



# SPECIFICATION

## DYNAMIC RECEIVER

**Customer:** D026

**Project:** Z215

**XiChun P/N:** KFR1206F2.3-32-S

**Customer P/N:**

**Date:** 2017-11-16

<i>Ding</i>	<i>Lifengjuan</i>	<i>Xufeihong</i>
<b>APPROVER</b>	<b>CHECKER</b>	<b>DESIGNER</b>

<b>CUSTOMER    APPROVER</b>	
<b>SIGNATURE</b>	<b>DATE</b>

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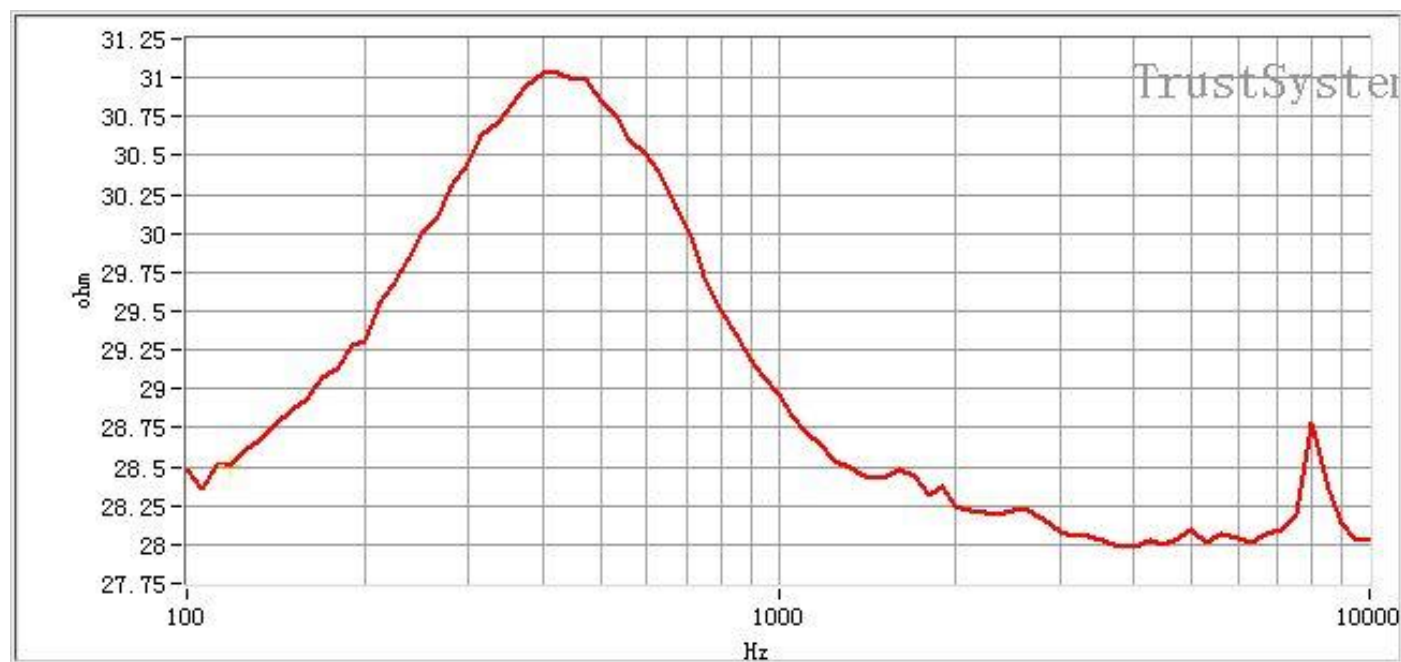
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			<b>TYPE NO.</b>	<b>KFR1206F2.3-32-S</b>		<b>Issue:A/1</b>
<b>Environmental Requirement</b>	<b>HF</b>	✓	<b>ROHS</b>	✓	<b>REACH</b>	✓
<b>Revision</b>						
<b>No</b>	<b>Date</b>	<b>Page</b>	<b>Description</b>			<b>Sign</b>
<b>1</b>	<b>2017-11-16</b>	<b>Full</b>	<b>First release</b>			xfh
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		<b>TYPE NO.</b>	<b>KFR1206F2.3-32-S</b>	<b>Issue:A/1</b>
<b>1. Product Outline</b>				
<b>1.1 Scope</b>	This specification is a typical receiver unit for telephone handset			
<b>1.2 Dimensions</b>	As shown in figure 11			
<b>1.3 Net Weight</b>	Approx 0.4 grams			
<b>1.4 Operating Temperature Range</b>	-20°C to +70°C without loss of function			
<b>1.5 Storage Temperature Range</b>	-40°C to +85°C(Note: Return to ambient room temperature before using)			
<b>2. Electroacoustic Characteristics</b>				
<b>2.1 Impedance</b>	DC: 28±15% ohm AC: 30±15% ohm （at 2KHz, 1Vrms input）			
<b>2.2 Bass Resonance Frequency</b>	450±100Hz in Free air See Figure 1			
<b>2.3Rated Frequency Range</b>	300Hz- 7.0 KHz			
<b>2.4 Frequency Response (High-leak)</b>	117±3 dB (at 1KHz) Input0.8Vrms, with IEC 711Ear （Type 3.2HL） See Figure 2, Table 1			
<b>2.5 Input Power (Rated./Max.)</b>	Rated Power: 20mW Maximum Power: 50mW			
<b>2.6 Rub and Buzz:</b>	A sine sweep among rated 50HZ-3400HZ at 0.8Vrms for a period of 1 second will not result in any buzzing or extraneous sound			
<b>2.7 THD (High-leak)</b>	Input0.8Vrms, with IEC 711 Ear （Type 3.2HL） See Figure 3 , Table 2			
<b>2.8 R&amp;B</b>	Input0.8Vrms, with IEC 711 Ear See Figure 4, Table 3			
<b>2.9.Polarity</b>	When a DC sources “+” polarity is attached to speakers “+” polarity, “-“polarity is attached speaker’s “-“polarity, the membrane will move forward.			

