

Model Number: BC20SC15-04
Product Line: Peerless Silver

Revision: Rev 1_0
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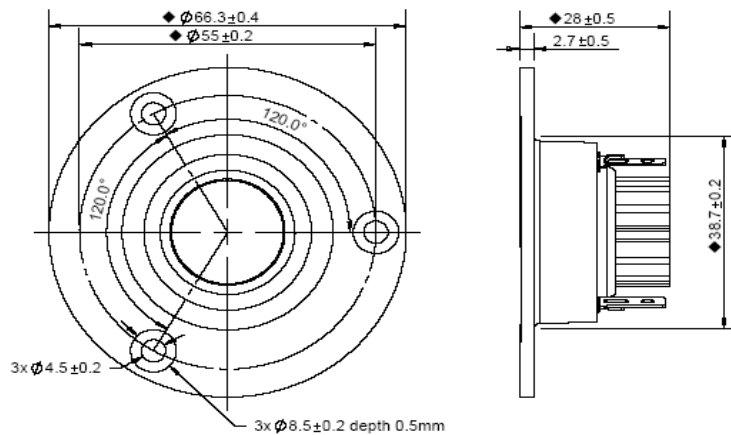


Product Description:

This BC family tweeter features a 4 Ω 0.75 inch voice coil, a damped fabric dome for smooth frequency response performance, and ferrofluid in the gap of the NdFeB motor, providing enhanced cooling of the voice coil. The tweeter comes with a compact faceplate with recessed mounting holes, complete with sealing gasket which helps in reducing vibration between baffle and driver.



Mechanical 2D Drawing:



Specifications:

DC Resistance	R_{evc}	Ω	3.1	5.0%	Energy Bandwidth Product	EBP	$(1/Q_{\text{es}}) \cdot f_s$	316
Minimum Impedance	Z_{min}	Ω	3.6	7.5%	Moving Mass	M_{ms}	g	0.2
Voice Coil Inductance	L_e	mH	0.02		Suspension Compliance	C_{ms}	um/N	49
Resonant Frequency	f_s	Hz	1580	15.0%	Effective Cone Diameter	D	cm	2.40
Mechanical Q Factor	Q_{ms}	-	4.80		Effective Piston Area	S_D	cm ²	4.5
Electrical Q Factor	Q_{es}	-	4.99		Equivalent Volume	V_{as}	L	0.001
Total Q Factor	Q_{ts}	-	2.45		Motor Force Factor	BL	T·m	1.13
Ratio f_s / Q_{ts}	F	f_s / Q_{ts}	646		Motor Efficiency Factor	β	$(T \cdot m^2) / \Omega$	0.41
Half Space Sensitivity @ 2.83V	$\text{dB} @ 2.83V/1m$	dB	90.3	$\pm 1.0^1$	Voice Coil Former Material	VC_{fm}	-	ASV
Sensitivity @ 1W/1m	$\text{dB} @ 1W/1m$	dB	86.2	$\pm 1.0^1$	Voice Coil Inner Diameter	VC_d	mm	20.40
					Gap Height	Gh	mm	2.00
Rated Noise Power (IEC 2685 18.1)	P	W	80		Maximum Linear Excursion	X_{max}	mm	0.17
Test Spectrum Bandwidth	2.5kHz - 20kHz	12 dB/Oct			Ferrofluid Type	FF	APG027N / 175CP	
					Transducer Size	-	inch	0.75
					Transducer Mass	-	Kg	0.1

1 - Piston Band Sensitivity Tolerance

Frequency and Impedance Response:

