HOSIDEN

Product Specification

Customer Name

NOKIA

Part Name:	Drawing Number:
2.5mm Headset	
Part Number:	Reception Number:
HS-9	
Model Number:	Reception Date:
0694176	

Remarks:

HBH0101-010121 DB
HBH0101-010121 HB
ATZ0656-500061 PE Ⓐ
ARC0230-010061 DE Ⓐ
ANA1029-500020 PE
ANA1029-500040 PE
EMC Critical Component List
Parts List

Caution

1. Please return this sheet by the desired day after signed in the customer's column.
2. This specification is assures to the use of the unit. Please investigate the influence on the circumference etc. when building in your product using.
3. Please use the product in the condition in specification exchanged. When you use the product in the condition out of the specification or you need some requirement that is not described in the specification please consult us.

For Customer:
Signature of approval

Hosiden

Model Name:
Earphone-Microphone

Product Number:
HBH0101-010121

Specification Number:
HBH0101-010121 SB

Drawing Number:
See Remarks

Section in charge:
Acoustic Engineering Section

Submitting Day:
Apr.6.'04

Desired Returning Date:
Apr.14.'04

	Date	Signature
Written by	Apr.6.'04	
Checked by	Apr.6.'04	
Checked by	Apr.6.'04	
Authorized by	Apr.6.'04	

Reference Number
04-0049

HOSIDEN

HOSIDEN CORPORATION

SPECIFICATION

SPEC No. HBH0101-010121SB

ISSUE DATE Apr. 6. '04

APPLICABLE DIVISION

ACOUSTIC ENGINEERING SECTION

MODEL No.

HBH0101-010121

	NAME	DATE	SIGNATURE
WRITTEN BY	ATSUSHI FUJII	Apr. 6. '04	A.FUJII.
CHECKED BY	KOJI NASU	Apr. 7. '04	
AUTHORIZED BY	Motsuhan. Tsumura	Apr. 08 '04	

DATE	PAGE	LTR	REVISED	AUTHORIZED	DESCRIPTIONS
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Hosiden Corporation
Factory

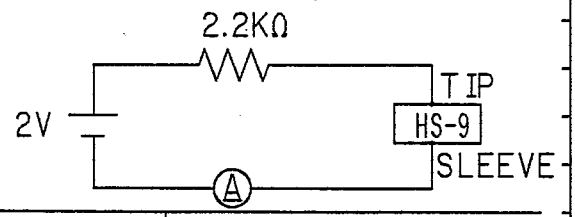
■ OSAKA ☐ TOKYO ☐ Hosiden F.D. ☐

☐ Hosiden TOHOKU ☐ Hosiden KYUSHU ☐ Hosiden SEIKO ☐

HOSIDEN

SPECIFICATIONS

1	適用範囲 SCOPE	本仕様書は、イヤホンマイクロホンについて適用する。 This specification applies earphone microphone.	
2	品番 PARTS NO.	USER TYPE No.HS-9 USER CODE No. 0694176 HOSIDEN PARTS No. HBH0101-010121	
3	外観 APPEARANCE	図番: HBH0101-010121 DB 参照 As shown in DWG No. HBH0101-010121 DB	
	3-1	コード長 CABLE LENGTH	1350±50 mm
	3-2	重量 NET WEIGHT	約 16 g APPROX.16 g
	3-3	梱包状態 PACKAGING METHOD	図番: HBH0101-010121 HB 参照 As shown in DWG No. HBH0101-010121 HB
4	標準試験条件 STANDARD TEST CONDITION	試験状態は指定のない限り常温(15~35°C)、常湿(45~85%)、常気圧(860~1060hpa)とする。ただし、判定に疑義を生じた場合は、温度20±2°C、相対湿度60~70%、気圧860~1060hpaとする。(JIS C5502 6項、JIS C5532 3-2項) The test conditions,unless otherwise specified shall be 15~35°c (Normal Temperature),45~85%(Normal Relative Humidity),and 860~1060hpa (normal Atmospheric Pressure).However,if there arises a doubt in judgement the test conditions shall be as follows: TEMPERATURE 20±2°C HUMIDITY 60~70%(RH) ATMOSPHERIC PRESSURE 860~1060hpa (JIS C5502 6,JIS C5532 3-2)	
5	電気仕様 ELECTRICAL SPECIFICATIONS		
	5-1	マイクロホン MICROPHONE	*MODEL No. HUC0002-010031
	5-1-1	感度 SENSITIVITY	-41±4.5 dB (0dB=1V/Pa,at1kHz) *図4の測定回路に基づく。 *Based on the measurement circuit in Fig.4.
	5-1-2	インピーダンス IMPEDANCE	MAX.2.2kΩ(at 1kHz) *図4の測定回路に基づく。 *Based on the measurement circuit in Fig.4.

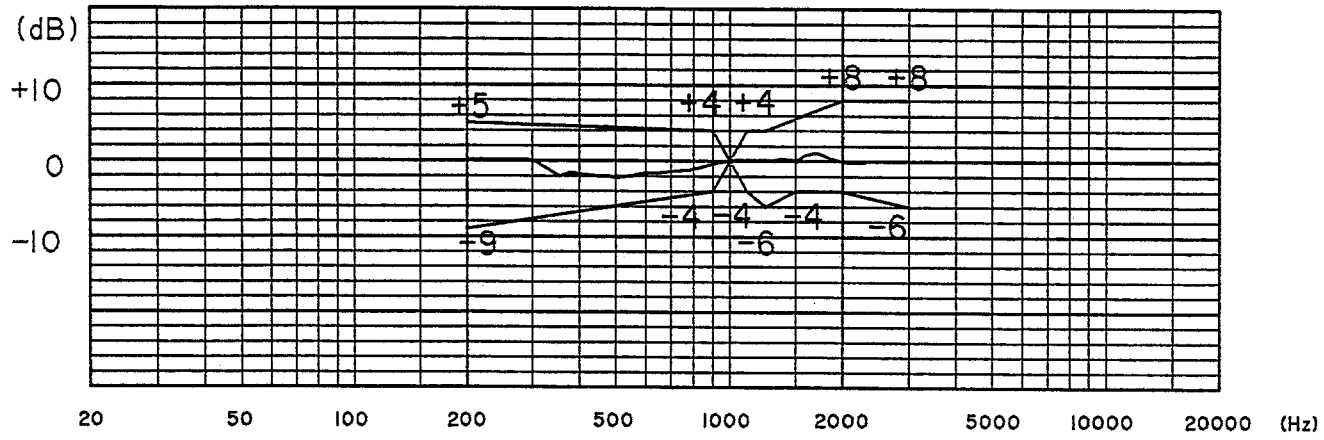
5-1-3	周波数特性 FREQUENCY RESPONSE	図1 参照 As shown in Fig.1
5-1-4	指向特性 DIRECTIVITY	無指向性 OMNI-DIRECTIONAL
5-1-5	静電誘導雑音 ELECTROSTATIC INDUCTION NOISE	供試マイクロホン本体又は金属部分に手を近づけるか、あるいは触れた時、静電誘導による異常雑音が生じないこと。 No abnormal noise shall occur due to induction caused by hand approach and contact.
5-1-6	極性 POLARITY	JIS C5502 8 基準 Based on JIS C5502 8
5-1-7	基準電圧 SUPPLY VOLTAGE	D.C. 2V
5-1-8	感度変動 SENSITIVITY DEGRADATION	基準電圧D.C. 2Vと比較してD.C. 1.5Vの時-4 dB以内 2VD.C./1.5VD.C.SENSITIVITY ALLOWANCE: -4dB MAX.
5-1-9	マイクロホン測定方法 MICROPHONE MEASUREMENT METHOD	図3 参照 As shown in Fig.3
5-1-10	マイクロホン測定回路 MICROPHONE MEASUREMENT CIRCUIT	図4 参照 As shown in Fig.4
5-1-11	消費電流 CURRENT CONSUMPTION	I ≦0.6mA
	測定回路 MEASURMENT CIRCUIT	
5-1-12	S/N比 SIGNAL NOISE RATIO	55 dB MIN. (1Pa 1kHz A CURVE)

