

**CLS50RN18.2E-8F1.5-B380R**

**Description**

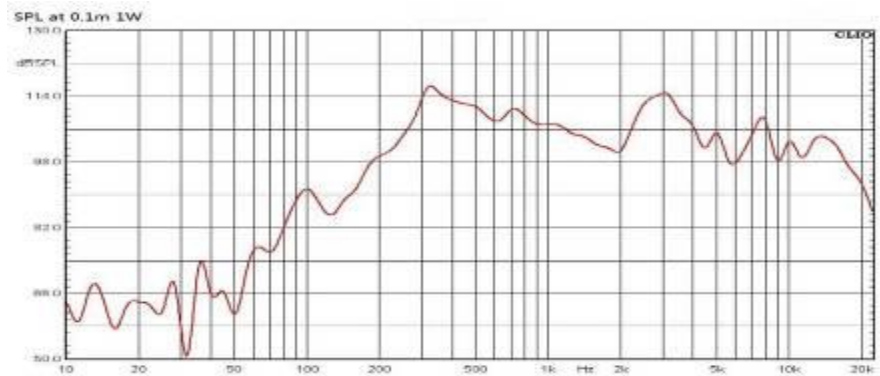
Chinasound Loudspeaker 50mm diameter, Round Noryl frame, 18.2mm height, type E(=with Noryl gasket and frame, straight terminals) – 8 ohm, Ferrite, 1.5W – Black Mylar cone, 380 Hz, RoHS compliant

