

SPECIFICATION FOR APPROVAL

Description : **Micro Dynamic Speaker**

Customer's Model No. :

Specification No. : **PKD-7269**

Number Of The Edition : **1.2**

CUSTOMER'S APPROVED SIGNATURE		

Approved by	Checked by	Issued by
		Fei 1/11/06'

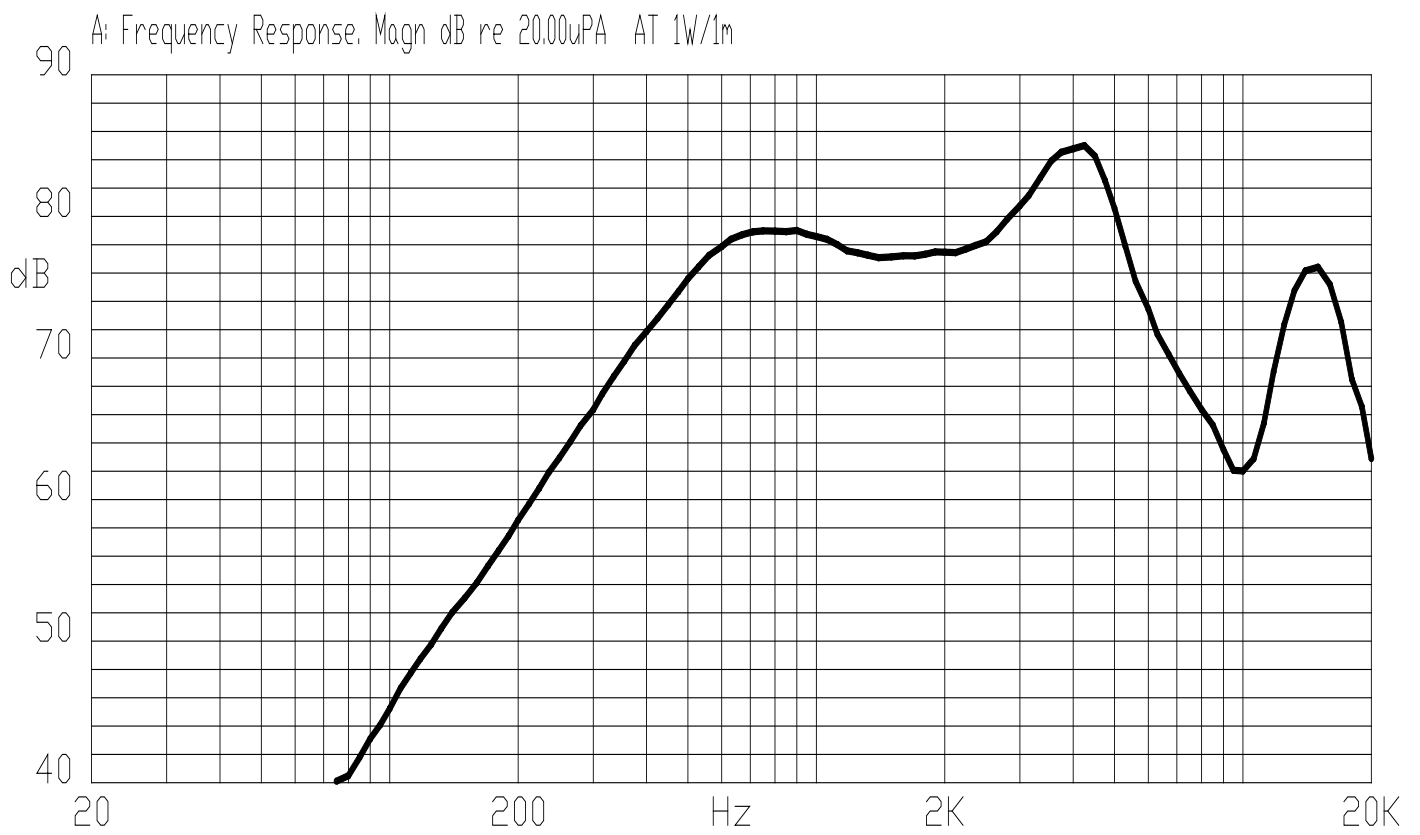
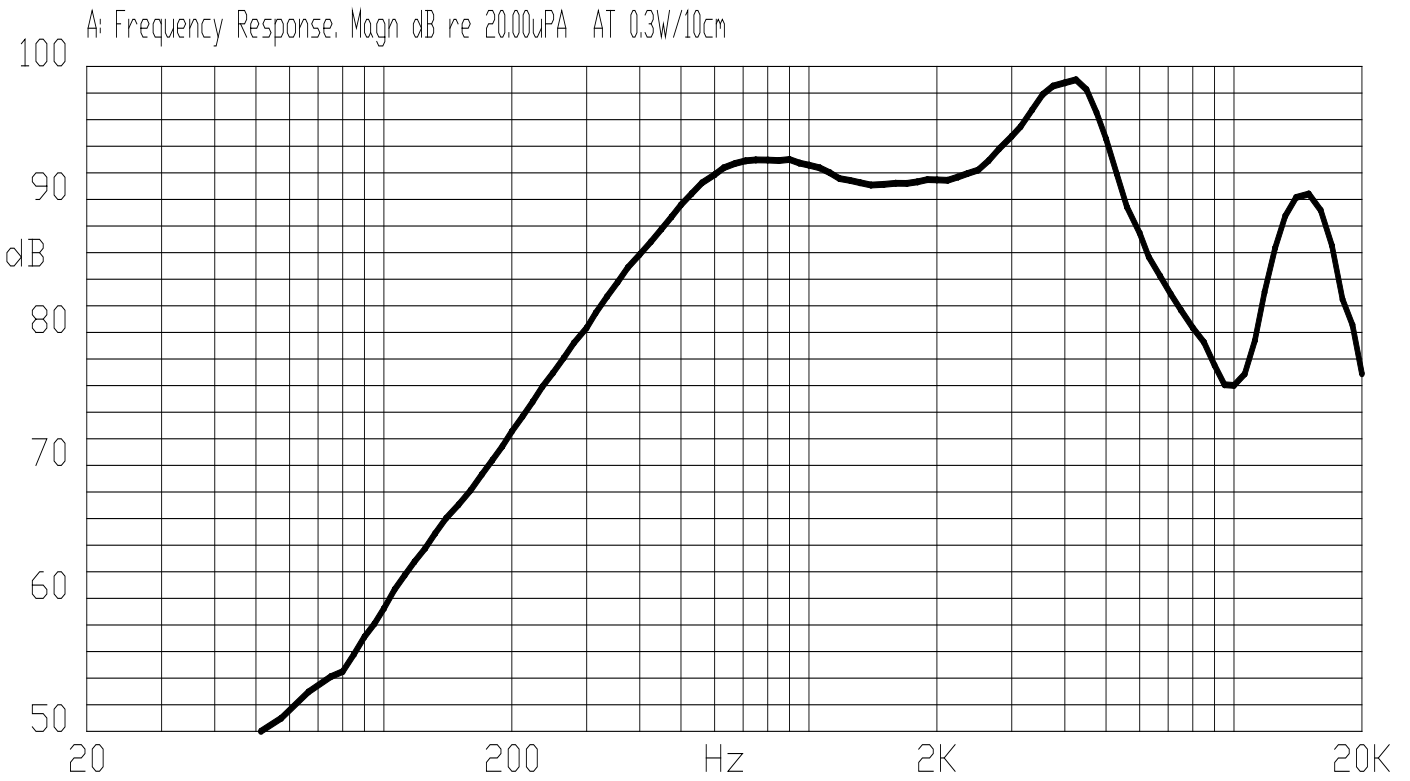
A. SCOPE