5-2	インナー ホン INNERPHONE		
5-2-1	基準入力 RATED INPUT POWER		1mW<179mV> * SINGLE INNERPHONE BASED ON EIAJ RC-8124
5-2-2	最大許容入力 MAX INPUT POWER		5mW<400mV> * SINGLE INNERPHONE BASED ON EIAJ RC-8124
5-2-3	インピー ダンス IMPEDANCE		32Ω±25%(インナー ホン単体) (INNERPHONE UNIT)
5-2-4	動作 BUZZ AND RATTLES		基準入力相当の正弦波信号入力を加え 音質、音量等動作に異常なきこと。 Shall be normal input power 1mW<179mV> program source or sine wave.
5-2-5	出力音圧レベル SOUND PRESSURE LEVEL		101±4dBSPL (0dB=0.00002Pa,at 1kHz,1mW<179mV>)
5-2-6	周波数特性 FREQUENCY RESPONSE		図2 参照 As shown in Fig.2
5-2-7	インナー ホン測定方法 INNERPHONE MEASUREMENT METHOD		図5 参照 As shown in Fig.5
5-2-8	インナー ホン測定回路 INNERPHONE MEASUREMENT CIRCUIT		図6 参照 As shown in Fig.6
5-2-9	最大出力音圧 MAX SOUND PRESSURE LEVEL		119.7dB(0dB=0.000002Pa, 1mW<179mV>,200Hz~5kHz)
5-3	クロストーク (RX➔TX) CROSSTALK (RX➔TX)		カップラー(AGG9267)に装着した状態でインナー ホンに−35 dB v入力した時にマイク出力(200H z~2 kH z までの平均値)が−85 dB以下であること。 Mic output (average from 200Hz~2kHz)should be less tham -85dBv when -35dBv is inputed into innerphone equipped with coupler AGG9267.

SPECIFICATIONS

図1

FIG.1 標準周波数特性 (マイクロホン) / STANDARD FREQUENCY RESPONSE (MICROPHONE)



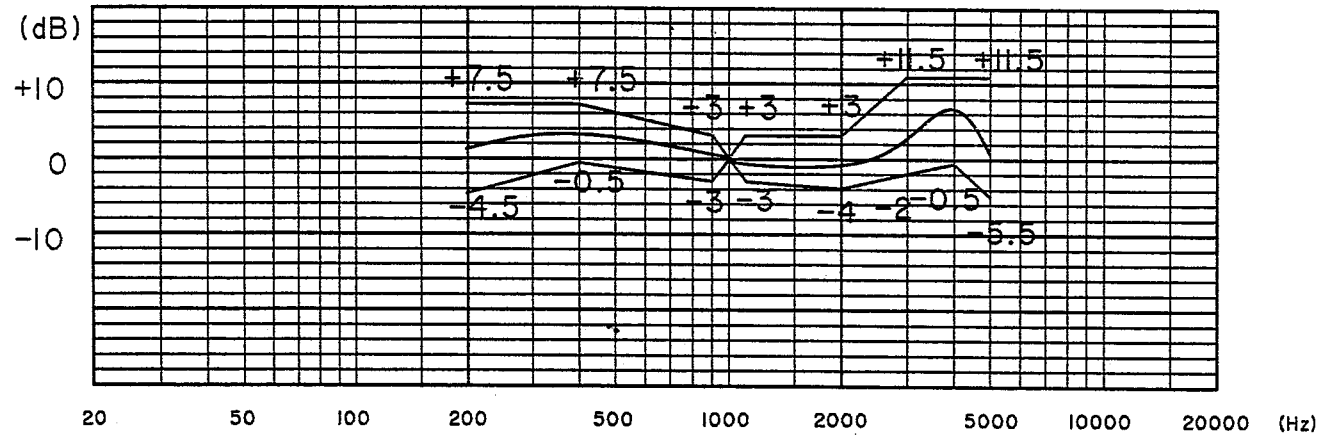
測定系 / ACOUSTICAL MEASUREMENT

* HETERODYNE ANALYZER : TYPE 2012 (B & K)
* MEASURING MICROPHONE : TYPE 4133 & 4191 (B & K)
* ARTIFICIAL VOICE : TYPE 4227 (B & K)

図2

FIG.2標準周波数特性 (インナーホン) / STANDARD FREQUENCY RESPONSE (INNERPHONE)

INPUT: SINE WAVE 1mW



測定系 / ACOUSTICAL MEASUREMENT

* HETERODYNE ANALYZER : TYPE 2012 (B & K)
* HETERODYNE MICROPHONE : TYPE 4134 or 4192 (B & K)
* ARTIFICIAL EAR : TYPE 4153 (B & K)
* COUPLER : HOSIDEN AGG9267