### 3. Impedance

Resonance Frequency(1V rms)



(Figure 1)

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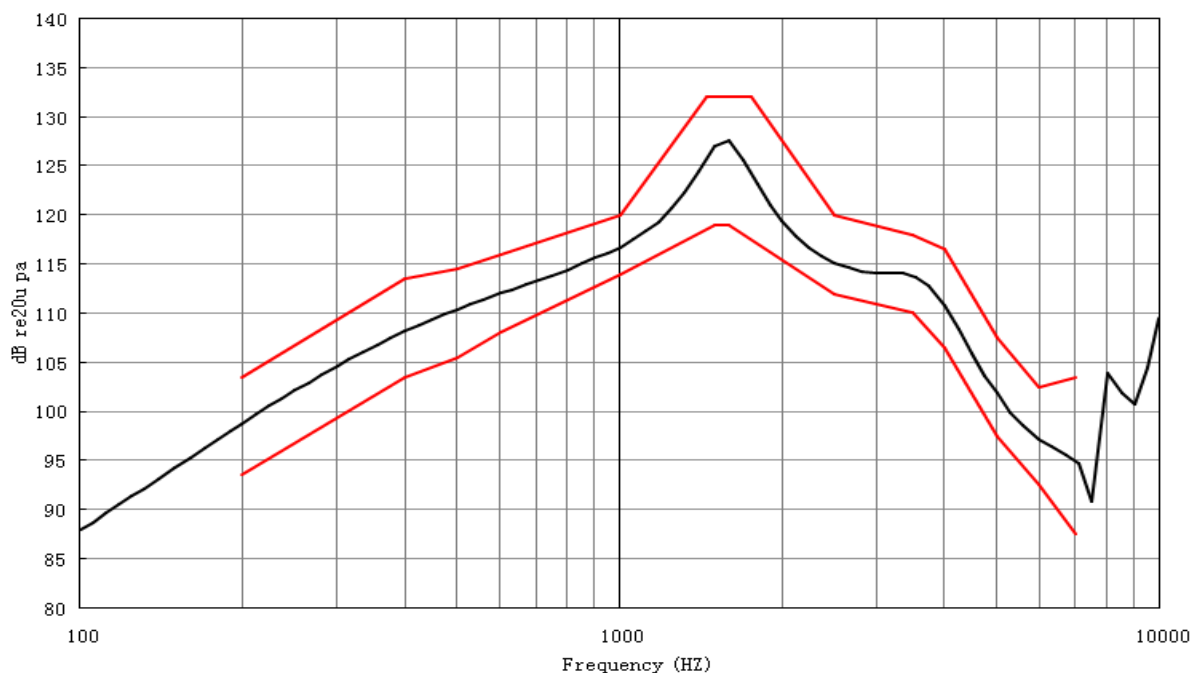
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## 4. Frequency Response(High-leak)

Frequency Response (0.8V rms/High-leak)