- ◆ RoHS Compliant
- ◆ Water-proof IP65 in the front

**Picture**



**Frequency Response Curve** Tested by CLIO



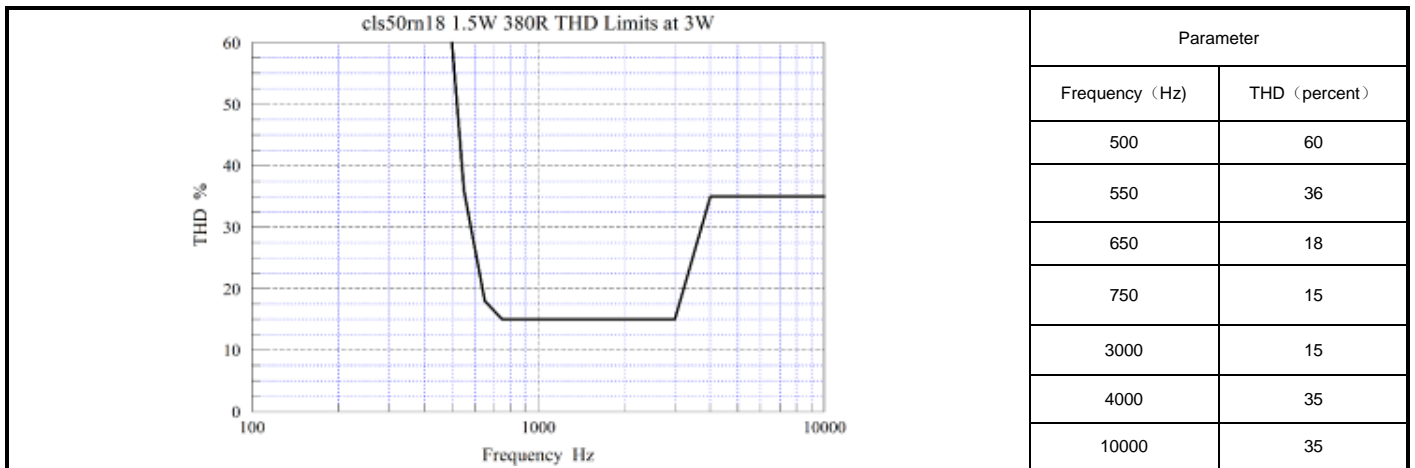
**Specification**

<p><b>Rated Impedance</b>  <b>Rated Power</b>  <b>Max. Power</b>  <b>Resonant Frequency</b>  <b>Frequency Range</b>  <b>Sound Pressure Level</b>  <b>THD, 2<sup>nd</sup>, 3<sup>rd</sup> harmonic</b>  <b>Rub+Buzz</b>  <b>Operating Temperature</b>  <b>Storage Temperature</b>  <b>Termination</b>  <b>Construction Materials</b></p>	<p><b>Description</b>  <b>Frame</b>  <b>Diaphragm</b>  <b>Coil</b>  <b>Solder</b></p>	<p>8+/-15% ohm (Other Rated Impedance is available.)                  1.5 W                  3 W                  380+/-20% Hz                  fo ~ 5,000 Hz                  106+/-3 dB (Average of SPL values at 800 1,000 1,200 &amp; 1,500 Hz.) at 2.83Vrms at 0.1 meter                  111+/-3 dB (Average of SPL values at 800 1,000 1,200 &amp; 1,500 Hz.) at 4.90Vrms at 0.1 meter                  See graphs below – measurements will be performed with 1/6<sup>th</sup> octave smoothing at 10cm                  See graphs below – measurements will be performed at 10cm                  -20 °C to +60 °C                  -30 °C to +70 °C                  2 soldering lugs, Sn plated Brass                  Plastic, Noryl PX9406                  Black Mylar                  Enameled wire + paper tube(bobbin) + tinsel lead wire with fiber core                  ALPHA TELECORE PLUS WRC TB SM416 SAC 305 Solder wire                  45 g                  Must be normal at 4.90V(=3.0W) sine wave                  1.5W white noise for 96hrs                  no function at +70 +/-2 °C for 96 hours, function at +60+/-2 °C for 16 hours,                  no function at -30+/-2 °C for 96 hours, function at -20+/-2 °C for 16 hours,                  +40+/-2 °C, 90 ~ 95% R.H. for 48hrs                  -20+/-2 °C, 30min→+20 °C,15min,→+60+/-2 °C, 30min→+20 °C,15min, 5 cycles                  1.5mm with 10 to 50Hz of vibration frequency to each of 3 perpendicular direction for 2 hrs                  Pins are immersed up to 1.5mm from sounder's body in solder bath of 350+/-5 °C for 3±0.5 seconds or 260+/-5 °C for 10+/-1 seconds                  Lead terminals are immersed in rosin for 5 seconds and then immersed in solder bath of 350+/-5 °C for 3+/-0.5 seconds.                  For a period of one (1) year from date of manufacture under normal operations</p>
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**Warranty**

\* All specifications must be satisfied after the test (Recovery:2 to 4 hrs of recovery under the standard condition after the removal from test chamber).  
 \*\*90% min. soldering pads shall be with solder.(except the edge of pad)