SPECIFICATIONS

図 3
FIG.3: MICROPHONE MEASUREMENT METHOD

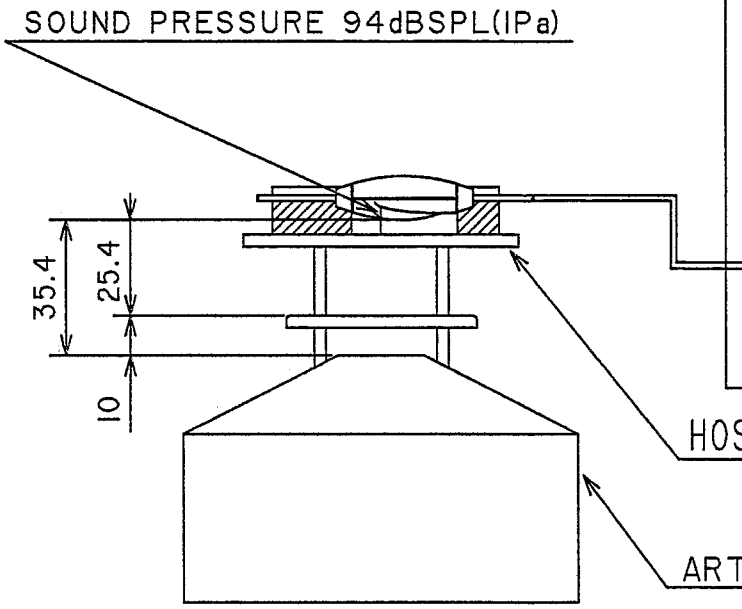


図 4
FIG.4: MEASUREMENT CIRCUIT

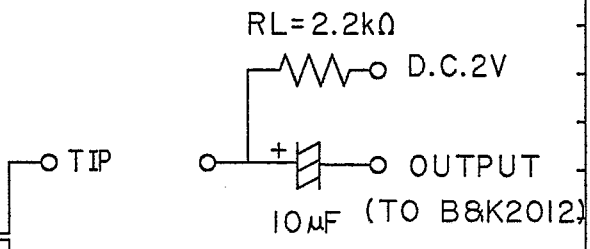


図 5
FIG.5: INNERPHONE MEASUREMENT METHOD

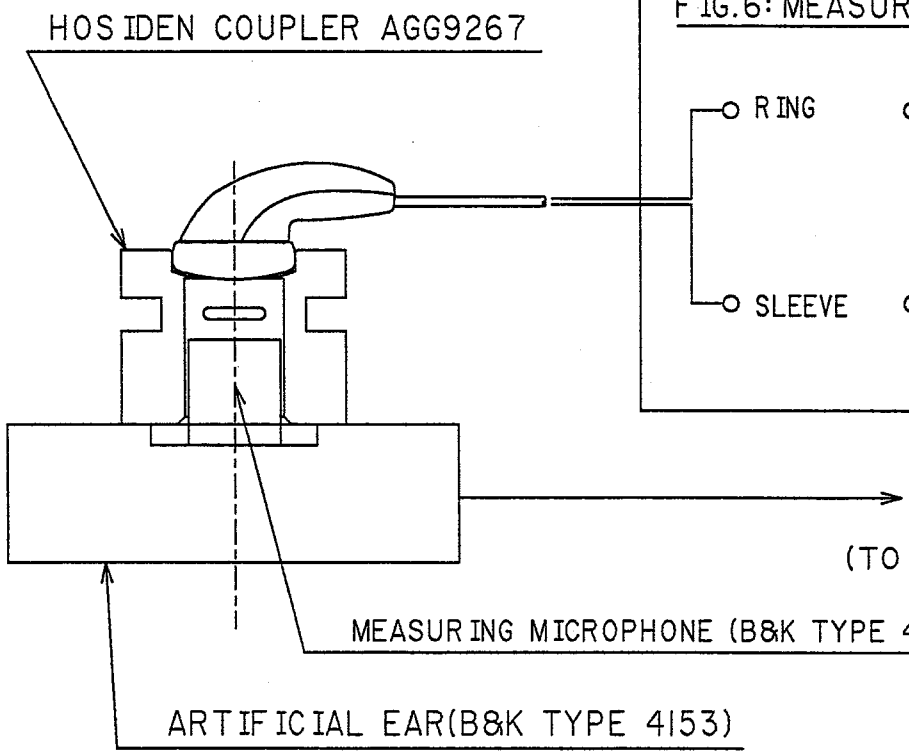
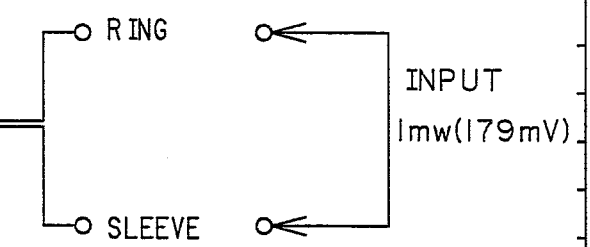
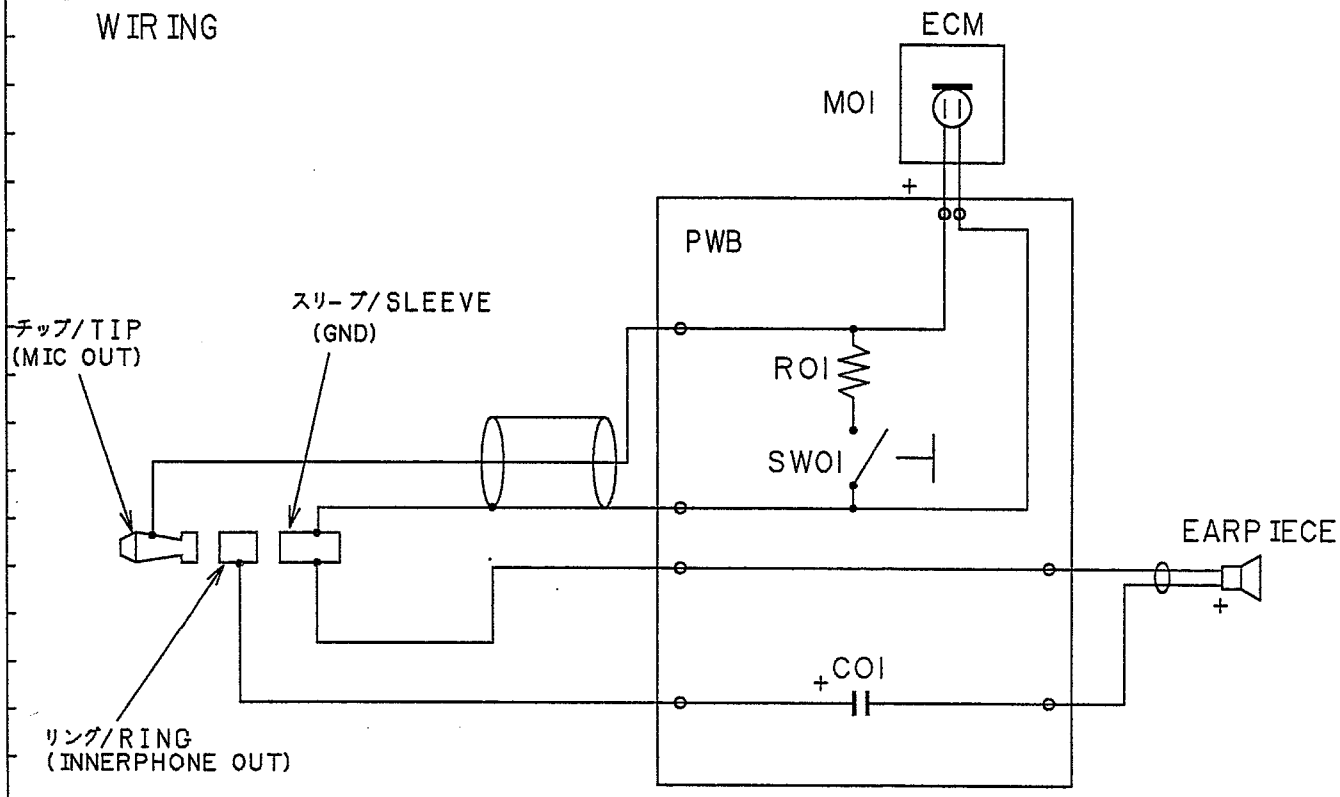


図 6
FIG.6: MEASUREMENT CIRCUIT



6 配線仕様
WIRING



USED COMPONENTS ON PWB:

ROI	22Ω
COI	22μF
SWOI	CITIZEN LUMI SWITCH LSI6A2-T
MOI	EMC MIC
	(HUC0002-010031)
	FET
	Capacitor : 3.3nF
	Capacitor : 10pF
	Resistor : 1kΩ
	Resistor : 100Ω
	Varistor : AVX or TDK

7 機械的仕様
MECHANICAL SPECIFICATIONS

7-1 コード引っ張り試験 CABLE PULL TEST

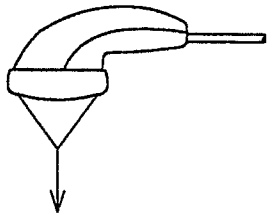
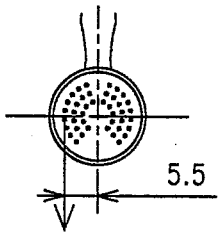
下記1 分間の引っ張り試験後、導通があること。
Should not be open after test. With 1 minute static pressure.

	荷重 (LOAD)(N)
インナーホンハウジング、コード間 BETWEEN INNERPHONE HOUSING AND CABLE	9.8
マイクロホンハウジング、コード間 BETWEEN MICROPHONE HOUSING AND CABLE	9.8
プラグ、コード間 BETWEEN CONNECTER AND CABLE	9.8

7-2 コード屈曲試験 CABLE BENDING TEST

180° の下記屈曲試験後、導通があること。
Should not be open after test.At 180° bending angle.

