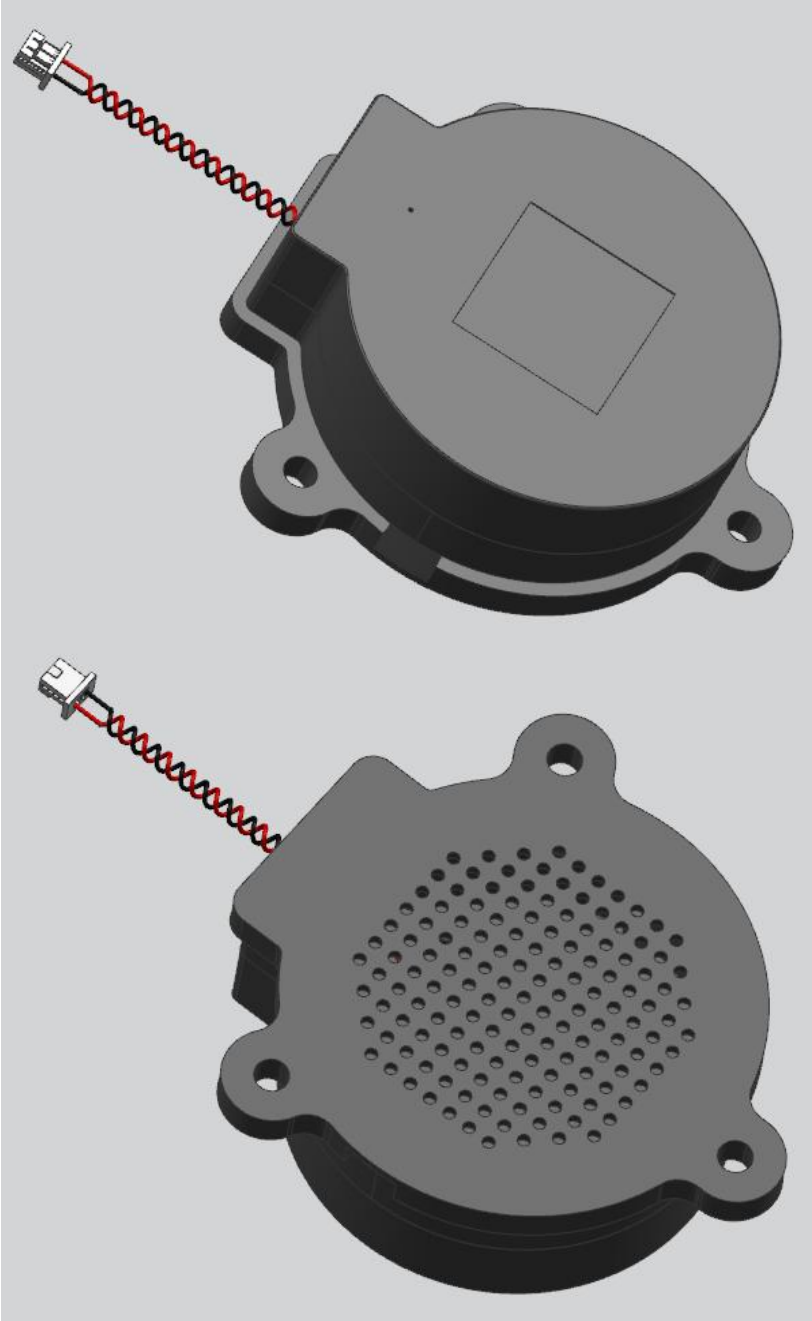
SPECIFICATION

BDT48-11-08H19.5-BOX



文件号：BS/QDTE045B

BeStar	SPECIFICATION FOR AUTOMOTIVE SPEAKER		
	TOTAL PAGE	08	www.be-star.com RoHS

Customer		Model Name	BDT48-11-08H19.5-BOX
Customer P/N		Product No.	132432
Date	01 Dec 2017	Issue No.	BS/TES01.1688A
Page	01 of 08	Issue Date	2017.12.01