**THD, 2nd, 3rd harmonic**

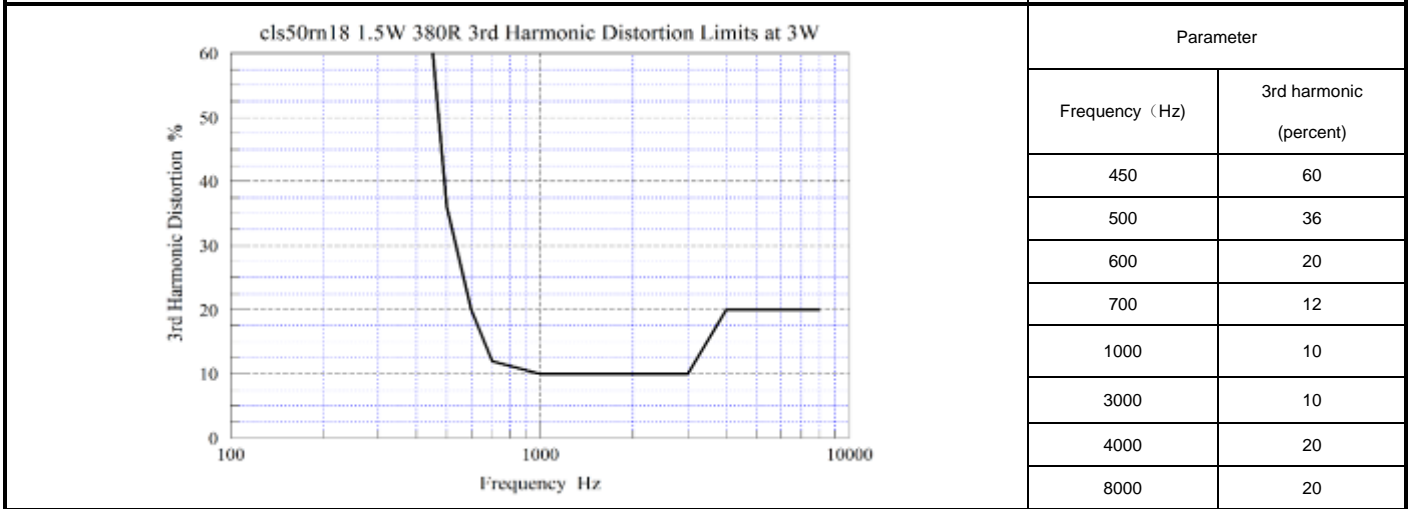
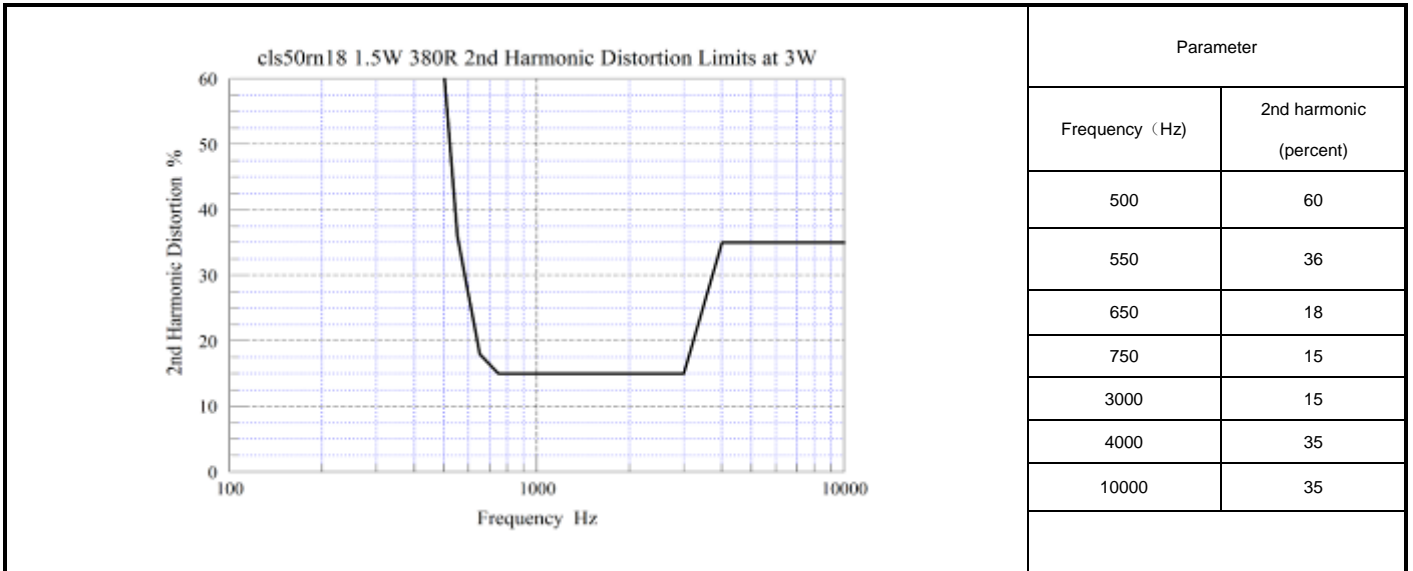


