

Model Number: TC8FD00-04  
 Product Line: Peerless Silver

Revision: Rev 1\_0  
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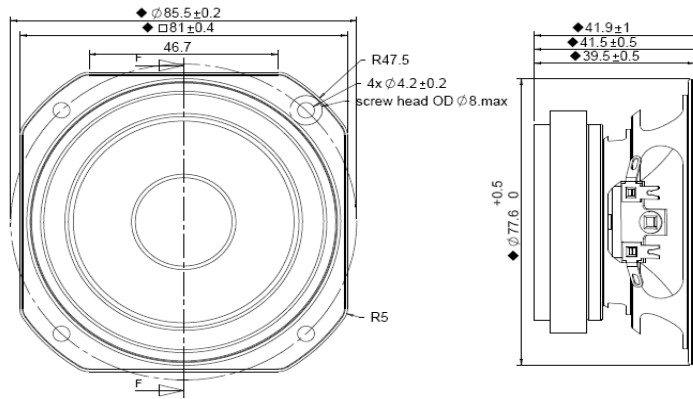


**Product Description:**

This TC family 3.0 inch 4 ohm 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	$R_{DC}$	$\Omega$	3.3	$\pm 7.5\%$	Energy Bandwidth Product	EBP	$(1/Q_{ms}) \cdot f_t$	102	
Minimum Impedance	$Z_{min}$	$\Omega$	4.2	$\pm 7.5\%$	Moving Mass	$M_{ms}$	g	2.55	
Voice Coil Inductance	$L_e$	mH	0.03		Suspension Compliance	$C_{ms}$	um/N	637.3	
Resonant Frequency	$f_s$	Hz	125	$\pm 15\%$	Effective Cone Diameter	D	cm	6.5	
Mechanical Q Factor	$Q_{ms}$	-	3.7		Effective Piston Area	$S_D$	cm <sup>2</sup>	33.2	
Electrical Q Factor	$Q_{es}$	-	1.23		Equivalent Volume	$V_{as}$	L	0.986	
Total Q Factor	$Q_t$	-	0.92		Motor Force Factor	BL	T·m	2.32	
Ratio $f_s / Q_{ts}$	F	$f_s / Q_{ts}$	136		Motor Efficiency Factor	$\beta$	$(T \cdot m^2) / \Omega$	1.63	
Half Space Sensitivity @ 2.83V	dB@2.83V/1m		dB	85.7	$\pm 1.0^1$	Voice Coil Former Material	VC <sub>fm</sub>	-	ASV
Sensitivity @ 1W/1m	1W/1m		dB	81.8	$\pm 1.0^1$	Voice Coil Inner Diameter	VC <sub>d</sub>	mm	19.4
Rated Noise Power (IEC 2685 18.1)	P	W	25		Gap Height	Gh	mm	4.0	
Test Spectrum Bandwidth	130Hz-20kHz		12 dB/Oct		Maximum Linear Excursion	$X_{max}$	mm	2.4	
					Ferrofluid Type	FF	-	N/A	
					Transducer Size	-	-	3 inch	
					Transducer Mass	-	Kg	0.3	

1 - Piston Band Sensitivity Tolerance

**Frequency and Impedance Response:**