Approval：

1.Characteristics
2.Bill of Material
3.Drawing
4.Reliability Test
5.Packing
6.History Change Record

Drawn by	Checked by	Approved by	Customer approved
唐从坤	莫丽丽	徐金国	

BESTAR HOLDING CO.,LTD
No.199 HuangHe West Road,New district,ChangZhou,JiangSu Province,P.R.China
Tel: +86 519 88222567 ***Fax:*** +86 519 88222551
E-mail:wu@be-star.com ***http://www.be-star.com***

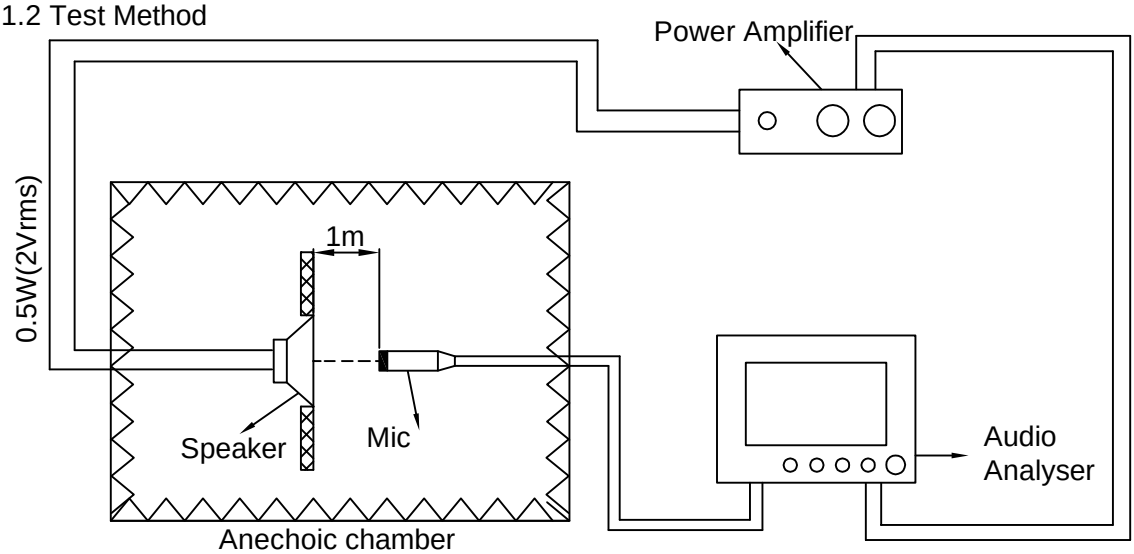
BDT48-11-08H19.5-BOX

1.Characteristics

1.1 Electrical and Mechanical Characteristics

No.	Item	Specifications
1.	Size	ϕ48*19.5mm
2.	Impedance at 1.0KHz/1V	8±15% Ω
3.	Lowest Resonance frequency	750±100Hz
4.	Effective frequency range	450...15K Hz
5.	Rated input power	0.5w
6.	Maximum input power	1w
7.	Buzz & Rattle(at sine wave 2V)	must be normal between 450~15KHz
8.	SPL(0.5W,1m)	83±5dB（ at 0.6K Hz）
		85±5dB（ at 0.8K Hz）
		83±5dB（ at 1.0K Hz）
		82 ±5dB（ at 1.2K Hz）
		82 ±5dB（ at 1.5K Hz）
		82±5dB（ at 2.0K Hz）
9.	THD	≤10% (at 0.4KHz~10kHz/0.5W/1m)
10.	Weight	≈29g
11.	Operating temperature	-40... +85°C
12.	Storage temperature	-40.. .+90°C