	荷重 (LOAD)(N)	毎分回数 (TIMES/MINUTE)	回数 (TIMES)
コード単体 (屈曲 R4) CABLE UNIT(BENDING R4)	1本 1.96 1pce.	60	4000
	2本 1.96 2pcs.	60	15000
インナーホンハウジング、コード間 BETWEEN INNERPHONE HOUSING AND CABLE	0.98	20	2000
マイクロホンハウジング、コード間 BETWEEN MICROPHONE HOUSING AND CSBLE	1本 0.49 1pcs.	20	2000
	2本 0.98 2pcs.	20	2000
プラグ、コード間 BETWEEN CONNECTER AND CABLE	1.96	60	2000

7-3	インナー ホンハウジング・ドライバー 取付強度 PULL STRENGTH BETWEEN INNERPHONE HOUSING AND DRIVER	下記試験に対し、異常の無いこと。/Shall be normal after test.	
		(1) 引っ張り方向 PULL STRENGTH  静圧9.8N /1分 STATIC PRESSURE 9.8N 1minute	(2) 回転方向 MOMENT STRENGTH  静圧9.8N /1分 STATIC PRESSURE 9.8N 1minute

8	温度範囲 TEMPERATURE RANGE		
8-1	使用温度範囲 WORKING TEMPERATURE RANGE	-20°C~60°C	
8-2	保存温度範囲 STORAGE TEMPERATURE RANGE	-40°C~80°C	

9	信頼性試験 RELIABLE TEST		
9-1	低温試験 LOW TEMPERATURE TEST	下記試験後,初期感度に比較して±4dB以内であること。 Sensitivity difference shall be within ±4 dB after test. 温 度 / TEMPERATURE : -20°C 時 間 / DURATION : 72 HOURS	
9-2	高温試験 HIGH TEMPERATURE TEST	下記試験後,初期感度に比較して±4dB以内であること。 Sensitivity difference shall be within ±4dB after test. 温 度 / TEMPERATURE : 60°C 時 間 / DURATION : 72 HOURS	
9-3	湿度試験 HUMIDITY TEST	下記試験後,初期感度に比較して ±4dB以内であること。 Sensitivity difference shall be within ±4dB after test. 温 度 / TEMPERATURE : 40°C 相対湿度 / RELATIVE HUMIDITY : 90% 時 間 / DURATION : 72 HOURS	

9-4	低温保存試験 LOW TEMPERATURE STORAGE TEST	下記試験後，常温に2 時間放置して動作に支障のないこと。 Shall be normal after test. 温　度 / TEMPERATURE : -40°C 時　間 / DURATION : 72 HOURS 試験後放置時間 / DURATION OF RECOVERY: 2HRS OF CONDITIONS AT 20°C
9-5	高温保存試験 HIGH TEMPERATURE STORAGE TEST	下記試験後，常温に2 時間放置して動作に支障のないこと。 Shall be normal after test. 温　度 / TEMPERATURE : 80°C 時　間 / DURATION : 72 HOURS 試験後放置時間 / DURATION OF RECOVERY: 2HRS OF CONDITIONS AT 20°C
9-6	温度サイクル試験 TEMPERATURE CYCLES TEST	温度−20°C 中に1 時間→常温1 時間→60°C 中に1 時間→常温1 時間を1 サイクルとして、3 サイクル後、常温に2 時間 放置して初期感度に比較して ±3 dB 以内であること。 Sensitivity difference shall be within ±3 dB after test. 温 度 / TEMPERATURE : -20°C → 20°C → 60°C → 20°C 時 間 / DURATION : (1hr) (1hr) (1hr) (1hr) サイクル数/ CYCLES : 3 CYCLES 試験後放置時間 / DURATION OF RECOVERY: 2HRS OF CONDITIONS AT 20°C
9-7	振動試験 VIBRATION TEST (UNDER THE PACKAGE)	梱包状態にて下記振動を加え、異常のないこと Shall be normal after test. 周波数 / FREQUENCY : 10Hz TO 55Hz 振 幅 / AMPLITUDE OF VIBRATION: 2mm 時 間 / DURATION : 2 HRS IN EACH OF 3 AXES
9-8	落下試験 DROP TEST	梱包状態でにて1.0m の高さよりコンクリートの床上に 3 方向、各1 回落下させた後、動作に異常のないこと。 Shall be normal after test. 落下方向 / THE DIRECTION OF DROP : 3 DIRECTION 高さ / HEIGHT : FROM 1m(ON THE CONCRETE)
9-9	静電破壊試験 ELECTROSTATIC DISCHARGE TEST	10 kV の電圧で200 pF の容量に充電して100 Ωの抵抗を介して3 回放電させた後、動作に異常のないこと。 Shall be normal after test. 電 圧 / VOLTAGE : 10kV 容 量 / CAPACITY : 200pF 抵 抗 / RESISTANCE: 100Ω

