



# TECHNICAL SPECIFICATIONS

	P38D2	P38D4
PRODUCT NAME	P38D2	P38D4
NOMINAL DIAMETER	8" [203]	8" [203]
MAGNET WEIGHT	57 oz (1616 g)	57 oz (1616 g)
FREQUENCY RANGE	39 Hz-250 Hz	42 Hz-250 Hz
VOICE COIL DIAMETER	2.00" [51]	2.00" [51]
VOICE COIL WINDING WIDTH	1.21" [37]	1.21" [37]
VOICE COIL FORMER MATERIAL	ALUMINUM	ALUMINUM
NOMINAL IMPEDANCE	(2) 2 Ohms	(2) 4 Ohms
DC RESISTANCE (Re)	3.1 Ohms	6.2 Ohms
VOICE COIL INDUCTANCE	3.0 mH	4.6 mH
RESONANCE FREQUENCY (Fs)	39 Hz	42 Hz
MECHANICAL Q FACTOR (Qms)	7.60	7.52
ELECTRICAL Q FACTOR (Qes)	0.50	0.55
TOTAL Q FACTOR (Qts)	0.47	0.52
COMPLIANCE (Cms)	1.57E-04 m/N	1.57E-04 m/N
EQUIVALENT AIR VOLUME (Vas)	0.230 FT <sup>3</sup> (6.5 LITERS)	0.230 FT <sup>3</sup> (6.5 LITERS)
MOVING MASS (Mms)	3.72 oz (105.4 g)	3.28 oz (93.1 g)
MECH. RESIST. LOSSES (Rms)	3.41 kg/s	3.24 kg/s
SENSITIVITY (SPL) W/M	81 dB	81 dB
FORCE FACTOR (BL)	12.7 T-m	16.6 T-m
EFFECTIVE CONE AREA (SD)	26 in <sup>2</sup> (0.017 m <sup>2</sup> )	26 in <sup>2</sup> (0.017 m <sup>2</sup> )
LINEAR EXCURSION (X-MAX)	0.42" [11]	0.42" [11]
OPERATING POWER (PE)	250 W RMS/500 W PEAK	250 W RMS/500 W PEAK
EFF. BANDWIDTH PROD. (EBP)	78	76
MOTOR CONSTANT (K <sub>rm</sub> )	10.03 mOhms	12.5 mOhms
MOTOR CONSTANT (E <sub>rm</sub> )	0.794	0.825
MOTOR CONSTANT (K <sub>xm</sub> )	90.51 mH	157.6 mH
MOTOR CONSTANT (E <sub>xm</sub> )	0.611	0.595
MOTOR IMPEDANCE (R <sub>em</sub> )	10.34 Ohms	16.95 Ohms

THIELE-SMALL MEASUREMENTS MADE WITH VOICE COILS IN SERIES.  
 SPECIFICATIONS MAY VARY PER MANUFACTURING TOLERANCES AND ARE SUBJECT TO IMPROVEMENT WITHOUT NOTICE.

DESCRIPTION:		8 INCH PUNCH STAGE 3 WOOFER		RELEASE & DATE:	#1 (8-11-04)
ENGINEER:	DATE:	8-11-04	SCALE:	1:3	CREATED IN SOLIDWORKS
DOC CON:	SHEET:	1 OF 1	UNITS:	INCHES [MILLIMETERS]	ROCKFORD ACOUSTIC DESIGNS 3056 WALKER RIDGE DRIVE SUITE G WALKER, MI 49544