1.2 Test Method

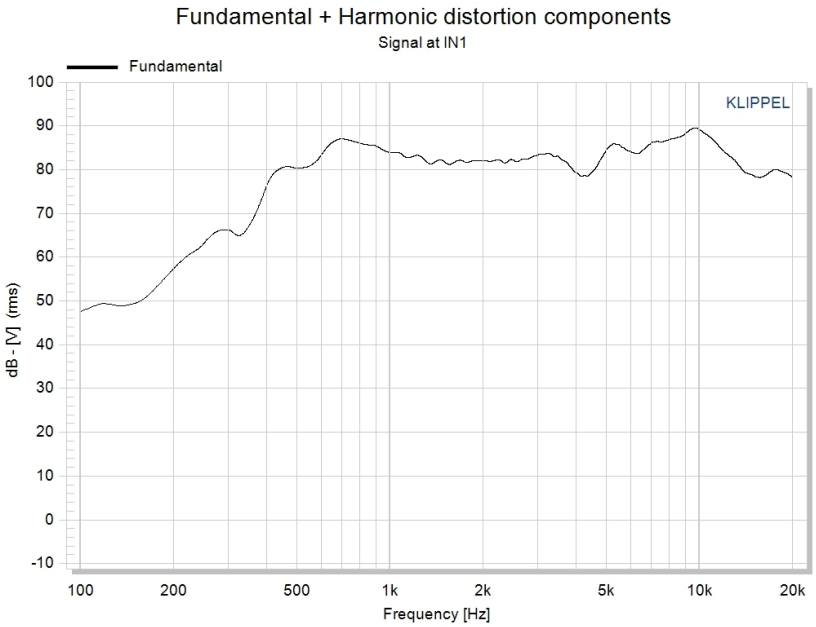


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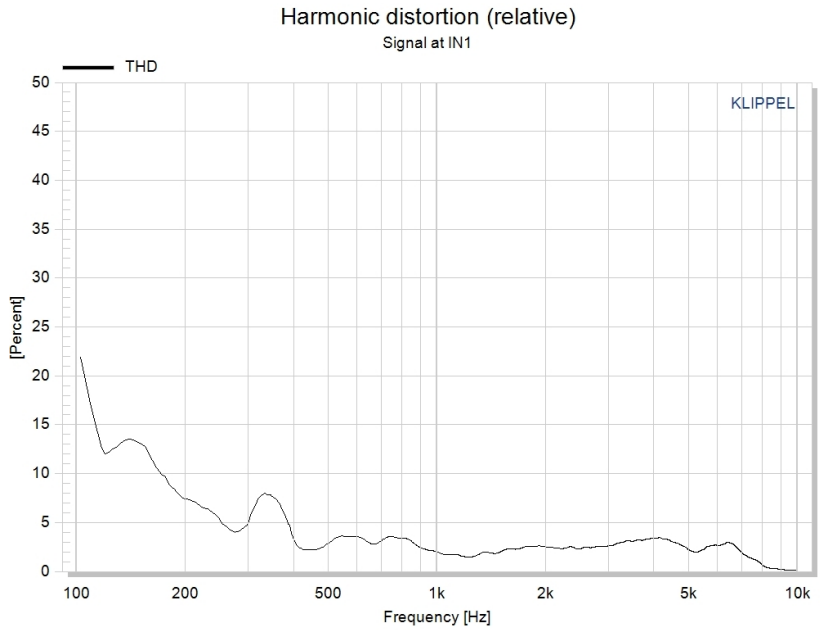
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1.3 Fundamental (0.5W/1m Klippel testing, the curve is smoothed 1/3rd of an octave)



