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| BOSAN HI-TECH CO., LTD. |
|-----------------------------------|
| BEST QUALITY, SPECIALIZED SERVICE |
| HI-TECH PRODUCTS |



BOSAN HITECH CO., LTD

444-2 NonHyun Dong, Namdong Gu, Inchon, Korea.

Tel) 82-32-818-2125 Fax) 82-32-818-8780

E-mail: andy@bosanhitech.com

Specification Sheet

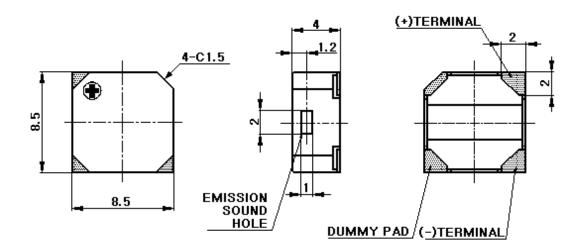
(MODEL: BST-0845A)

<Non Washable Type>

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1. DIMENSION



UNIT: mm Tolerance: ±0.3 Housing Material: LCP

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2. SCOPE

THIS SPECIFICATION IS APPLIED TO THE DYNAMIC MAGNET TRANSDUCER ASSEMBLY WHICH IS USED AS ALERT IN A CELLULAR PORTABLE PRODUCTS.

3. ELECTRICAL SPECIFICATIONS

ALL DATA AT 25 °C, HUMIDITY 40% ~ 80% UNLESS OTHERWISE SPECIFIED.

| ITEMS | SPECIFICATIONS | CONDITIONS |
|-------------------|-----------------|--------------------------|
| RATED VOLTAGE | 5.0 Vo-p | |
| OPERATING VOLTAGE | 3.0V ~ 7.0Vo-p | Vo-p |
| RATED CURRENT | MAX 80mA | |
| COIL RESISTANCE | 30ohm +/- 5 | |
| SOUND PRESSURE | MIN. 90dBA | * f=2,700Hz, Vo-p=5.0Vdc |
| LEVEL (AT 10cm) | Pint Soub/t | *1/2 DUTY SQUARE WAVE |
| RATED FREQUENCY | 2,700Hz | |
| OPERATING TEMP. | -30 °C ~ +75 °C | |
| STORAGE TEMP. | -40 °C ~ +85 °C | |

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4. RELIABILITY

TEMPERATURE CHARACTERISTICS

- #. All data taken at -30 °C and +85 °C will be referenced to initial data taken at +25 °C.
- #. Component must be fully stabilized at temperature extremes before data taken, which may require up to a 4 hour soak.

STATIC HUMIDITY

#. Precondition at 25℃ for 60 minutes. After 72 hours at 40℃ with 90% to 95% relative humidity, allow to dry at room ambient for 4 hours.

VIBRATION (RANDOM)

- #. To vibrate randomly at 6 g's or 0.04 g /Hz power spectral density from 10 to 2000 Hz for 15 minutes per plane or
- #. Sinusoidal vibration 10 to 60 Hz, 0.06" double amplitude or 15 g's whichever is less for 1/2 hour per plane X,Y,Z.

OPERATING LIFE

#. To subject samples to 85°C at 85% RH for 168Hr at full rated power.

COMPONENT SHEAR TEST

#. To subject sample on PC Board to a tensile pull strength of 1Kg force for 30 seconds.

DROP TEST

#. While assembled in a dummy case, 5 free falls onto a concrete floor from a height of 150cm.

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SPECIFICATION FOR APPROVAL

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5. Environmental Information

- # This product meets ROHS standard and information of every parts below can be subjected.
 - -. ICP-AES analysis data
 - -. MSDS data

| Type | Substances / Material | ppm(amount) |
|-----------|---|--------------|
| | Cadmium and compounds | 3.7 |
| | Lead and compounds | 477 |
| | Mercury and compounds | Not detected |
| | Chrom(VI) and compounds | Not detected |
| | Polybrominated biphenyls (PBBs) | Not detected |
| Class I | Polybrominated diphenylethers(PBDEs) | Not detected |
| | Polychlorinated biphenyls (PCBs) | Not detected |
| | Polychlorinated Terphenyls (PCTs) | Not detected |
| | Polychlorinated naphthalences (PCNs) | Not detected |
| | Ozone depleting substances(CFCs, HCFCs, Halons) | Not detected |
| | Asbestos and compounds | Not detected |
| | Formaldehydes | Not detected |
| | Short-chain chlorinated paraffins | Not detected |
| | (Alkane 10 ~ 13 Carbon chain) | Not detected |
| | Azo colorants | Not detected |
| | Nickel and compounds | Not detected |
| | Organic tin compounds | Not detected |
| Class II | Arsenic and compounds | Not detected |
| | Phthalates | Not detected |
| | PVC | Not detected |
| | Beryllium and compounds | Not detected |
| | Other Chlorinated flame retardants | Not detected |
| Class III | Other Chlorinated flame retardants (TBBP-A) | Not detected |