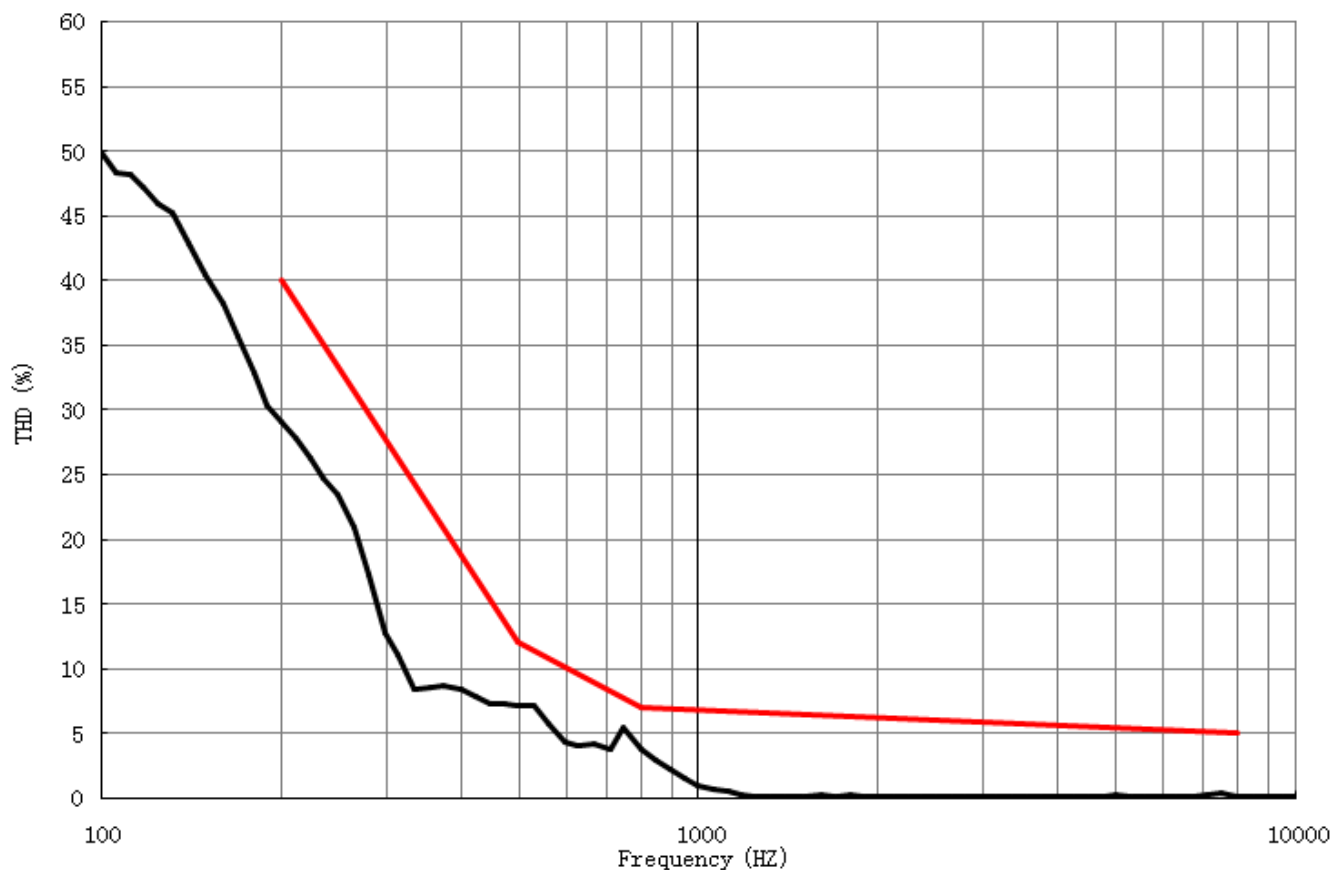
(Figure 2)

Table 1:Tolerance Limits Data for FR

Frequency(Hz)	Upper Limits(dB)	Frequency(Hz)	Lower Limits(dB)
200	103.5	200	93.5
400	113.5	400	103.5
500	114.5	500	105.5
600	116	600	108
1000	120	1000	114
1450	132	1500	119
1750	132	1600	119
2500	120	2500	112
3500	118	3500	110
4000	116.5	4000	106.5
5000	107.5	5000	97.5
6000	102.5	6000	92.5
7000	103.5	7000	87.5

## 5. Total Harmonic Distortion(High-leak)

THD (0.8V rms/High-leak)



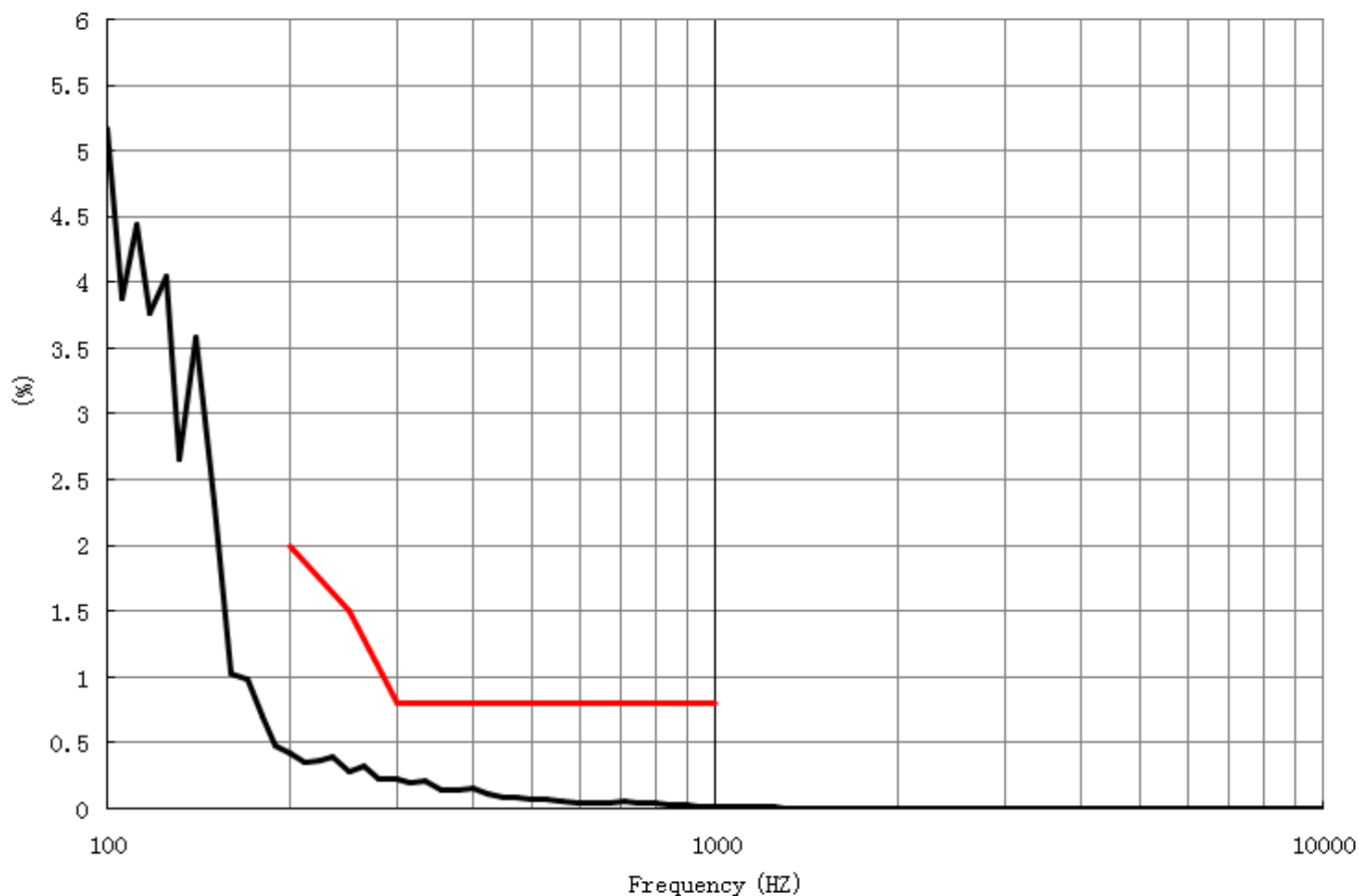
(Figure 3)