HOSIDEN

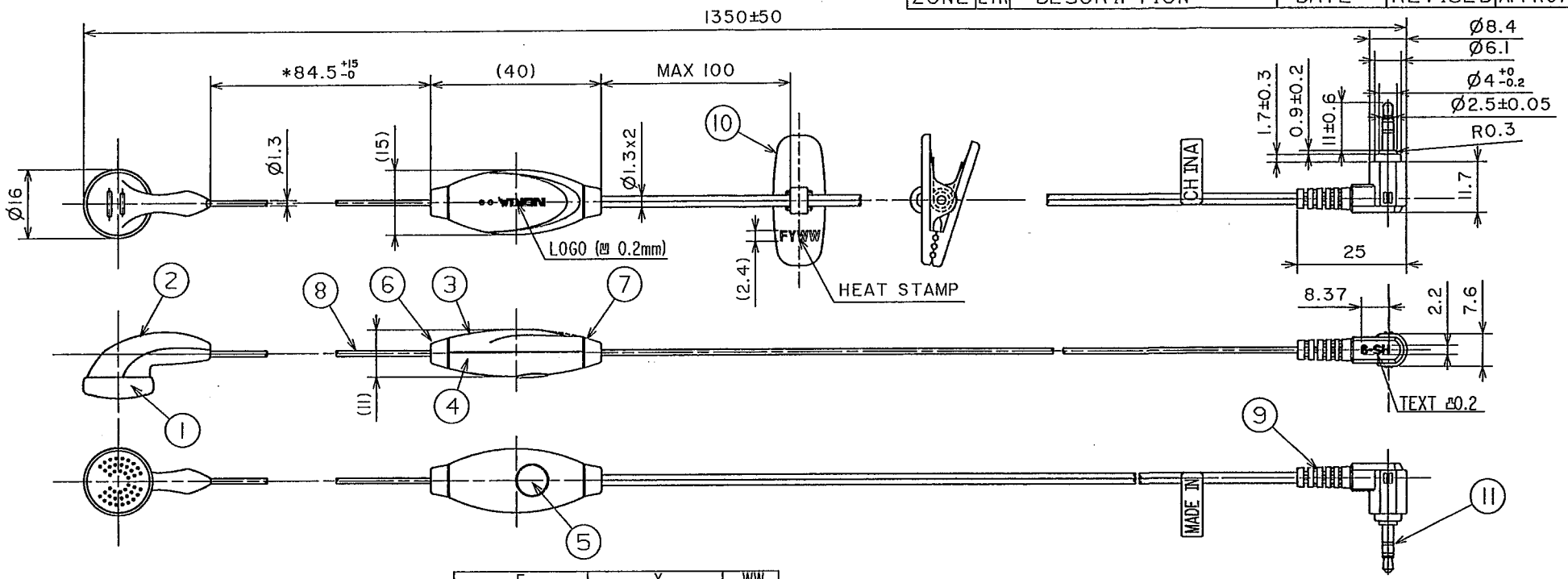
SPECIFICATIONS

11	適用範囲 SCOPE		本規格は、イヤホンマイクロホンHBH0101のスイッチ単品の性能について適用する。 This specfication applies switch unit of earphone microphone.
12	機械的性能 MECHANICAL SPECIFICATIONS		
	12-1	動作力 ACTUATING FORCE	1.57±0.49 N (center of switch)
	12-2	ストローク ACTUATING STROKE	0.2 ± 0.1mm (center of switch)
	12-3	耐荷重 STATIC LOAD TEST	スイッチ中央のストローク方向へ29.4Nの静荷重を15秒間加えた後、機械的、電気的に異常のないこと。 Shall be normal in electrical and mechanical characteristics after 15 seconds static load 29.4N in the center of switch.
13	電気的性能 ELECTRICAL SPECIFICATIONS		
	13-1	最大定格 MAX.RATED	D.C. 12V,20mA
	13-2	接触抵抗 CONTACT RESISTANCE	100mΩ 以下 (スイッチ中央部に3.14Nの静荷重を加え、1 kHz微小電流接触抵抗計にて測定する。) 100mΩ MAX. Mesured with 1kHz micro current milliohmmeter in adding static load 3.14N on the center of switch.
	13-3	絶縁抵抗 INSULATION RESISTANCE	100MΩ 以上 DC100Vの電圧を、端子間へ1分間印加する。 100MΩ MIN. With 1 minute D.C. 100V between terminals.
	13-4	動作寿命 LIFE TEST	DC12V,5mAの抵抗負荷、押圧力2.35N,動作速度2回/秒にて、50万回動作後、以下の条件を満たすこと。 Shall be satified with following spacifications after the switch is operated 500 thousands times at a rate of 2 cycles /secound with an operating force 2.35N under resistive load D.C.12V,5mA 接触抵抗 /CONTACT RESISTANCE :10Ω以下 /10Ω MAX. 絶縁抵抗 /INSULATION RESISTANCE :10MΩ 以上 /10MΩ MIN. 動作寿命 /ACTUATING FORCE :初期値の±30% /INITIAL VALUE±30%

14	バージョンナンバー管理 Version Number Control	HW No. 0.4 SW No. N/A MV No. 0.3

HOSIDEN

REVISION					
ZONE	LTR	DESCRIPTION	DATE	REVISED	APPROVED



F		Y		WW
Factory(F)	Letter	Year(Y)	Letter	Week(WW)
QINGDAO	Q	1993	A	01
SUBARU	E	・・・	・・・	02
SEIKI	S	・・・	・・・	03
WAKAYAMA	W	2003	K	04
NTP	N	2004	L	05
		2005	M	06
		2006	N	07
		2007	O	08
		2008	P	・・・
		2009	Q	・・・
		2010	R	・・・
		2011	S	・・・
		2012	T	・・・
		・・・	・・・	52

11	ラベル/LABEL	1		MADE IN JAPAN or MADE IN CHINA
10	クリップAss'y/CLIP Ass'y	1	PC	黒/BLACK
9	プラグ付コード/CABLE WITH PLUG	1	TPE	黒/BLACK
8	コード/CABLE	1	TPE	黒/BLACK
7	キャップ/CAP	1	ABS	黒/BLACK
6	キャップ/CAP	1	ABS	黒/BLACK
5	ノブ/KNOB	1	ABS	黒/BLACK
4	マイクハウジング/MIC.HOUSING	1	ABS	黒/BLACK
3	マイクハウジング/MIC.HOUSING	1	ABS	黒/BLACK
2	ハウジング/HOUSING	1	ABS	黒/BLACK
1	ドライバー/DRIVER	1		黒/BLACK
LTR	PART NAME	QTY	MATERIAL	

注/ NOTE

1. 指定なき寸法公差は±0.3とする.
   Unless otherwise specified, dimensional tolerances shall be ±0.3.
2. 本外観図はイヤホンマイクロホンHBH0101-010121に適用する.
   This specification covers Earphone microphone model HBH0101-010121.
3. 製品規格については,図面HBH0101-010121SBに示す.
   Earphone microphone shall conform to specification DWG.No.HBH0101-010121SB.
4. プラスチック成形品の外観レベルはNOKIA MOSS 800/6 CLASS Ⅰに基づく.
   This appearance level of plastic parts based on NOKIA MOSS 800/6 CLASS I.

DWN	A.Ueno.	DATE	Apr. 6. '04	SCALE 1:1	NAME イヤホンマイクロホン外観図 EARPHONE MICROPHONE LINE DIMENSIONS
CHKD	K.Nasu	DATE	Apr. 7. '04	3RD ANGLE PROJECTION	MODEL NO. HBH0101-010121
APVD	M.Soshi	DATE	Apr. 08 '04		DWG NO. HBH0101-010121 DB

Hosiden Corporation

FACTORY: ■OSAKA □TOKYO □F.D. □ □TOHOKU □KYUSHU □SEIKO □

~~UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS INCHES TOLERANCE ON DECIMALS~~ ~~FRACTIONALS±~~ ~~ANGLES±3°~~ DO NOT SCALE DRAWING

LAY 0,40,60,80,110
A.HBH.0101.011210.D

SHEET 1 OF 1

永久保存 GIJ-0010-00

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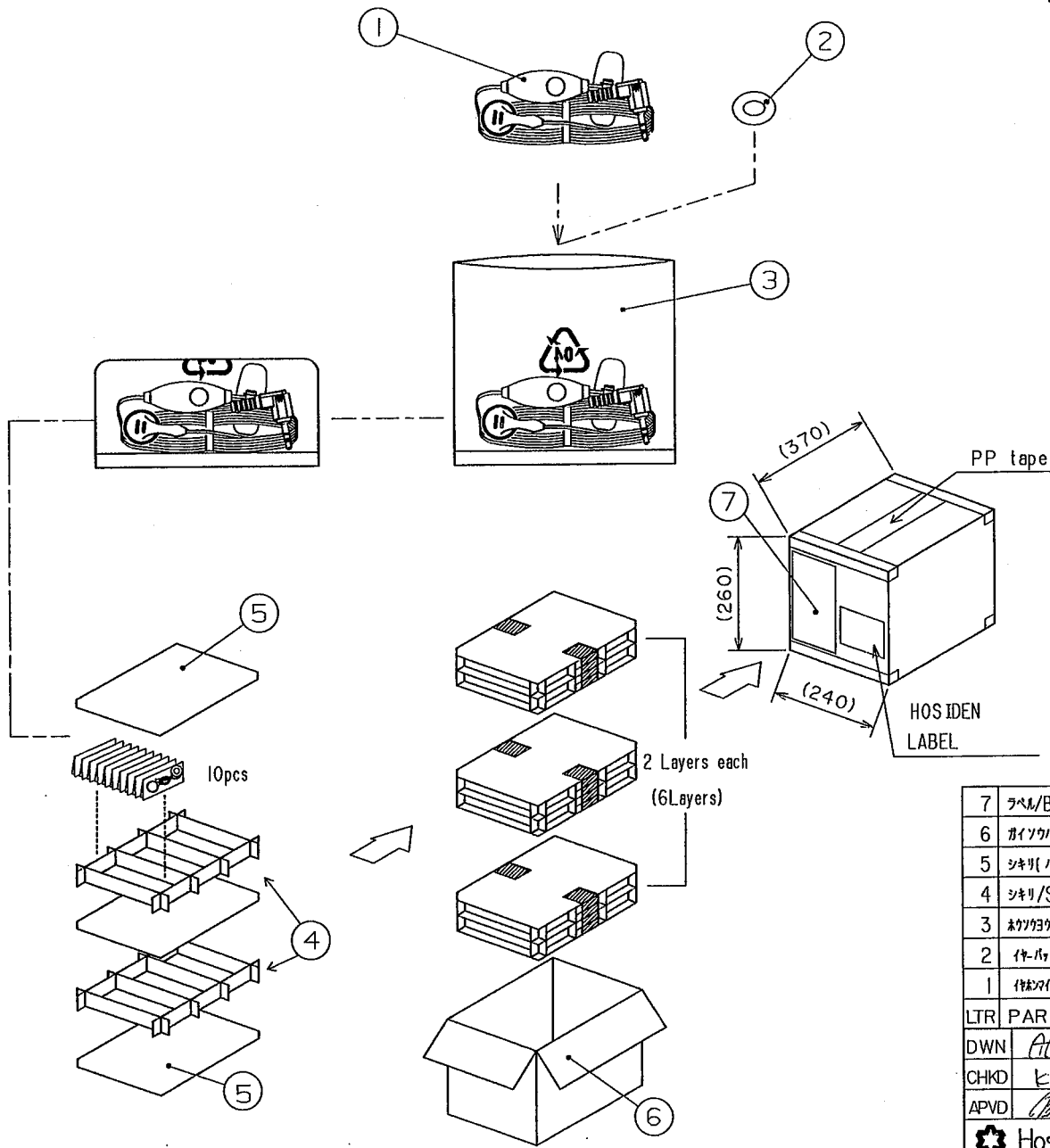
REVISION					
ZONE	LTR	DESCRIPTION	DATE	REVISED	APPROVED