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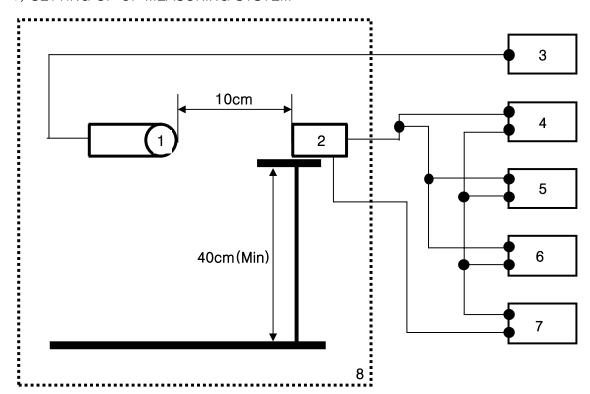
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5. ELECTRICAL CHARACTERISTICS MEASUREMENT

1) SETTING UP OF MEASURING SYSTEM



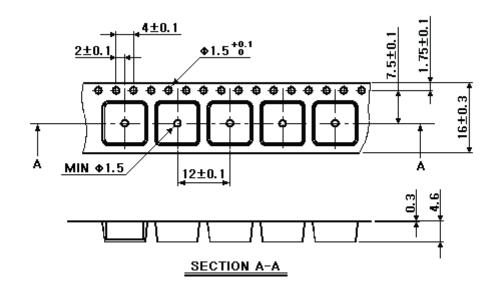
| NO | EQUIPMENT | REMARKS |
|----|---------------------------|-----------------|
| 1 | CONDENSER MIC. | |
| 2 | DEVICE UNDER TEST | MAGNETIC BUZZER |
| 3 | F.F.T, OR S.P.L INDICATOR | |
| 4 | OSCILLATOR | |
| 5 | FREQUENCY COUNTER | |
| 6 | VOLTAGE METER | |
| 7 | AMPERE METER | |
| 8 | SOUND PROOF ROOM | |

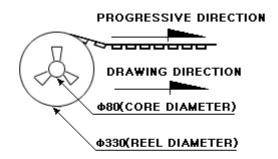
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6. PACKING FORMAT





REMARK

- 1.Each corner without specification is max R0.25.
- 2.Emboss carrier tape is as per JIS C0806 standard.
- 3.Diameter of reel is ◆330mm and core is ◆80mm. 4.Quantity packed in a reel: 1,000pcs

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7. SOLDERING CONDITION

1) REFLOW SOLDERING

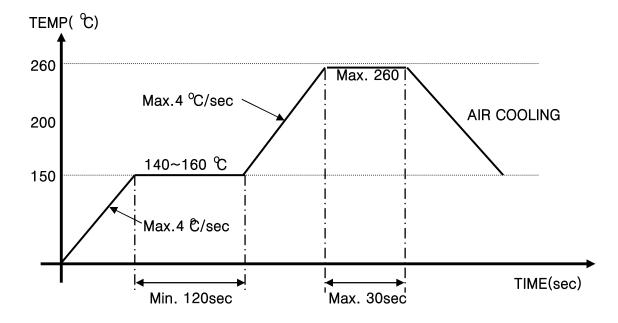
RECOMMENDABLE REFLOW SOLDERING CONDITION IS AS FOLLOWS.

#. REFLOW SOLDERING IS TWO TIMES

1-1: IT IS REQUESTED THAT 2ND REFLOW SOLDERING SHOULD BE EXECUTED AFTER THE TEMPERATURE OF PRODUCT GOES DOWN TO NORMAL TEMPERATURE

1-2 : MAXIMUM REFLOW TEMPERATURE IS 240℃ WITH MAXIMUM DURATION OF 45 SECONDS BETWEEN 200℃ AND 240℃.

#. TEMPERATURE PROFILE(C)



2) MANUAL SOLDERING

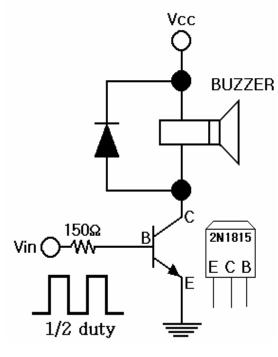
THE TEMPERATURE OF SOLDERING IRON: 350℃ WITHIN 10 SECONDS.

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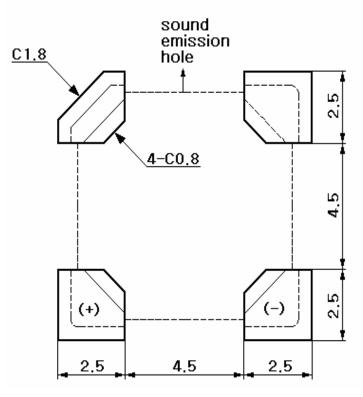
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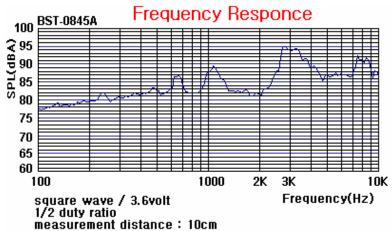
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⟨Standard Drive Circuit⟩



⟨Recommended foot print layout⟩





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