**Table 2: Limits Data for THD**

Frequency(Hz)	Limits
200	40
500	12
800	7
8000	5

## 6. Rub&Buzz Harmonic

R&B (0.8V rms)



**(Figure 4)**

**Table 3: Limits Data for R&B**

Frequency(Hz)	Limits
200	2
250	1.5
300	0.8
500	0.8
1000	0.8

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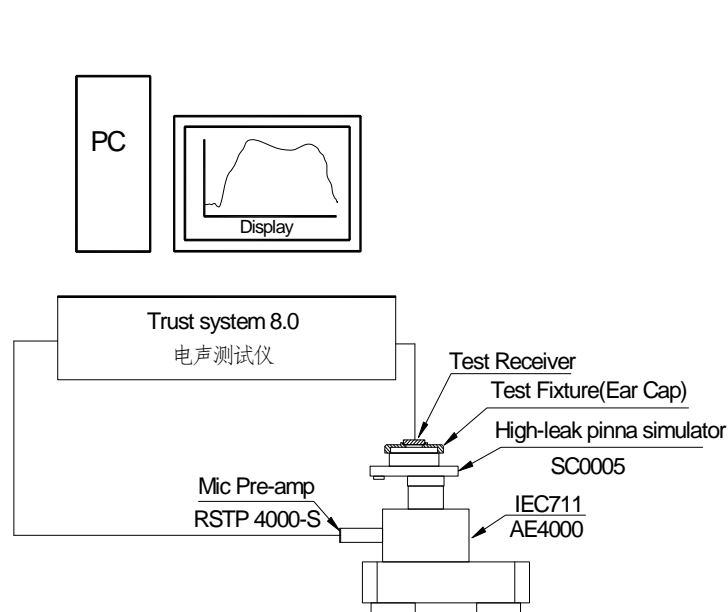
### 7.Test Method(High-leak)

#### 7.1 Sensitivity and Frequency Response Curve:

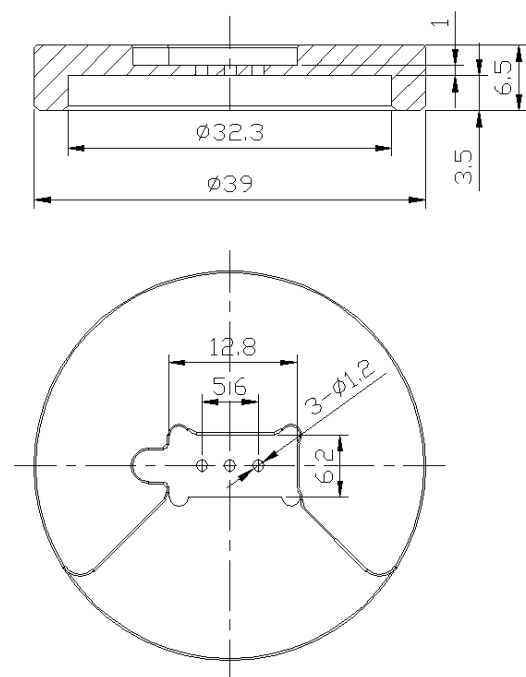
The receiver shall be mounted in a fixture shown in Figure 5 .and the recommended acoustic measuring devices are shown below in figure 4. The swept sine-wave frequency range is 100-10kHz (input0.8Vrms).

#### 7.2 T.H.D:

The receiver shall be mounted in a fixture shown in Figure 5 .and the recommended acoustic measuring devices are shown below in figure 4. The swept sine-wave frequency range is 100-10kHz (input0.8Vrms).