1.4 THD (0.5W/1m Klippel testing , the curve is smoothed 1/3rd of an octave)

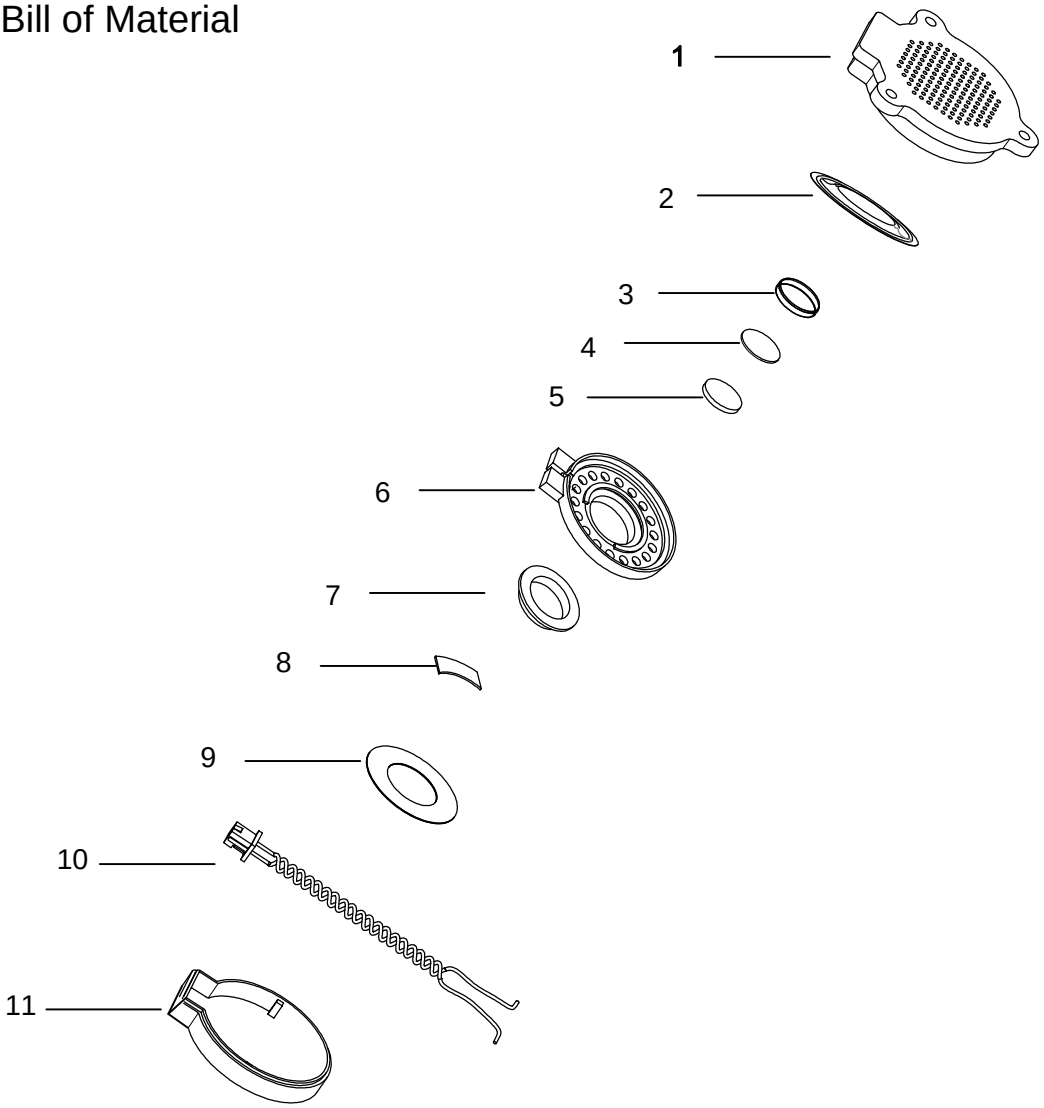


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2.Bill of Material



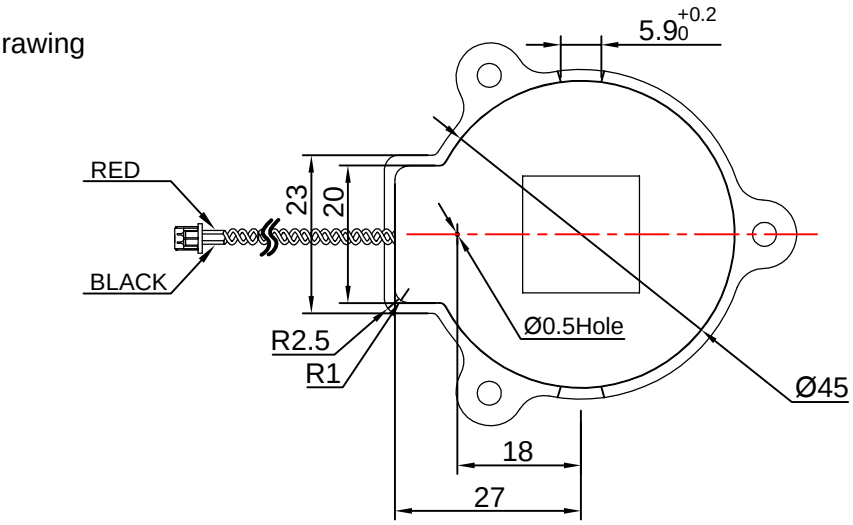
No.	Part Name	Material
1.	Cover	PBT+30%GF
2.	Membrane	PEN
3.	Voice coil	Cu
4.	Up Plate	SPCC
5.	Magnet	Nd-Fe-B
6.	Frame	PBT+30%GF
7.	magnet bowl	SPCC
8.	PCB	Ethoxyline+Cu