1. ① イヤホンマイクと② イヤーパッドを③ ホウソウヨウコモノに入れる
   Put ① Earphone microphone and ② Ear pad in ③ Polyethylene bag.
2. 一升にイヤホンマイクロホン10個詰めの30個入りとする
   Put 10 pcs Earphone microphones into each segregated square of ④ Separator. 30 pcs earphone microphones per layer.
3. 2段ごとに PPテープで止め、⑥マスターカートンに合計6段詰める。
   Fix 2layers each with transparent P.P.tape and put 6layers intotal into ⑥ Master carton.
4. マスターカートンをPPテープで止める ⑦ バーコードラベルを貼る
   Seal Master carton with transparent P.P.tape.
   Put ⑦ Barcode label on Master carton.

LTR	PART NAME	QTY	MATERIAL	
7	ラベル/BARCODE LABEL	1		BARCODE LABEL
6	ガイソウバコ/CARTON BOX	1	W CARTON	MASTER CARTON
5	シキリ(パッド)/PAD	9	S CARTON	
4	シキリ/SEPARATOR	6	S CARTON	
3	ホウソウヨウコモノ/POLYETHYLENE BAG	180		
2	イヤーパッド/EAR PAD	180		
1	イヤホンマイク/EARPHONE MICROPHONE	180		

DWN	A.Fujii	DATE	Apr. 6. '04	SCALE NTS	NAME イヤホンマイクロホン/EARPHONE MICROPHONE 梱包規格図/PACCKING SPEC
CHKD	K. Nasu	DATE	Apr. 7. '04	3RD ANGLE PROJECTION	
APVD	[signature]	DATE	Apr. 8'04		MODEL NO. HBH0101-010121

Hosiden Corporation
FACTORY: ■OSAKA □TOKYO □F.D. □ □TOHOKU □KYUSHU □SEIKO □

DWG NO. HBH0101-010121 HB

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS INCHES TOLERANCE ON DECIMALS± FRACTIONALS± ANGLES± DO NOT SCALE DRAWING

A.HBH.0101.011210.H

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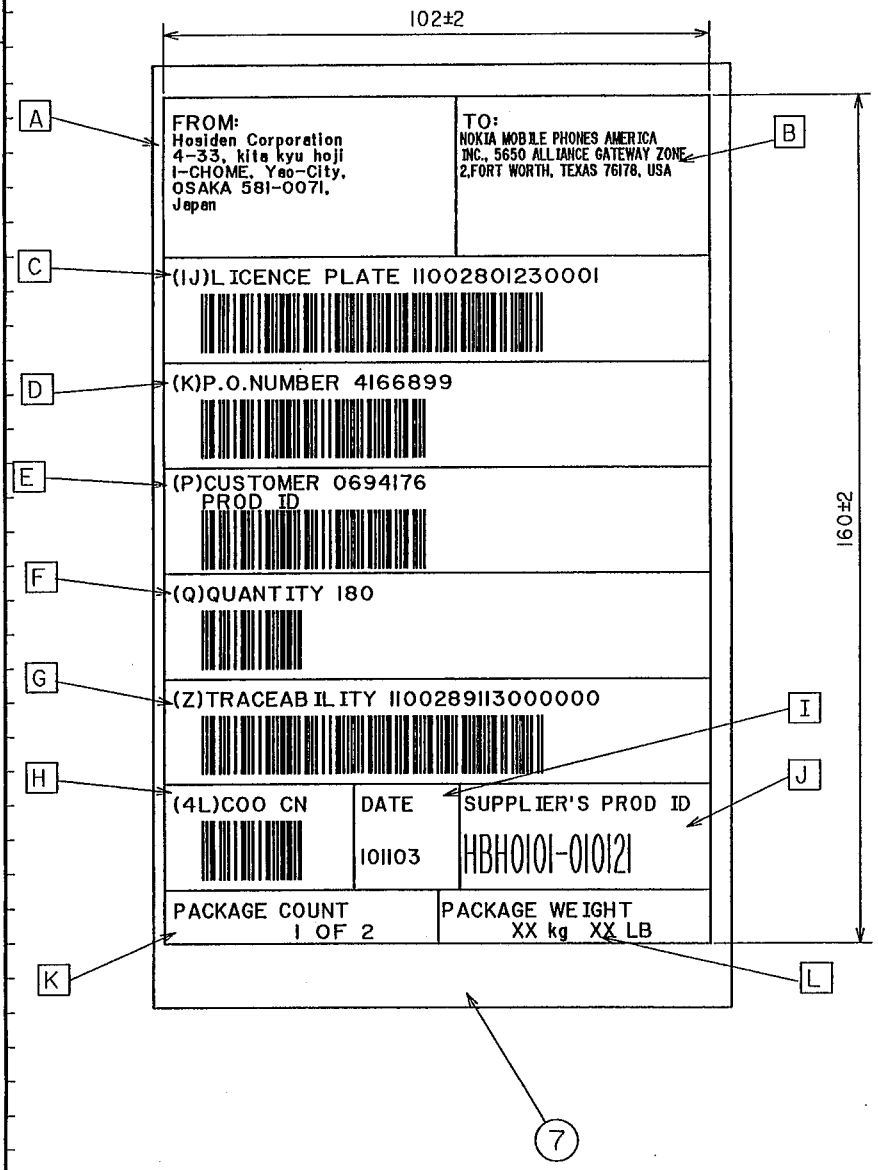
REVISION					
ZONE	LTR	DESCRIPTION	DATE	REVISED	APPROVED

Barcode label of carton box (Receiving package label)



Letter

A	Shipping Information Field	Fixed	Supplier's name and address
B	Shipping Information Field	Variable	Receiver's name and address
C	(1J) Licence Plate	Variable	1100280123000 1
D	(k) Purchase Order Number	Variable	4166899
E	(P)NMP Product Identification	Fixed	0694176
F	(Q)Quantity	Variable	180
G	(Z)Traceability	Variable	1100289113000000
H	(4L) Country of Origin	Variable	CN
I	Date	Variable	101103(DDMMYY)
J	Supplier's Product ID/Version Number(S)	Fixed	HBH0101-010121
K	Package Count	Variable	1 of 2
L	Package Weight	Variable	XXkg XXLB