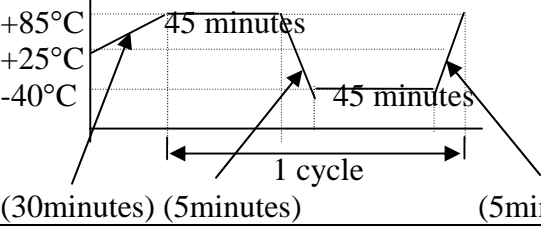


(Figure 5)



(Figure 6)

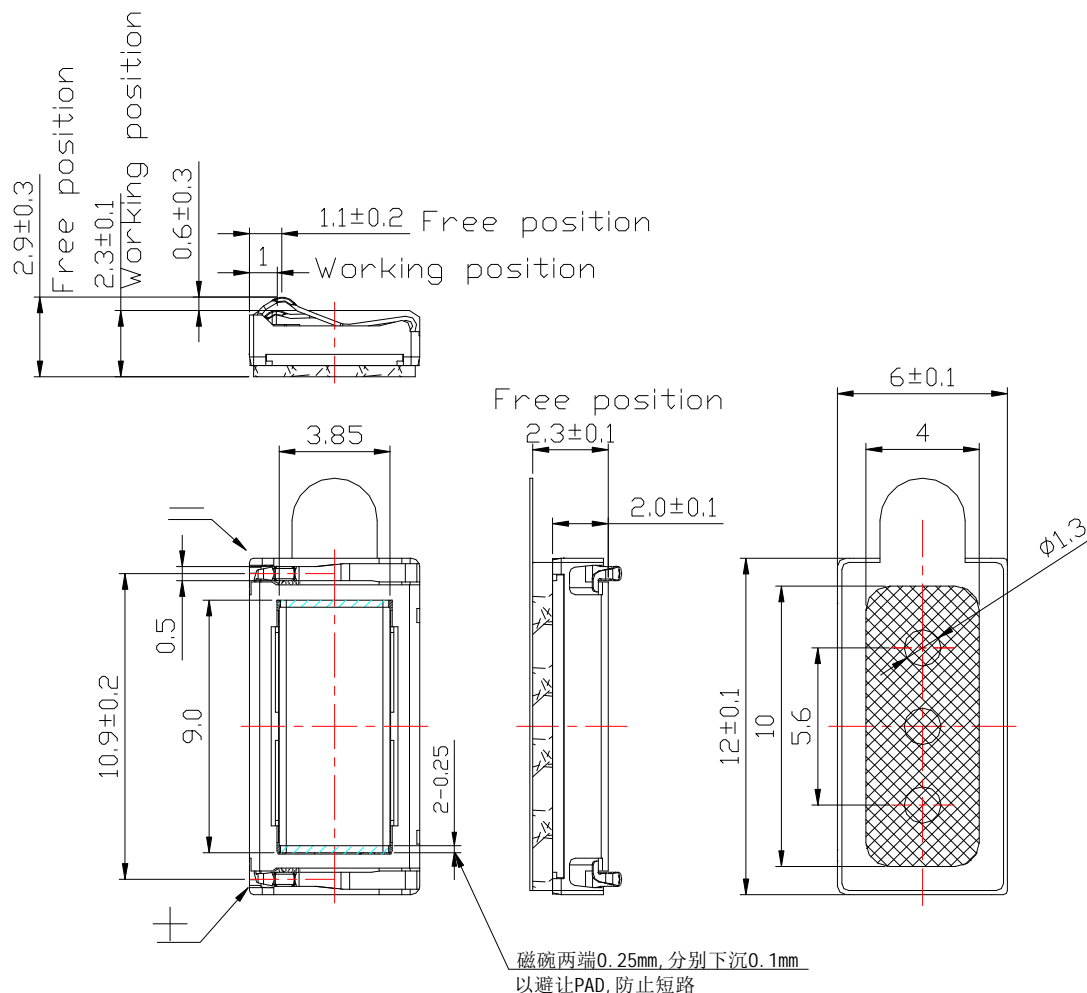


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<b>8. General Reliability</b>			
<b>8.1 General</b>	After any following tests the response at 1 KHz shall not deviate more than $\pm 3$ dB from the initial value		
<b>8.2 Temperature Shock Test</b>	Temperature: $-40^{\circ}\text{C} \pm 3^{\circ}\text{C}$ $\longleftrightarrow$ $+85^{\circ}\text{C} \pm 3^{\circ}\text{C}$ Cycle: 12 cycles Duration: 45 minutes 45 minutes 2 hours (recovery 2 hours)  (30minutes) (5minutes) (5minutes)		
<b>8.3 Static Humidity Test</b>	Temperature: $+40^{\circ}\text{C} \pm 3^{\circ}\text{C}$ Relative Humidity: 90%~95%RH Duration: 96 hours (recovery 6 hours)		
<b>8.4 Vibration Test</b>	Secure device using a fixture appropriate for this test. Fixture shall be capable of mounting on vibration table. Vibrate from 10Hz to 2000Hz, 1 octave per minute, 2mm displacement $\pm x$ , $\pm y$ , $\pm z$ directions with 15 g's force for 2 hrs per each plane.		
<b>8.5 Drop Test</b>	Height: 1.5m Cycle: 1 cycles Drop samples 1.5m 2 drops on each side (2*6), 2 drops on each corner (2*4). Total 20 drops		
<b>8.6 Operating Life Test</b>	$25^{\circ}\text{C}$ ;Pink noise;20Hz-20kHz;20mW;Crest factor 1.8-2.2;96 H		
<b>8.7 Max Power Test</b>	$25^{\circ}\text{C}$ ;Pink noise;20Hz-20kHz;50mW;1 sec on/60 sec off;60 cycles		
<b>8.8 High Temperature Test</b>	$85 \pm 3^{\circ}\text{C}$ ;96H;2H Recovery time		
<b>8.9 Low Temperature Test</b>	$-40 \pm 3^{\circ}\text{C}$ ;96H;2H Recovery time		