This specification applies speaker, **KDMG20008**

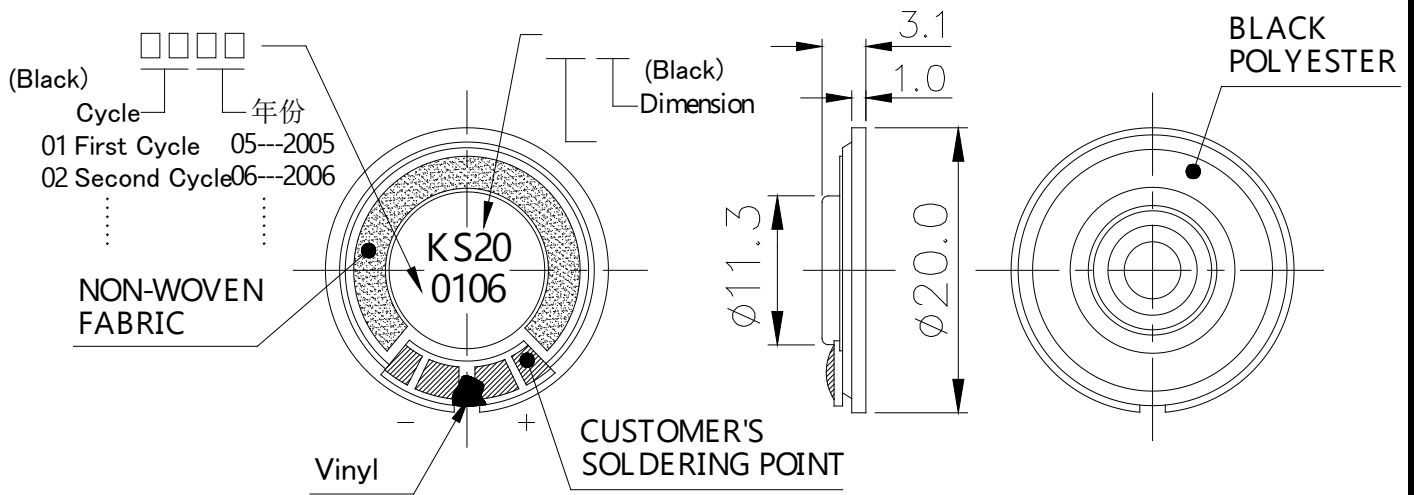
B. SPECIFICATION

No.	Item	Symbol	Unit	Specification	Condition
1	Dimension		mm	\varnothing 20.0 x 3.1	
2	Power Rating		W	Rated. 0.3 / MAX. 0.5	Maximum Power:IEC-60268-5 Filter 60s On/120s Off 10 Cycles (Room TEMP.)
3	Impedance	Ω	ohm	$8 \pm 15\%$	At 1.0kHz 1.0V
4	Resonance Frequency	Fo	Hz	$560 \pm 20\%$	At 1.0V
5	Output S.P.L.		dB	$92 \pm 3\text{dB}(0.3\text{w}/10\text{cm})$ $78 \pm 3\text{dB}(1\text{w}/1\text{m})$	At 1.0k,1.2k,1.5k,2.0kHz (Average figures)
6	Frequency Rang		Hz	Fo---7K	Output S.P.L. $\pm 10\text{dB}$
7	Distortion		%	5% Max.	At 1.0kHz , 0.3W
8	Voice Coil		mm	\varnothing 8.7x \varnothing 0.055 x H1.3 x 8Ω	
9	Magnet		mm	\varnothing 8.0 x 1.0	Nd-Fe-B
10	Flux Density		Gauss	$4800 \pm 10\%$	Min.
11	Operating temp.		$^{\circ}\text{C}$	- 20 ~ +55	
12	Buzze & Rattle				Not be audible at 1.54V sine wave between Fo ~ 7KHz
13	Weight		g	2.3	
14	Material			Metal	
15	Environmental Protection Regulation			RoHS	