Code 39 is used for all barcode symbols. <All 1: 3>

LTR	PART NAME	QTY	MATERIAL	REMARK
DWN	Atojii.	DATE	Apr. 6. '04	
CHKD	K. Nasu	DATE	Apr. 7. '04	
APVD		DATE	Apr. 8 '04	

SCALE NTS
3RD ANGLE PROJECTION

Hosiden Corporation
FACTORY: ■OSAKA □TOKYO □KOBE □F.D. □TOHOKU □KYUSHU □SEIKO □

NAME イヤホンマイクロホン/EARPHONE MICROPHONE
個包装仕様/PACKING SPEC
MODEL NO. HBH0101-010121
DWG NO. HBH0101-010121 HB

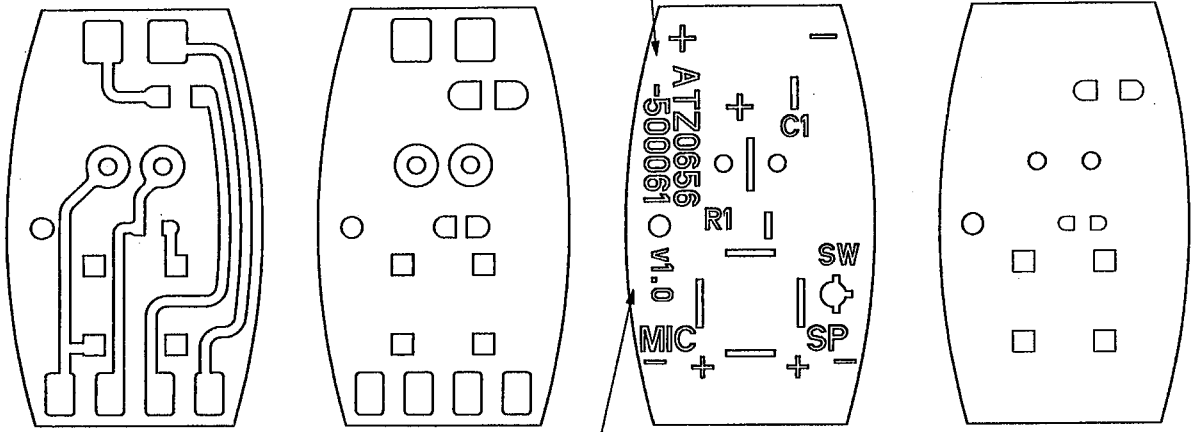
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS INCHES TOLERANCE ON DECIMALS±0.3
FRACTIONALS± ANGLES± DO NOT SCALE DRAWING

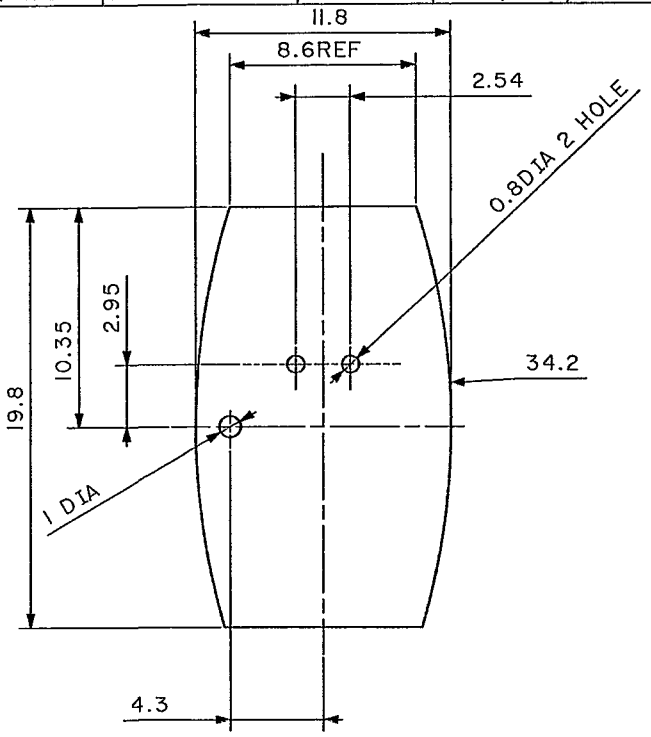
A.HBH.0101.0112II.H

永久保存 GIJ-0010-00

HOSIDEN

REVISION					
ZONE	LTR	DESCRIPTION	DATE	REVISED	APPROVED
H10 D10	A	(1) Added explanation of part # (2) Added explanation of vers.#	APR.2.'04	A.Fujii.	





1	ATZ0656-500061						
LTR	PART NAME		QTY	MATERIAL			
DWN	A.FUJII	DATE	DEC.24.'03	SCALE NTS	NAME PWB		
CHKD	K.NASU	DATE	DEC.25.'03	3RD ANGLE PROJECTION			
APVD	M.TSURUHARA	DATE	DEC.25.'03		MODEL NO.		

Hosiden Corporation

FACTORY: ■OSAKA □TOKYO □F.D. □ □TOHOKU □KYUSHU □SEIKO □

DWG NO. ATZ0656-500061 PE Ⓐ

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS INCHES TOLERANCE ON DECIMALS± FRACTIONALS± ANGLES± DO NOT SCALE DRAWING

A.ATZ.0656.510061.E

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SHEET | OF |

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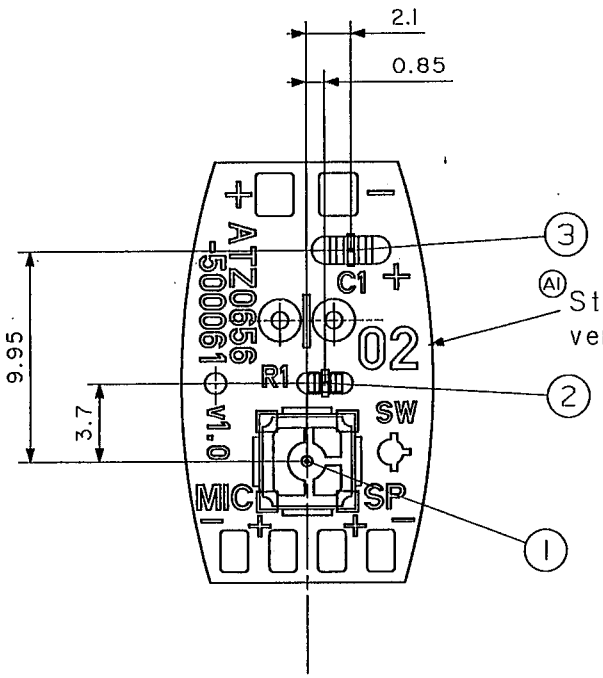
REVISION					
ZONE	LTR	DESCRIPTION	DATE	REVISED	APPROVED
G9 F3	A	(1) Added explanation of Vers.# (2) Added name & part No. of capacitor Maker	APR.2.'04	A.FUJII	



(A1) Stamp "02" that is version # of PWB Assy.