9.	Dustproof Sheet	Silk
10.	Connector wire	Cu
11.	Housing	PBT+30%GF

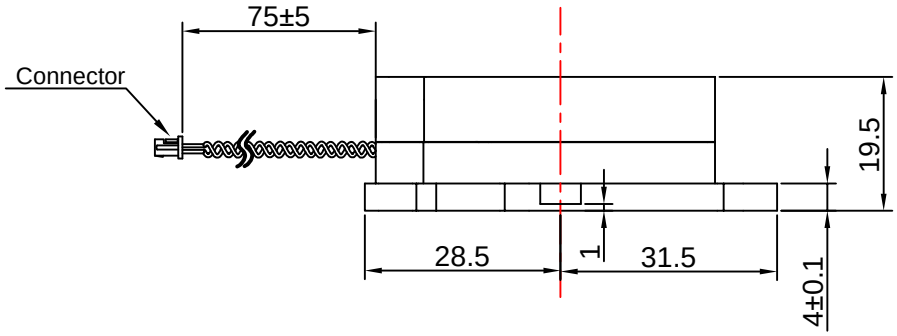
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				Drawn by:	唐从坤	
A	2017.12.01	唐从坤		Checked by:	莫丽丽	Speaker
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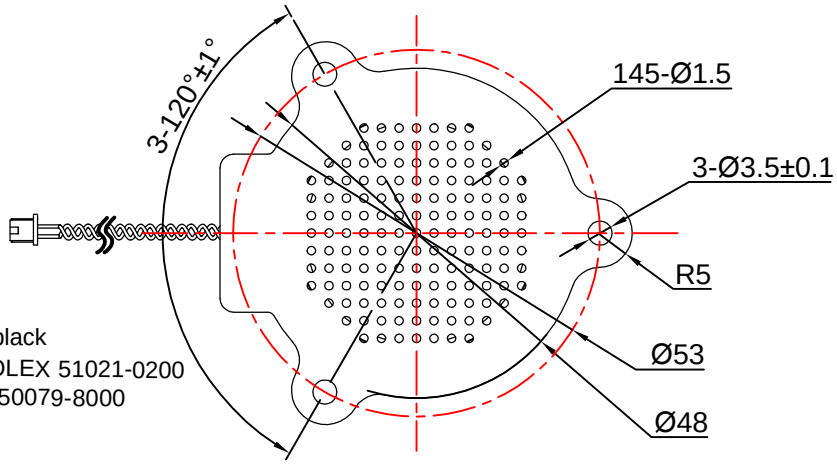
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3.Drawing