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## 9. Mechanical Layout and Dimensions

### 9.1 Mechanical Layout



#### Notes:

#### 1、General unless otherwise noted $\pm 0.15\text{mm}$ . (Figure 7)

10	Gasket	11.8*5.8-10*4-0.3T	1	SATTI B080
9	Spring	SUS301 3/4H-0.15T	2	Min0.1um Au
8	Cover	SUS301	1	
7	Voice Coil	COPPER	1	
6	Dome Type	PEN	1	
5	Diaphragm	PEEK	1	
4	Pole Piece	SPCC	1	
3	Magnet	NdFeB	1	
2	Yoke	SPCE	1	
1	Frame	PPA	1	
No.	Part Name	Material	Q'TY	Remark

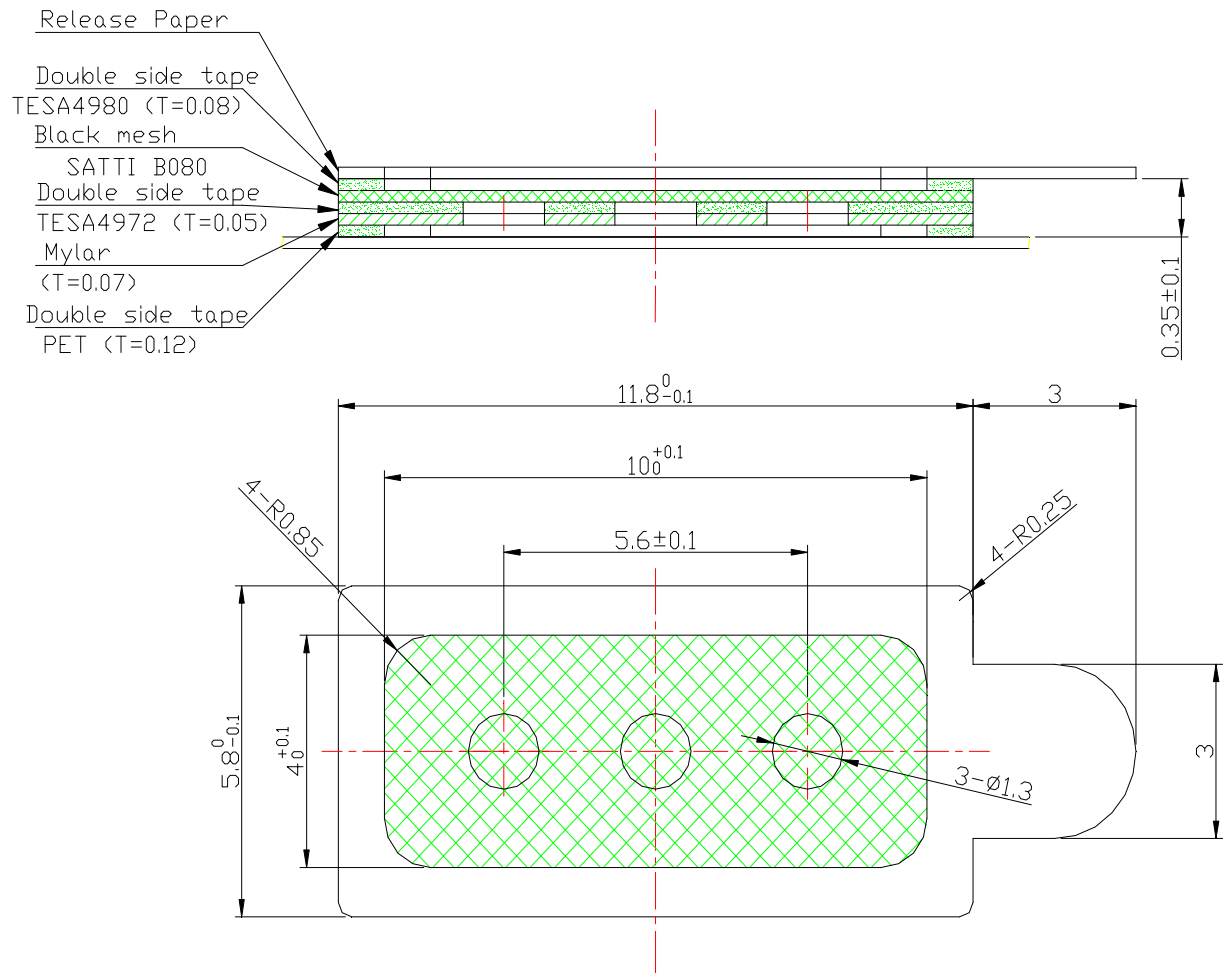
## SPECIFICATIONS (10/14)

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### 9.2 Dimensions Of Gasket

