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\* LMS Version 3.54                      Date=Dec 19,1995      Time=Tue 4:54PM  
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\* Speaker Parameter Measurement Data (SPM)  
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Method: Delta Mass Curve Pair

Free Air Curve Num= 17      Name=zpm100 no mass  
Delta Mass Curve Num= 18      Name=zpm100 mass

*X<sub>MAX</sub> 1.75mm*

Mass Added to Cone= 10.00 Gram

----- Electrical/Mechanical Parameters -----  
Revc (DC VC Res ) = 3.2100 Ohm                      Qms (Mech Q) = 1.8247  
Fo (Res Freq ) = 92.0605 Hz                      Qes (Elec Q) = 0.6626  
Zo (Zmax at Fo) = 12.0497 Ohm                      Qts (Total Q) = 0.4861  
Sd (Piston Area)= 0.0055 sqM                      Vas (Acous Vol) = 1.8771 Litr  
BL (Flux\*Length)= 4.3779 TM                      Cms (Compliance)= 436.9866 uM/N  
no (Ref Effncy) = 0.2137 %                      Mms (Total Mass)= 6.8395 Gram  
SPLo (SPL at 1W ) = 85.3170 dB                      Mmd (DiaphmMass)= 6.6050 Gram

----- Motor Impedance Parameters -----  
Levc (Induc at 1kHz) = 0.2057 mH                      Rem (Res at 1kHz) = 0.9135 Ohm  
Levc (Induc at 20kHz) = 0.0928 mH                      Rem (Res at 20kHz) = 9.1703 Ohm  
Krm (Resistance Cons) = 1.0874 mOhm                      Erm (Resis Expont) = 0.7699  
Kxm (Reactance Cons) = 2.1007 mH                      Exm (React Expont) = 0.7343

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MOUNTING DIA. 3.6"  
DEPTH 2.04"

*P<sub>MAX</sub>: 100 WATT PEAK  
60 WATT CONT.*

*ZPM100*

*ZCS4*

*ZPM100 + ZPT 25 W/CROSSOVER*

*12dB per octave @ 3500Hz*

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\* LMS Version 3.50                      Date=Oct 11,1994              Time=Tue 1:00PM  
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\* Speaker Parameter Measurement Data (SPM)  
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Method: Delta Mass Curve Pair

Free Air Curve Num= 6              Name=ZPM130  
Delta Mass Curve Num= 7             Name=ZPM130 10g

Mass Added to Cone= 10.00 Gram

----- Electrical/Mechanical Parameters -----  
Revc(DC VC Res ) = 3.9600 Ohm              Qms (Mech Q) = 2.7234  
Fo (Res Freq ) = 86.4768 Hz                Qes (Elec Q) = 0.7026  
Zo (Zmax at Fo) = 19.3104 Ohm              Qts (Total Q) = 0.5585  
Sd (Piston Area)= 0.0089 sqM              Vas(Acoust Vol) = 3.8684 Litr  
BL (Flux\*Length)= 5.4921 TM                Cms(Compliance)= 343.9154 uM/N  
no (Ref Effncy) = 0.3443 %                Mms(Total Mass)= 9.8489 Gram  
SPLo(SPL at 1W ) = 87.3879 dB              Mmd(DiaphmMass)= 9.3662 Gram

----- Motor Impedance Parameters -----  
Levc (Induc at 1kHz) = 0.4192 mH              Rem(Res at 1kHz)= 1.9504 Ohm  
Levc (Induc at 20kHz) = 0.1167 mH             Rem(Res at 20kHz)= 16.2823 Ohm  
Krm (Resistance Cons)= 3.9780 mOhm            Erm(Resis Expont)= 0.7084  
Kxm (Reactance Cons)= 17.5177 mH              Exm(React Expont)= 0.5732

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ZPM130

MOUNTING DIA 4.86"

XMAX 3mm

DEPTH 2.74"

Pmax: 150 WATT PEAK  
100 WATT CONT.

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ZCS5

ZPM130 + ZPT25 w/CROSSOVER

12dB per octave @ 3,000 Hz

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\* LMS Version 3.50                      Date=Dec 15,1994                      Time=Thr 1:39PM  
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\* Speaker Parameter Measurement Data (SPM)  
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Method: Delta Mass Curve Pair

Free Air Curve Num= 4                      Name=Z TEST FREE  
Delta Mass Curve Num= 5                      Name=Z TEST DELTA

XMAX 4mm

Mass Added to Cone= 10.00 Gram

----- Electrical/Mechanical Parameters -----  
Revc(DC VC Res ) = 4.1000 Ohm                      Qms (Mech Q) = 2.1467  
Fo (Res Freq ) = 39.8055 Hz                      Qes (Elec Q) = 0.5499  
Zo (Zmax at Fo) = 20.1049 Ohm                      Qts (Total Q) = 0.4378  
Sd (Piston Area)= 0.0129 sqM                      Vas(Acous Vol) = 18.6052 Litr  
BL (Flux\*Length)= 6.1532 TM                      Cms(Compliance)= 787.3297 uM/N  
no (Ref Effncy) = 0.2063 %                      Mms(Total Mass)= 20.3047 Gram  
SPLo(SPL at 1W ) = 85.1641 dB                      Mmd(DiaphmMass)= 19.4623 Gram

----- Motor Impedance Parameters -----  
Levc (Induc at 1kHz) = .4400 mH                      Rem(Res at 1kHz)= 0.0000 Ohm  
Levc (Induc at 20kHz) = 0.0000 mH                      Rem(Res at 20kHz)= 0.0000 Ohm  
Krm (Resistance Cons)= 0.0000 mOhm                      Erm(Resis Expont)= 0.0000  
Kxm (Reactance Cons)= 0.0000 mH                      Exm(React Expont)= 0.0000

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ZPM160

Pmax : 180 WATT PEAK/120 CONT.

MOUNTING DIA. 5.67"

DEPTH 2.99"

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ZCS6 SET

ZPM160 + ZPT25 W/CROSSOVER

12dB PER OCTAVE @ 2500HZ

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\* LMS Version 3.61                      Date=Jul 23,1996      Time=Tue 3:12PM  
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\* Speaker Parameter Measurement Data (SPM)  
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Method: Single Impedance Curve

Free Air Curve Num= 10      Name=~~Z~~ZPT25

ZPT 25

----- Electrical/Mechanical Parameters -----  
Revc(DC VC Res ) = 4.5600 Ohm                      Qms (Mech Q) = 1.0554  
Fo (Res Freq ) =1373.9990 Hz                      Qes (Elec Q) = 1.2858  
Zo (Zmax at Fo) = 8.3027 Ohm                      Qts (Total Q) = 0.5796

----- Motor Impedance Parameters -----  
Levc (Induc at 1kHz) = 0.0000 mH                      Rem(Res at 1kHz)= 0.0000 Ohm  
Levc (Induc at 20kHz) = 0.0000 mH                      Rem(Res at 20kHz)= 0.0000 Ohm  
Krm (Resistance Cons)= 0.0000 mOhm                      Erm(Resis Expont)= 0.0000  
Kxm (Reactance Cons)= 0.0000 mH                      Exm(React Expont)= 0.0000

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Pmax: 50W CONTINUOUS ~~70~~ WATT PEAK  
SENS: 90dB  
MOUNTING DIAMETER 2.1" FLUSH  
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