No	Ref.No	X axis	Y axis	Name	Remarks
1	SW	0.0	0.0	Switch	CITIZEN LS16A2 h=0.35
2	RI	0.85	3.7	Resistor	22Ω,1608Type
3	CI	2.1	9.95	Capacitor	22μF,4V,2012Type (A2) nichicon F92G226MPA

1	ARC0230-010061					
LTR	PART NAME		QTY	MATERIAL		
DWN	A.FUJII	DATE	DEC.24.'03	SCALE 4:1	NAME	PWB A'ssy
CHKD	K.NASU	DATE	DEC.25.'03	3RD ANGLE PROJECTION	MODEL NO.	
APVD	M.TSURUHARA	DATE	DEC.25.'03			

Hosiden Corporation

FACTORY: ■OSAKA □TOKYO □F.D. □ □TOHOKU □KYUSHU □SEIKO □

DWG NO. ARC0230-010061 DE (A)

SHEET 1 OF 1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS INCHES TOLERANCE ON DECIMALS±0.3
FRACTIONALS± ANGLES± DO NOT SCALE DRAWING A.ARC.0230.I10061.E

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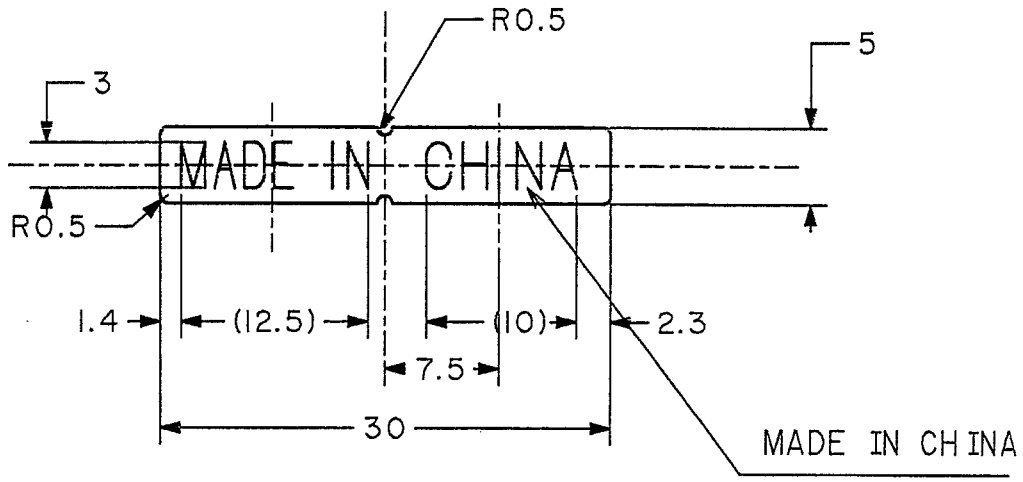
REVISION					
ZONE	LTR	DESCRIPTION	DATE	REVISED	APPROVED

N A



Unless otherwise specified, dimensional tolerances shall be ±0.3.
Eccentricity to centerline shall be less than 0.3.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS INCHES TOLERANCE ON DECIMALS±
FRACTIONALS± ANGLES± DO NOT SCALE DRAWING

	ANAI029-500020		PAPER	
LTR	PART NAME	QTY	MATERIAL	

DWN	K. Taniyoshi	DATE	Jun. 12.'01	SCALE 2:1	NAME LABEL
CHKD	K. Nasu	DATE	Jun. 12.'01	3RD ANGLE PROJECTION	MODEL NO.
APVD	Shuji Sato	DATE	Jun. 13.'01		

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FACTORY: ■OSAKA □TOKYO □F.D. □ □TOHOKU □KYUSHU □SEIKO □

DWG NO. ANAI029-500020PE

A.ANA.1029.500020.E

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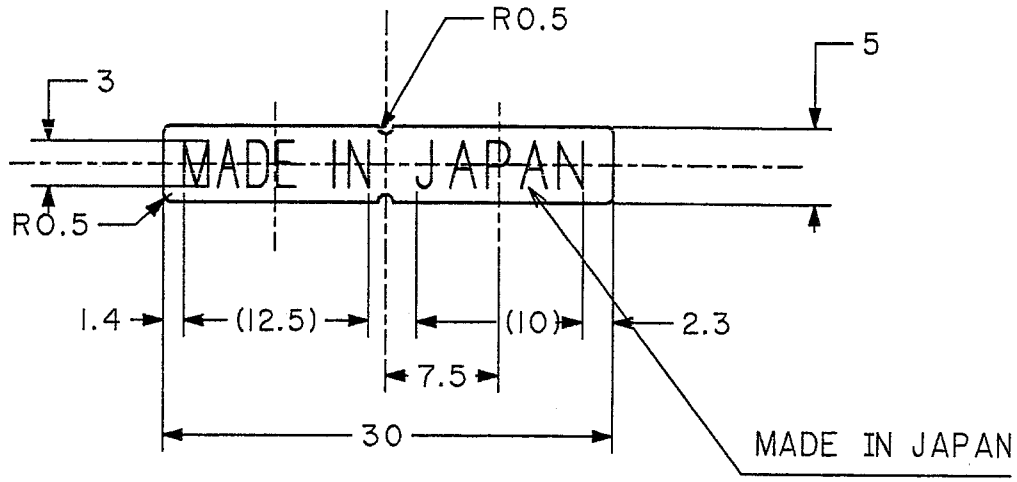
SHEET 1 OF 1

HOSIDEN

REVISION					
ZONE	LTR	DESCRIPTION	DATE	REVISED	APPROVED

N A



Unless otherwise specified, dimensional tolerances shall be ±0.3.
Eccentricity to centerline shall be less than 0.3.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS INCHES TOLERANCE ON DECIMALS± FRACTIONALS± ANGLES±
DO NOT SCALE DRAWING

	ANAI029-500040		PAPER	
LTR	PART NAME	QTY	MATERIAL	

DWN	K. Tomizaki	DATE	Jun. 12. '01	SCALE 2:1	NAME LABEL
CHKD	K. Nasu	DATE	Jun. 12. '01	3RD ANGLE PROJECTION	MODEL NO.
APVD	Shuji. Sato	DATE	Jun. 13. '01		

Hosiden Corporation

FACTORY: ■OSAKA □TOKYO □F.D. □ □TOHOKU □KYUSHU □SEIKO □

DWG NO. ANAI029-500040PE

A.ANA.1029.500040.E

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SHEET 1 OF 1

HS-9 EMC Critical Component List

Part Number: HS-9
Product Numb HBH0101-010121

No	Name			Remark
1	Cable with Plug			
2	Driver			
3	ECM			
4	Earphone Cable			
5	PWB			
	Ref. No	Q'ty	Name	Remark
6	SW	1	Switch	CITIZEN LS16A2 h=0.35
7	R1	1	Resistor	22ohm 1608Type
8	C1	1	Capacitor	22 μF 4V 2012Type nichicon F92G226MPA
9				
10				
11				
12				
13				
14				
15				
16				

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Parts List

Name	Headset	Part#	HBH0101-010121 (HS-9)	
No.	Part Name	Q'ty	Material	Color
1	Driver	1		
2	Pad(for Earphone)	1	Polyurethane	Black
3	Housing	1	ABS	Black
4	Cord	1	TPE	Black
5	Mic.Housing(TOP)	1	ABS	Black
6	Mic.Housing(Bottom)	1	ABS	Black
7	Knob	1	ABS	Black
8	Cap	1	ABS	Black
9	Cap	1	ABS	Black
10	Pad(for ECM front)	1	Polyuresthane	Black
11	Pad(for Switch)	1	Polyurethane	Black
12	Pad(for PWB)	1	Polyurethane	Black
13	E.C.M.	1	ϕ9.4	
14	PWB Assy	1	PWB+SMT Parts	
15	Cable with Plug	1	TPE	Black
16	Clip Assy	1	PC	Black
17	Polyethylene Bag	1	Polyethylene Bag / Print	
18	Ear Pad	1	Polyurethane	Black
19	Label	1	Paper	English Label with Country of Origin
20	Carton Box	1/180	W Carton	
21	Pad	9/120	S Carton	
22	Separator	6/180	S Carton	
23	Barcode Label	1/180	Paper	
24				
25				
26				
28				