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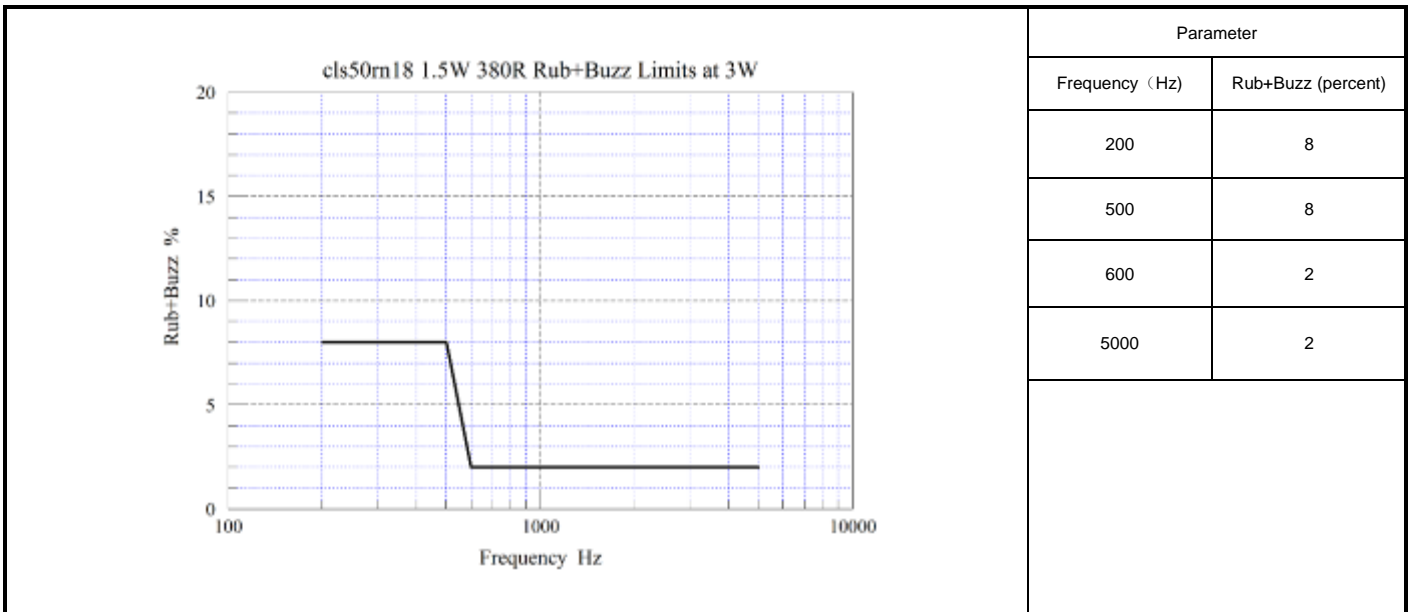
Checked by: James Z/190729

Approved by: William W /190729





**Rub+Buzz**

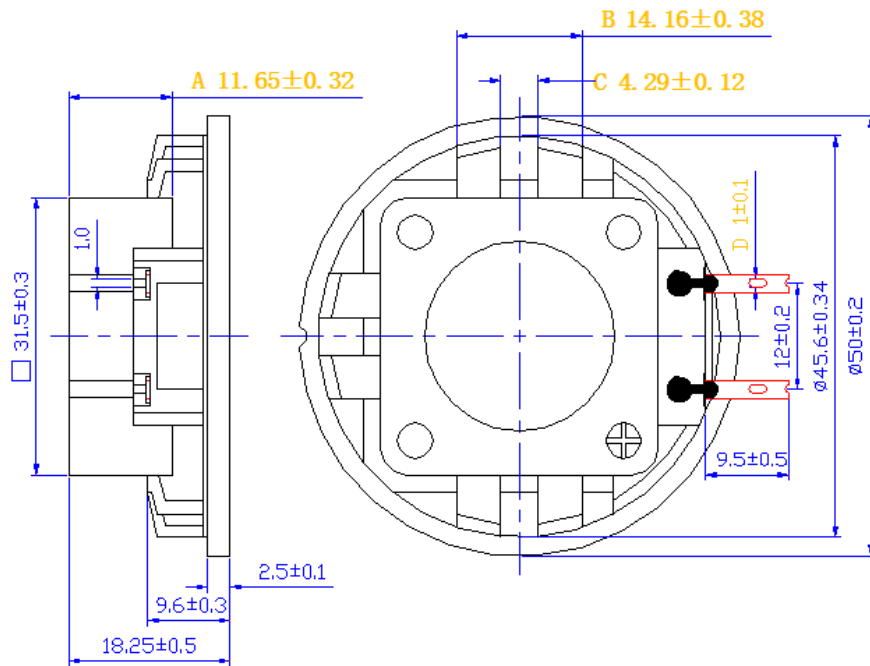
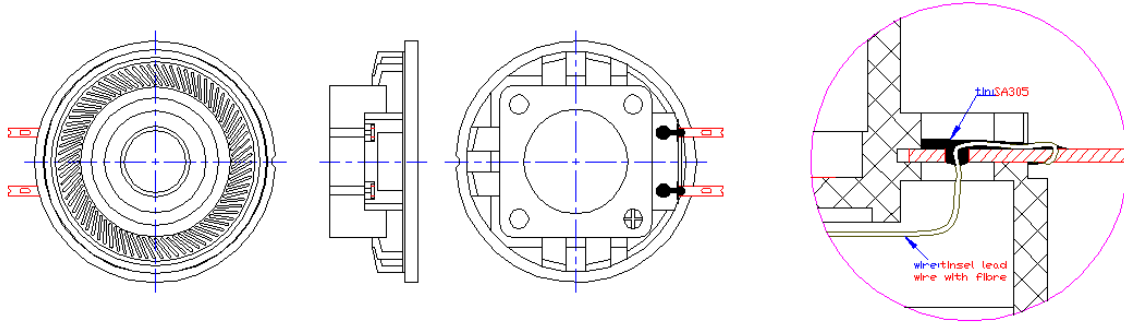


