

**Description**

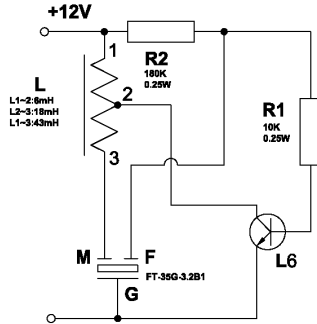
Chinasound Piezo Transducer, self driven type with Feedback piezo disc 39mm diameter, type B (=18mm max. height, side fire sound holes), 12 VDC rated voltage – 3.2KHz resonant frequency, RoHS compliant

- ◆ RoHS compliant
- ◆ Reliable Solid State Piezoelectric Technology
- ◆ Side fire sound holes

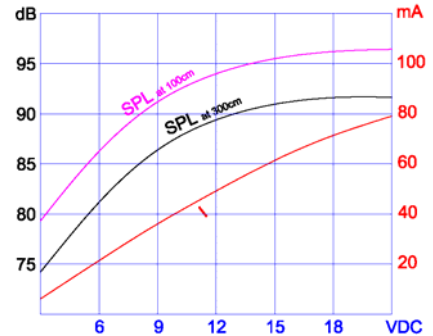
**Picture**



**Driving Circuit**



**Frequency Response Curve**



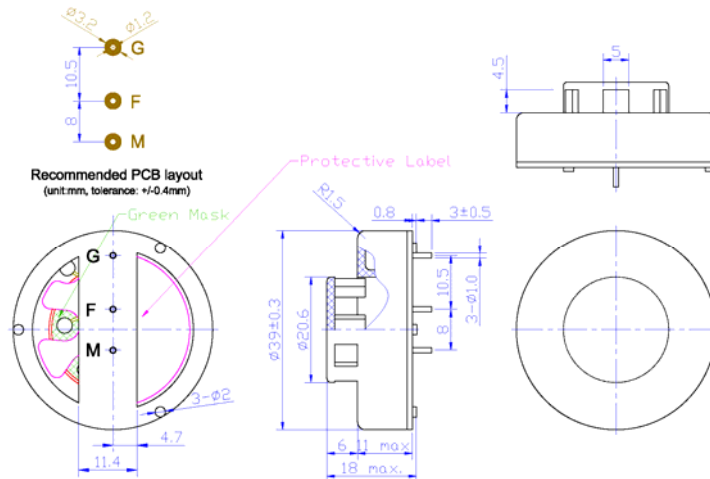
**Specification**

	Description
Rated Voltage	12 VDC
Operating Voltage	6 ~ 20 VDC
Operating Frequency	3,200+/-500Hz
Typical Sound Output	85 dB min. at 12 VDC 300cm 25 °C
Rated Current	60 mA max. at 12 VDC 25 °C
Capacitance	25,000+/-30% pF at 100Hz 1Vrms
Operating Temp.	-30 °C to +95 °C
Storage Temperature	-40 °C to +105 °C
Termination	3 PC pins, electro-tin plated brass
Termination Strength	Maximum of 5N load pull test, applied to each terminal in axial direction for 10 seconds
Construction Materials	Case: Plastic, Case: Noryl PX9406 Diaphragm: Stainless Steel 304
Weight (Typical)	8.6 g
Reliability	*Life Test: At 12 VDC in room temperature, 1 ON 4 OFF, continuously for 1000 hours *High Temperature: No function at +105+/-2 °C for 240 hours; Function at +95+/-2 °C for 240 hours *Low Temperature: No function at -40+/-2 °C for 240 hours; Function at -30+/-2 °C for 240 hours *Humidity: +40+/-2 °C, 95+/-5%RH, 240 hours *Thermal Shock: -30+/-2 °C 0.5 hr → +25+/-2 °C 0.25 hr → +95+/-2 °C 0.5 hr → +25+/-2 °C 0.25 hr. Temperature Go up or Drop time is 0.5 hr. 3 hrs per 1 cycle. Total is 5 cycles *Vibration: 1.5mm with 10 to 50Hz of vibration frequency to each of 3 perpendicular directions for 2 hours *Shock: 980m/s <sup>2</sup> (=100g) shock for each mutually perpendicular directions, half sine wave, 3 times each *Drop Test: Dropped naturally from 750mm height onto the surface of 10mm wooden board. 2 directions – upper and side of the part are applied *Soldering Heat Resistance: 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 **Solderability: Lead terminals are immersed in rosin for 5 seconds and then immersed in solder bath of 350+/-5 °C for 3+/-0.5 seconds.

**Warranty**

For a period of one (1) year from date of manufacture under normal operations  
 \* 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)

**Dimensions (Unit:mm, tolerance: 0.5mm)**



All specifications are subject to change without notice

Composed by:Guo J/090507 Checked by: Xiao W, Gong YS, Zhu YC/090507 Approved by: Wang Z/0900507



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## Revisions History

Version Number	Description	Name
080110	Original, CPT39BF12-3.2R	Guo Jun
090304	(1) Part number is changed to CPF39B12-3.2R (2) Bottom design is changed to be glued with housing fully (3) A label is added to protect ceramic disc	Guo Jun
090428	(1) The pin length is changed from 4.5mm to 3mm. Approved by customer on May 07, 2009 (2) Correct mistake to remove "Spring Terminals" from description	Guo Jun

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**ChinaSound**

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