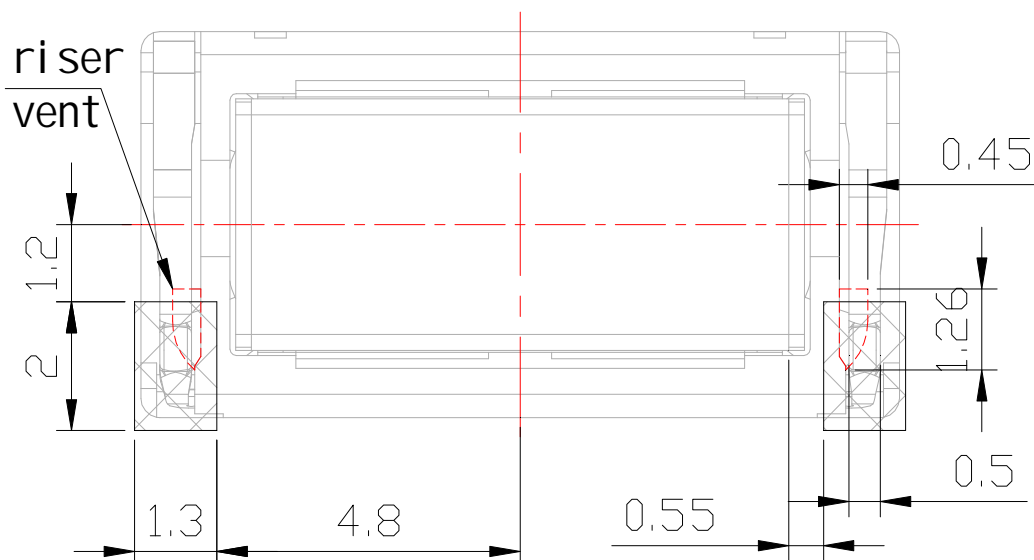


(Figure 8)

**Notes:**

- 1、 Working position of gasket is 0.3mm.
- 2、 General unless otherwise noted  $\pm 0.1$ mm.

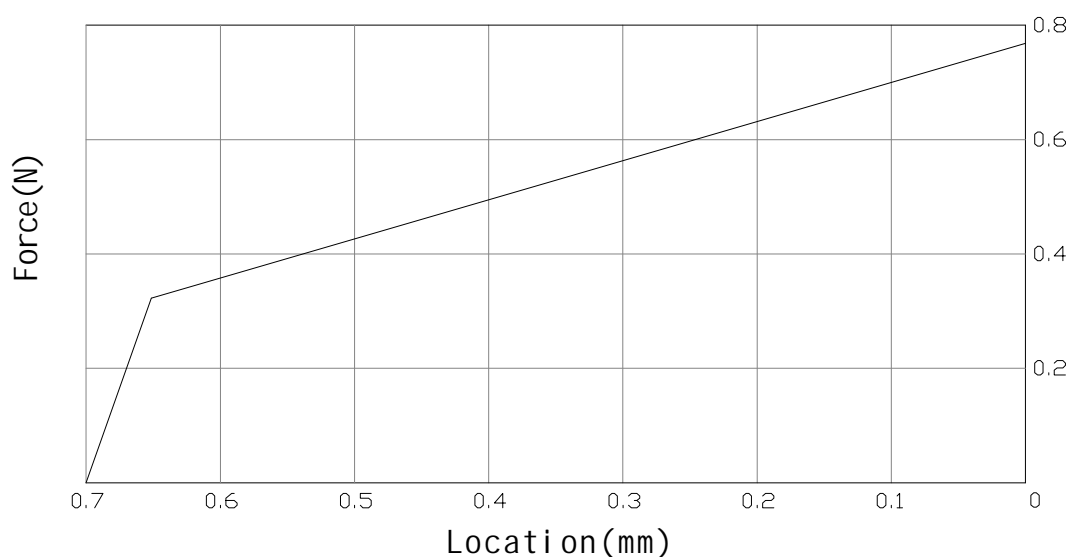
### 9.3 Pad Layout of Spring contact



(Figure 9)

