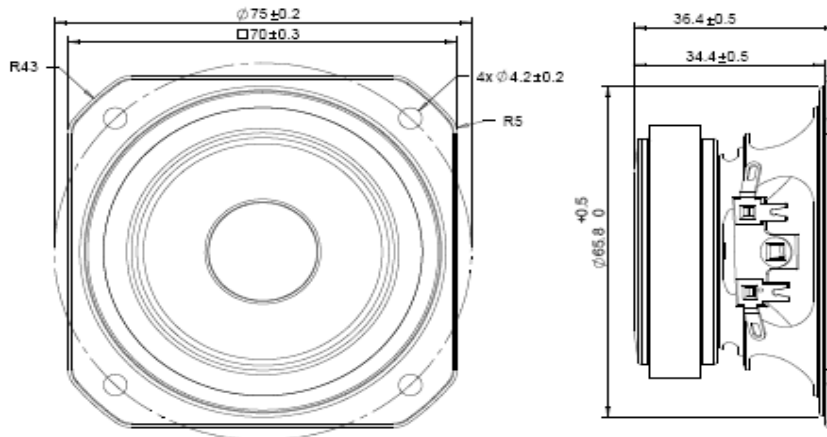


### Product Description:

This TC family 2.5 inch 4 Ω full-range driver, with ferrite magnet, paper cone and rubber surround, and steel 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:

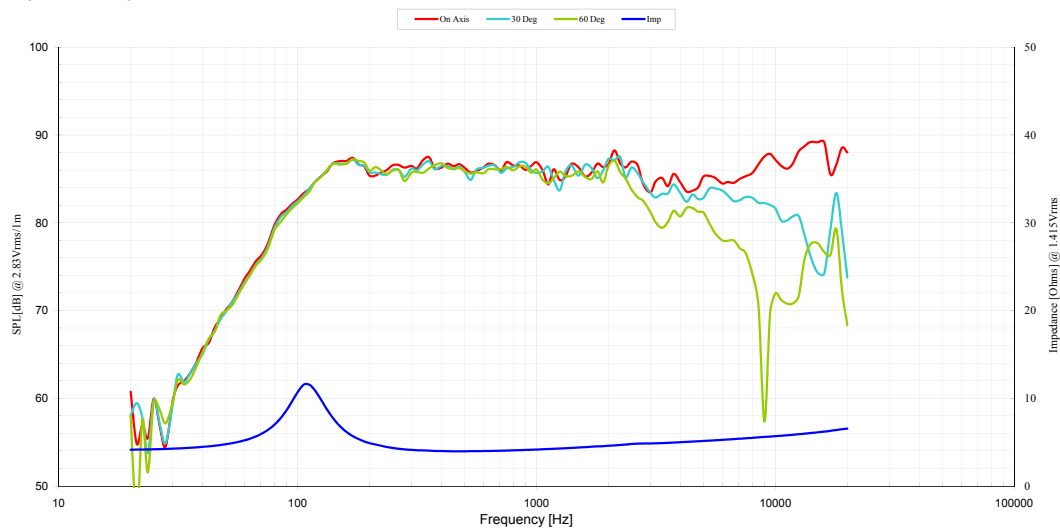


### Specifications:

DC Resistance	$R_{\text{evc}}$	$\Omega$	3.2	5.0%	Energy Bandwidth Product	EBP	$(1/Q_{\text{es}}) f_s$	117
Minimum Impedance	$Z_{\text{min}}$	$\Omega$	4.0	7.5%	Moving Mass	$M_{\text{ms}}$	g	1.64
Voice Coil Inductance	$L_e$	mH	0.02		Suspension Compliance	$C_{\text{ms}}$	um/N	750.5
Resonant Frequency	$f_s$	Hz	143	15.0%	Effective Cone Diameter	D	cm	5.3
Mechanical Q Factor	$Q_{\text{ms}}$	-	3.7		Effective Piston Area	$S_D$	cm <sup>2</sup>	22.1
Electrical Q Factor	$Q_{\text{es}}$	-	1.22		Equivalent Volume	$V_{\text{as}}$	L	0.51
Total Q Factor	$Q_{\text{ts}}$	-	0.92		Motor Force Factor	BL	T·m	1.97
Ratio $f_s / Q_{\text{es}}$	F	$f_s / Q_{\text{es}}$	156		Motor Efficiency Factor	$\beta$	$(T \cdot m^2) / \Omega$	1.21
Half Space Sensitivity @ 2.83V	dB@2.83V/1m	dB	86.4	+/-1.0 <sup>1</sup>	Voice Coil Former Material	$VC_{\text{fm}}$	-	ASV
Sensitivity @ 1W/1m	1W/1m	dB	82.4	+/-1.0 <sup>1</sup>	Voice Coil Inner Diameter	$VC_{\text{id}}$	mm	19.3
Rated Noise Power (IEC 2685 18.1)	P	W	20		Gap Height	Gh	mm	3.0
Test Spectrum Bandwidth	130Hz - 20kHz	12 dB/Oct			Maximum Linear Excursion	$X_{\text{max}}$	mm	1.0
					Ferrofluid Type	FF	-	N/A
					Transducer Size	-	-	2.5 inch
					Transducer Mass	-	Kg	0.18

1 - Piston Band Sensitivity Tolerance

### Frequency and Impedance Response:



F088-0713A