SPEC. No.: RK00232 P1/5

# **SPECIFICATION**

## SHEET FOR APPROVAL

MULTI-FUNCTIONAL TRANSDUCER (2 MODES: RECEIVER & SPEAKER)

MODEL NUMBER: M4075-8B-1A02R ( $\Phi$ 40mm 8 $\Omega$  2W)

勝 特 力 材 料 886-3-5753170 胜特力电子(上海) 86-21-34970699 胜特力电子(深圳) 86-755-83298787 Http://www.100y.com.tw

SPECIFICATION						P2/5
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1. **SCOPE** This specification cover our product of mylar speaker unit for use in DVD, telephone, alarm system and calling system.

#### 2. ELECTRICAL ANDACOUSTICAL CHARACTERISTIC

2. 1 SOUND PRESSURE LEVEL (S.P.L)

Sound pressure level shall be indicated by the mean value of those measured at the specified frequency range.  $131\pm3$  dB at 1200, 1500, 1800, 2000 Hz in average.

**Measure Condition:** sin swept measurement at **0.1W** on axis at **0.1M Measurement Circuit:** shown in Fig. 2.

- 2. 2 RESONANCE FREQUENCY(FO):500±20%Hz at 1V.(NO Baffle )
   Measurement Circuit:Shown in Fig.2.
- 3 RATED IMPEDANCE: 8±20% Ω (at 1KHz, 1V)
   Measure Condition: the impedance response is measured with Mylar speaker.
   Measurement Circuit: shown in Fig. 2.
- 2. 4 FREQUENCY RANGE: Fo~20KHz (Deviation 10dB from average S.P.L.)
  Frequency Response Curve: Shown in Fig.3. Whit IEC Baffle plate.
  Frequency Response Measurement Circuit: Shown in Fig.2.
- 2. 5 RATED INPUT POWER (CONTINUUM): 2.0W
- 2. 6 MAX INPUT POWER (SHORT-TERM): 2.0W

  Testing will be done using IEC filter with white noise source for 1 minute with no degradation in performance.
- 7 TOTAL HARMONIC DISTORTION: Less than 5% at 1KHz,2.0W Measurement Circuit:Shown in Fig.2.
- 2. 8 **OPERATION:** Must be normal at sine wave and program source 2.0W.
- 2. 9 **POLARITY:** When a positive DC current is applied to the terminal marked(+),Diaphragm shall move forward. Marking: 8 Ω 2W

2. 10 PURE SOUND DETECTION:

Buzz, Rattle, etc Should not be audible at 4.0 VRMS sine wave from Fo ~ 7KHz.

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1			AricZhu	AricZhu	
2		100,100,14	ATTCZIIU	ATTCZIIU	-02 LM

### **SPECIFICATION**

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UPDATE

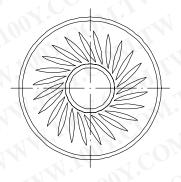
V00

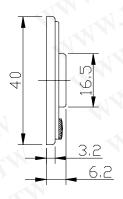
ISSUED DATE

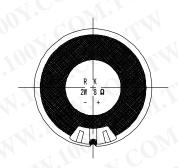
2011-10-23

#### 3. DIMENSIONS (Fig.1)

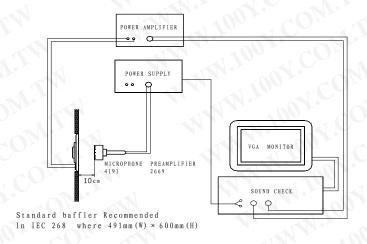
Unless otherwise specified, tolerance: ±0.3 (unit: mm)





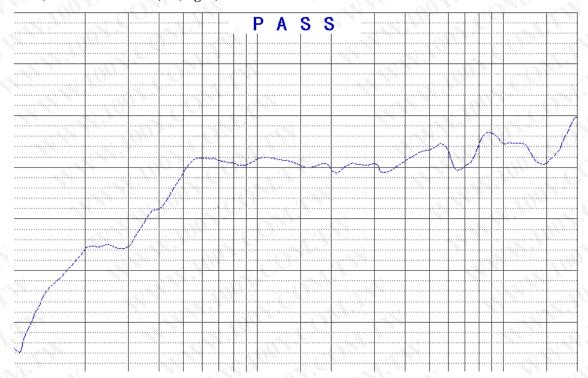


#### 4. FREQUENCY MEASURING CIRCUIT (SPEAKER MODE) (Fig.2)

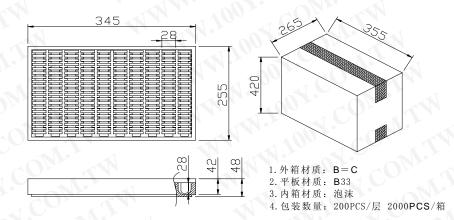


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# 5. FREQUENCY RESPONSE MASK & TYPICAL FREQUENCY RESPONSE CURVE (SPEAKER MODE) (Fig. 3)



#### 6. PACKAGING EXPLAIN



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2				MITOLIIU	

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#### 7. RELIABILITY TESTS

The sound pressure as specified shall neither deviate more than  $\pm 3dB$  from the initial value, nor any significant damage after any of following testing.

#### 7.1 HIGH TEMPERATURE TEST

High temperature: +55±2°C

Duration: 48 hours

#### 7.2 LOW TEMPERATURE TEST

Low temperature : -20±2°C

Duration: 24 hours

#### 7.3 HEAT SHOCK TEST (See in Fig.6)

High temperature: $+55\pm2^{\circ}$ CLow temperature: $-20\pm2^{\circ}$ CChangeover time:<30 secondsDuration:45 minutes

Cycle: **7.4 HUMIDITY TEST** 

Temperature:  $+20\pm2$  °C Relative humidity:  $90\sim95\%$  Duration: 24 hours

#### 7.5 TEMPERATURE CYCLE TEST

Temperature:  $-20^{\circ}$ C  $+55^{\circ}$ C Duration:  $45^{\circ}$  minutes  $45^{\circ}$  minutes

Temperature gradient: 1~3℃/min.

Cycle: 10

#### 7.6 DROP TEST

Height: 1.0 m

Cycle: 6 (1 each plain)

onto the concrete board

#### 7.7 LOAD TEST

Speaker mode: White noise (EIA filter) for **48hours** @ **2.0W** input power @ **20-20KHz**.

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