C. TYPICAL FREQUENCY RESPONSE CURVE



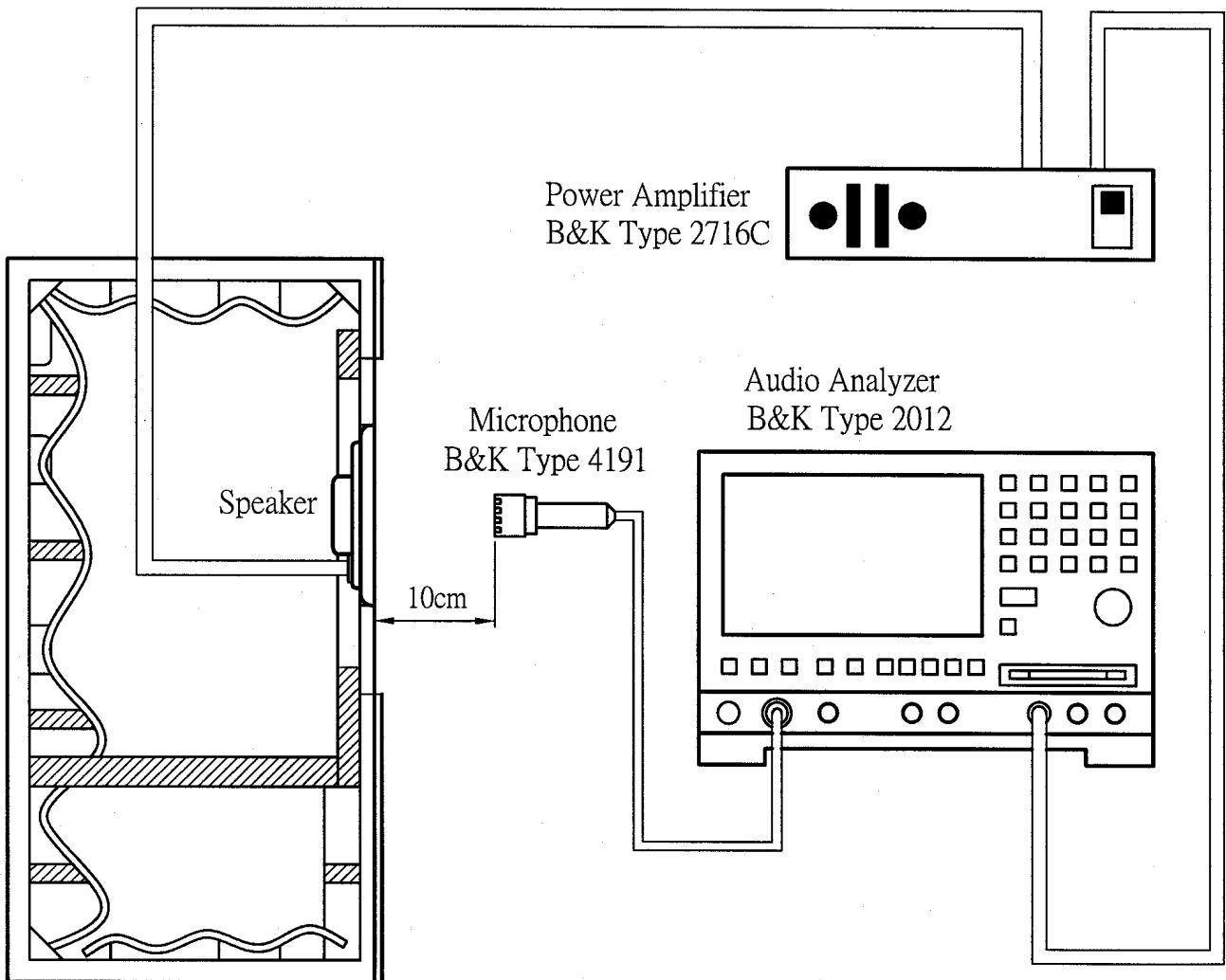
D. APPEARANCE DRAWING



Tol: ± 0.5

Unit: mm

E. MEASUREMENT CIRCUIT



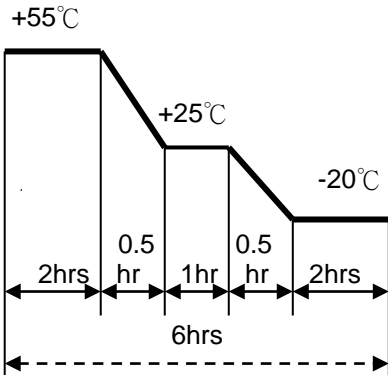
JIS C5531

940mm x 640mm x 1240mm

F. MECHANICAL CHARACTERISTICS

No.	Item	Test condition	Evaluation standard
1	PCB Wire Pull Strength	The pull force shall be applied to double lead wire : Horizontal 3.0N(0.306kg) for 30 seconds.	No damage and cutting off
2	Vibration Test	Speaker shall be measured after being applied vibration of amplitude of 1.5mm with 10 to 55Hz band of vibration frequency to each of 3 perpendicular directions for 2 hours.	No obstacle to be harmful to normal operation; damages, cracks, rusts and distortions.
3	Drop Test	Drop the speakers contained in normal box onto the board 40mm thick 10 times from the height of 75cm.	Should not be audible at 1.54V sine wave between Fo ~ 7KHz

G. ENVIRONMENTAL TEST

No.	Item	Test conditions	Evaluation standard
1	High temp. Test	After being placed in a chamber at +55°C for 96 hours	Being placed for 6 hours at +25°C, speaker shall be measured. No obstacle to be harmful to normal operation; damages, cracks, rusts, etc. Should not be audible at 1.54V sine wave between Fo ~ 7KHz. Fo should meet initial one. S.P.L. deviation of unit should be within ±3dB
2	Low temp. Test	After being placed in a chamber at -20°C for 96 hours.	
3	Humidity test	After being placed in a chamber at +40°C and 90±5% RH relative humidity for 96 hours.	
4	Temp. cycle test	<p>The part shall be subjected to 5 cycles. One cycle shall be consist of:</p> 	