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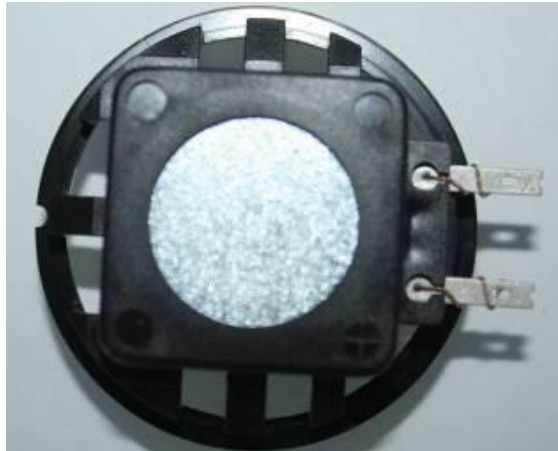
Approved by: William W /190729

Dimensions ( Unit: mm )



**Tinsel leads**

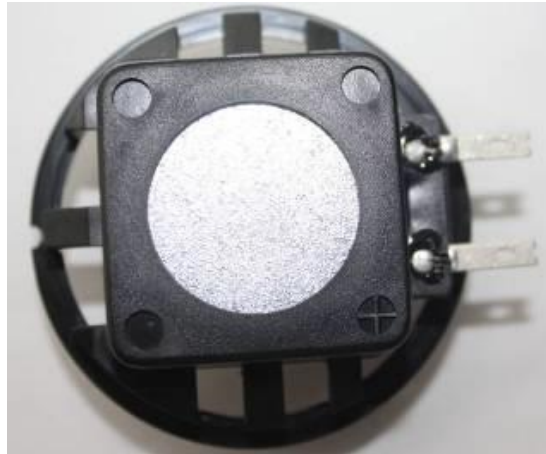
Note pictures below showing standard and acceptable tinsel lead wires for finished products. Both tinsel leads can be cosmetically different but should not have excessively loose wire, shall not touch the frame. Tinsel lead wires exposed on the terminals do not have to be fully covered in solder flow. The tinsel lead wires should enter the gate in the plastic



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All specifications are subject to change without notice

### Revisions History

Version Number	Description	Name	Date
SP1.09.058-A0	Original, CE CLS50RN18.2E-8F1.5-B380R	Eileen Guan	2015-1-6
SP1.09.058-A1	SPL Measurement updated to reflect 0.1M/1W	Eileen Guan	2015-1-15
SP1.09.058-A2	Correct the dimension A from $\Phi 45.6 \pm 0.2$ to $\Phi 45.6 \pm 0.34$ .	Eileen Guan	2015-5-11
SP1.09.058-A3	1) Add the description of the solder and coil under <b>Construction Materials</b> 2) Update the description of the tinsel leads Add photo to show bend radius 3 Thermal Shock changed to <b>Thermal Cycle</b> 4) Update expanded view in dimension section to show solder and fiber wire 5) Implementation of A-3 to begin with date code 16314	Chrissy Deng	2016-08-01
SP1.09.058-A4	1) Change the dimension A from $11.651 \pm 0.320$ to $11.65 \pm 0.32$ 2) Change the dimension B from $14.155 \pm 0.389$ to $14.16 \pm 0.38$ 3) Change the dimension C from $4.285 \pm 0.118$ to $4.29 \pm 0.128$ 4) Add a dimension D $1 \pm 0.1$ 5) Delete duplicate dimensioned 6) Add THD, 2nd, 3rd harmonic and RUB+BUZZ Parameters 7) Delete this statement (and shall have a minimum bend radius of 4x the wire diameter) at the description of the tinsel leads	Chrissy Deng	2016-08-16
SP1.09.058-A5	Add the description of the waterproof rating	Chrissy Deng	2019-07-29

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