UL3265,AWG28#red/black
connector housing:MOLEX 51021-0200
crimpcontact:MOLEX 50079-8000

Tolerance:±0.3

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4. Reliability Test

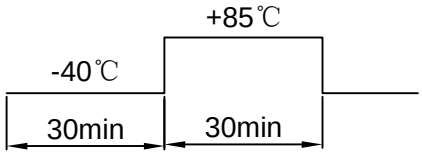
4.1High temperature preservation test

Temperature	+85°C
Duration	500hrs

4.2 Low temperature preservation test

Temperature	-40°C
Duration	500hrs

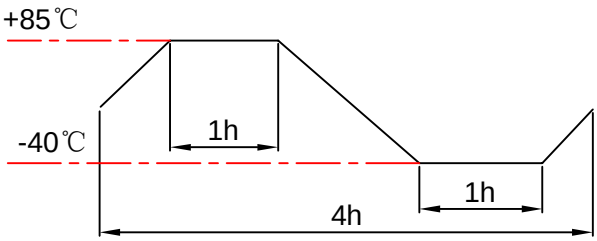
4.3 Thermal shock test



100 Cycles

4.4 Life test

Temperature cycling



125 Cycles

Life test condition with symmetrical excitation

-Test signal alternation ON for 50sec./ OFF for 150sec

-Logarithmic Sweep 2Vrms sine signal 400...3000Hz,sweep time 50 seconds

4.5 Max input test

Room tenperature,sine wave input :750Hz,1W(2.83Vrms) 1min/on-2min/off,10cycles

4.6 Humidity test 40 ℃/93%Rh 1000Hours

4.7 Vibration

10~55Hz:Amplitude ±0.75mm

1-oct./min,X,Y,Z 3 driections 24 hours each

4.8 Free drop

Free drop on concrete 100cm height

Every 3surface x 1 time,Total 3times

Notice：

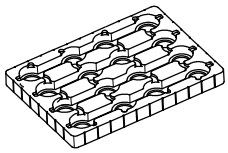
1.Being placed for 24 hours at +25 ℃, speaker shall be measured. No obstacle to be harmful to normal operation;damages, cracks, rusts, etc. Should not be audible at 2V sine wave between 450 ~ 15KHz. Fo should meet initial one. S.P.L. deviation of unit should be within 3dB.

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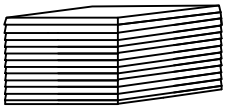
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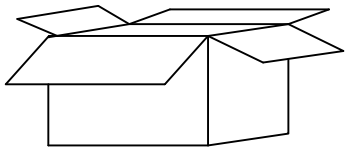
5. Packing



ESD packing

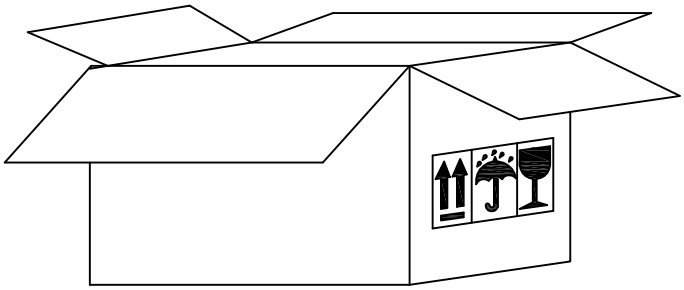


16 pcs per tray,7 pcs trays , 1pcs cover
16x7=112pcs



112 pcs per inside box

112x2 inside box =224pcs



5.2 packing quantity

1) 16pcs per tray,
2) 112pcs tray per inside box
3) 2 inside box per carton,total:224pcs per carton
4) carton size: 54X38X19cm

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6. History Change Record

version No.	Change Items		Date	Drawn	Approved
	Before	After			
A			2017.12.01	唐从坤	徐金国

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Speaker

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