H. Recommended Temperature Profile For Hand Soldering

Hand Soldering
370±10°C / 3±1 Sec

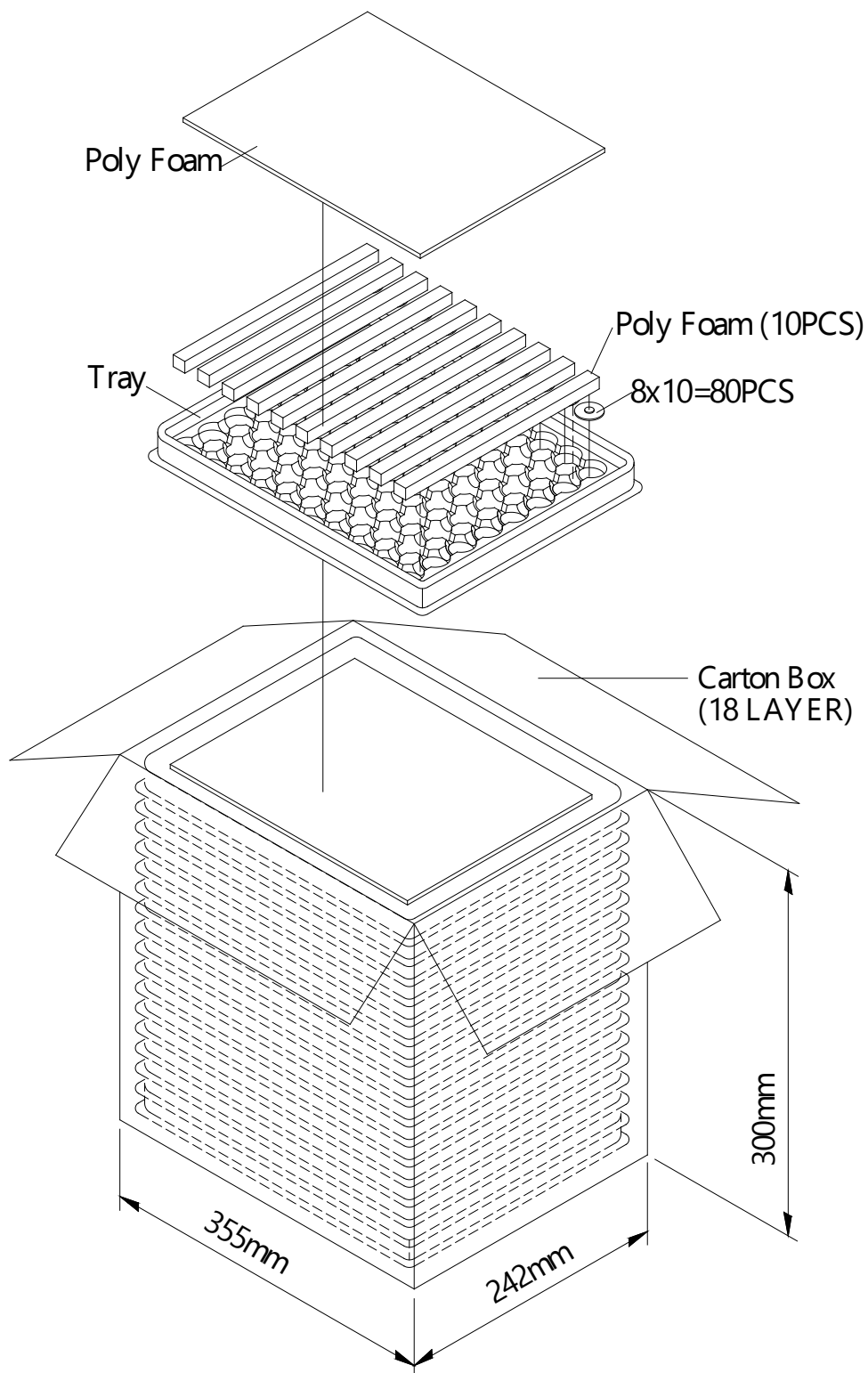
I. RELIABILITY TEST

No.	Item	Test conditions	Evaluation standard
1	Load test	0.3W white noise is applied for 24 hours, at room temp.	Being placed for 1 hours at +25°C, speaker shall be measured. No obstacle to be harmful to normal operation; damages, cracks, rusts, etc. Should not be audible at 1.54V sine wave between Fo ~ 7KHz. Fo should meet initial one. S.P.L. deviation of unit should be within ±3dB.

TEST CONDITION.

Standard Test Condition : a) Temperature : +5 ~ +35°C b) Humidity : 45-85% c) Pressure : 860-1060mbar
Judgement Test Condition a) Temperature : +25 ± 2°C b) Humidity : 60-70% c) Pressure : 860-1060mbar

J. PACKING STANDARD



Tray	340mmx230mmx20mm	1x80PCS=80PCS
Carton Box	355mmx242mmx300mm	80PCSx18=1,440PCS