**B25** 

**PROFESSIONAL SERIES** 



10". 25cm Low Frequency Driver Very High Power Handling Capacity

### **APPLICATIONS**

Low frequency transducer dedicated to the reproduction of 50-2500Hz frequencies. Usable either for direct radiation in small volumes from 12L tuned at 80Hz or for horn loaded application.

Its design gives priority to power handling capacity and allows for use in compact boxes.

### **FEATURES**

Power handling capacity
Reference efficiency(1W@1m)
SPL max (continuous)
Usable frequency range
Environmental withstanding

400 W AES 96 dB SPL 118 dB SPL 50-2500 Hz Outdoor

# 3820

TVDICAL CHADACTEDISTICS

## 10" ■ 25 cm Low Frequency Driver

### 3820

TYPICAL CHARACTERISTICS			
Rated impedance	Z	6	Ω
Reference efficiency (1 W@1 m)	-	96	dB SPL
Usable frequency range 1	-	50-2500	Hz
Power handling capacity <sup>2</sup>	(AES)	400	W
Max Sound Pressure Level <sup>3</sup>	SPLmax	118	dB SPL
Min. impedance modulus	Zmin	5.2 @ 290Hz	Ω
Voice-coil inductance 4 @ 1 kHz	Lelk	1.43	mH
@ 10 kHz	Le10k	0.77	mH
BI product	BL	22.7	N/A
Moving mass	Mms	0.056	Kg
THIELE-SMALL PARAMETERS : TYPICAL (QC LIN	/IITS)		
Resonance frequency 5	Fs	54(±7)	Hz
DC resistance <sup>6</sup>	Re	5.0 (±0.5)	Ω
Mechanical quality factor	Qms	4.8	1
Electrical quality factor	Qes	0.19	1
Total quality factor	Qts	0.18	1
Mechanical suspension compliance	Cms	155	10 <sup>-6</sup> m/N
Effective piston area	Sd	0.0356	m²
Equivalent Cas air load	Vas	0.028	m <sup>3</sup>
Max. linear excursion	Xmax	±4.5	mm
Linear displacement volume	Vd	0.160	10 <sup>-3</sup> m <sup>3</sup>
Half-space efficiency		2.3	%
Unity load volume	Vas Qts <sup>2</sup>	0.9	10 <sup>-3</sup> m <sup>3</sup>
ABSOLUTE MAXIMUM RATINGS			
Short term max. input voltage <sup>7</sup>	Vmax	110	V
Max. excursion before damage	Xdam	±12	mm
Ambient operating temperature		-10 to +50	°C
Storage temperature 8		-20 to +70	°C
Environmental conditions 9		Outdoor	
APPLICATION INFORMATION			
Air volume occupied by the driver 10		2.0	10 <sup>-3</sup> m <sup>3</sup>
Speaker net mass		8.240	Kg
Recommended reflex box	Vb/Fb	12 / 80	L / Hz
Electrical polarity	A positive	e voltage applied on the r	ed terminal
	produces	s forward cone motion.	

#### SPECIFICATION NOTES

- Note 1 : Allowing for energy response, excursion capability, Power spectrum, and -3dB low freq, roll-off for standard reflex tuning.
- Note 2 : Established at 20°C ambient temp, according to AES2-1984 standard using IEC268-1 simulated programme signal and a 12 liter Bass-Reflex test enclosure tuned at 80Hz.
- Note 3: Established at 1m on axis of the loudspeaker mounted in test enclosure, when driven at full AES Power Handling Capacity, including 4dB of thermal compression loss.
- Note 4: Measured at 20 mA in free air.
- Note 5 : Measured at 20 mA and 20°C ambient temp. in free air conditions, after full run and rest.
- Note 6 : Measured at 20°C ambient temp. QC limits are  $\pm 10 \%$
- Note 7 : Stated in RMS voltage according to IEC 268-5.
- Note 8 : Includes shipping conditions. The lower limit prevents from demagnetization.
- Note 9: Our products are classified in three categories : Indoor, Outdoor, and Outdoor → for permanent outdoor use or severe conditions.
- Note 10: Calculated for front mounting on to a 18 mm thick



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