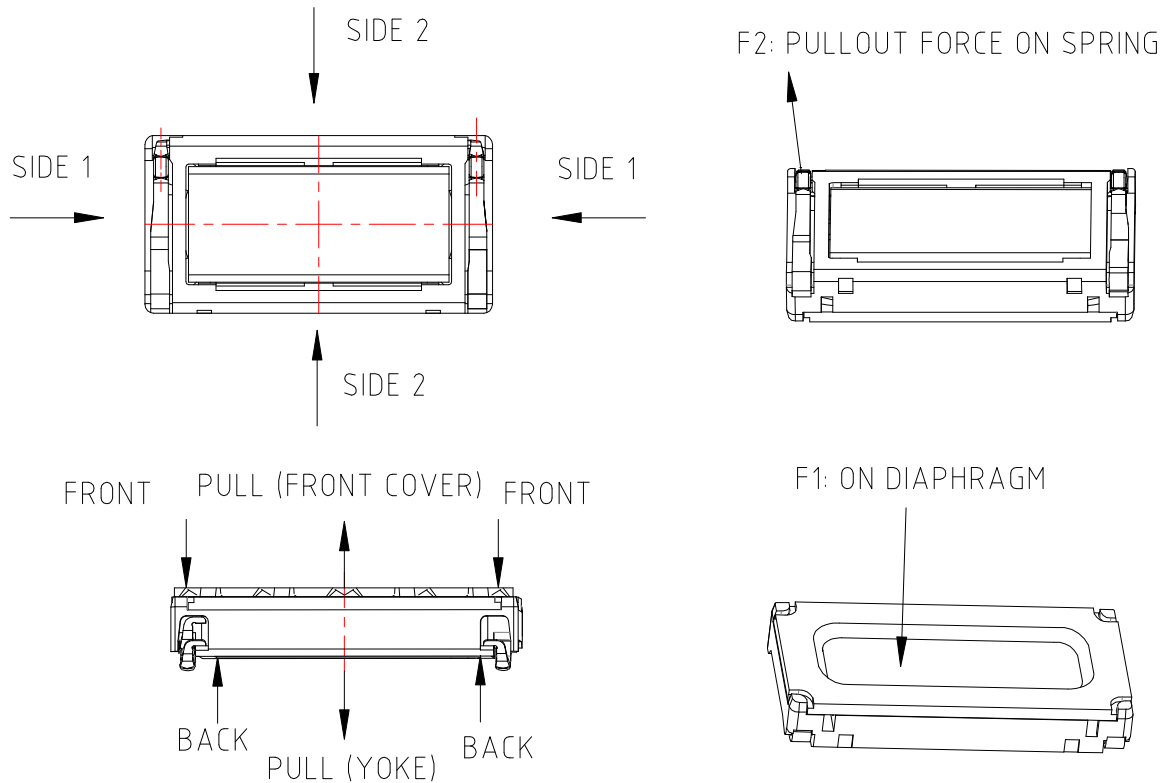
### 9.4 Force Diagram

FORCE PROGRESSION OF ONE SPRING CONTACT



(Figure 10)

## 9.5 Permitted Force to Receiver



Max.Permitted Compression Forces			
NO.	From	To	Maxmun Force
1	F1		0N
2	F2		0N
3	FRONT	BACK	5N
4	SIDE1	SIDE1	10N
5	SIDE2	SIDE2	10N
6	PULL OF FORCE (YOKE/COVER)		0N

**(Figure 11)**

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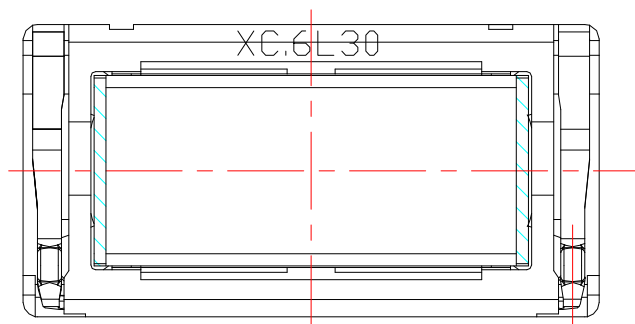
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### 9.6 Date Code



6L30  
Year                      Day  
0.....2010                      01.....  
1.....2011                      02.....  
.....  
Month                      .....  
A.....January  
B.....February  
.....

(Figure 12)

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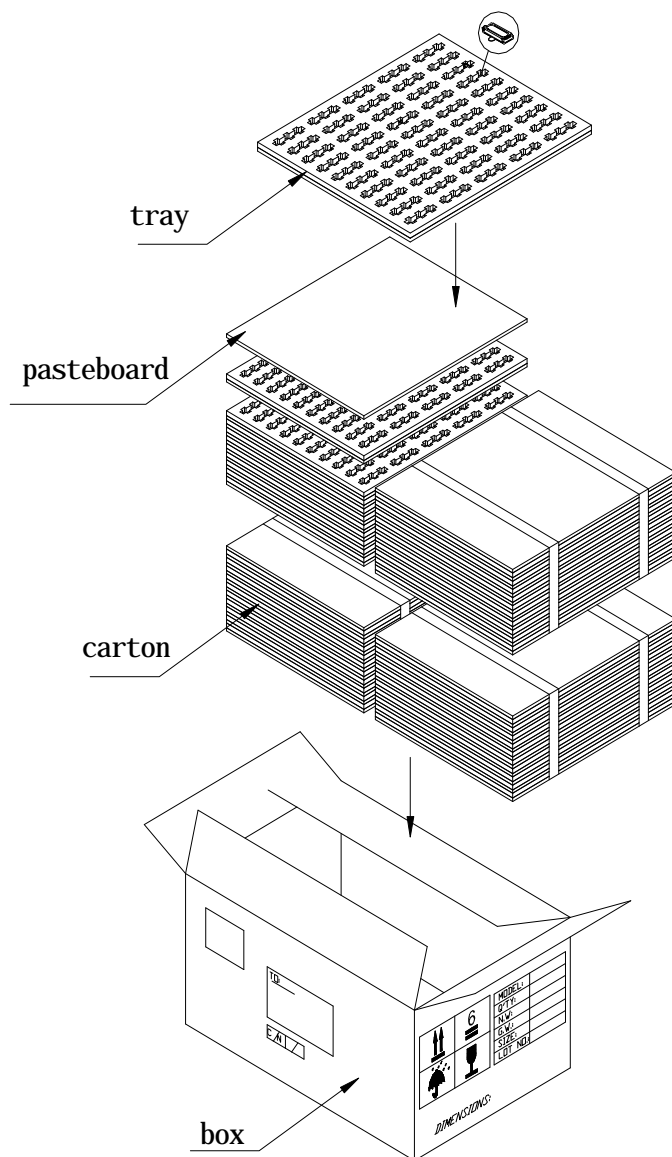
## SPECIFICATIONS (14/14)

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### 10.0 Package



#### NOTES:

1. 150 pcs per tray.
2. 10 traies per carton.
3. 4 cartons per box.
4. Total: 6000 pcs per box.