

ISSUE DATE : 20 Nov., 2007

SPECIFICATIONS

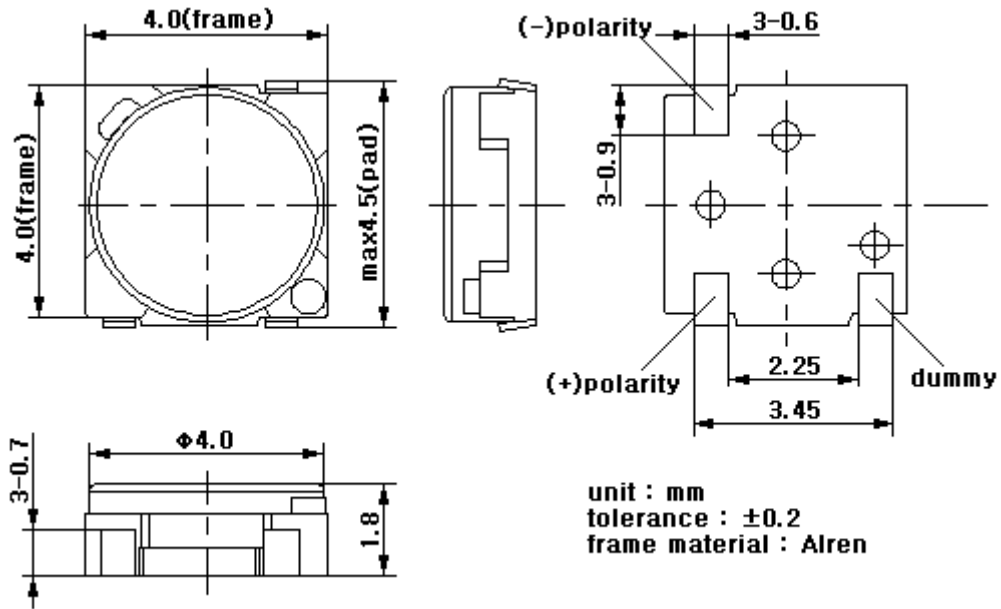
CUSTOMER:	AMEC GmbH
CONTACT PERSON:	Jessica
PROJECT NOTE:	

MAGNETIC BUZZER

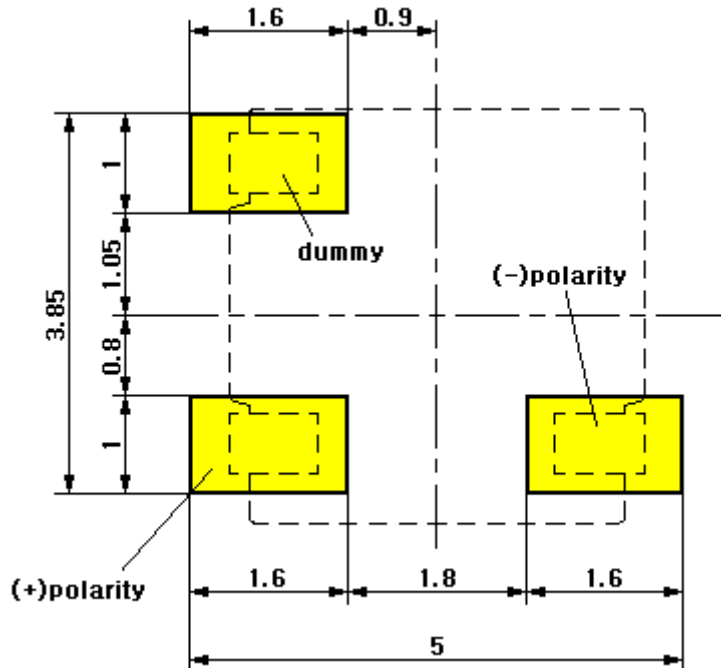
ALPINE P/N.:	AEB-404018S-45-12	APPROVAL DATE:	
CUSTOMER P/N.:		SIGNATURE AND COMPANY STAMP FOR APPROVAL :	

NO.	DATE	REVISION RECORD		CAUSE OF REVISION	SIGN. REV.
		BEFORE REVISION	AFTER REVISION		

1. DIMENSION



RECOMMENDED LAND PATTERN DIMENSIONS

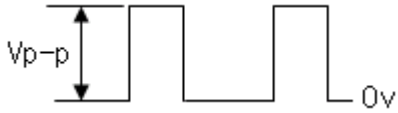


2. SCOPE

This Specification is applied to the dynamic magnet transducer assembly which is used as alert in cellular portable product.

3. ELECTRICAL SPECIFICATIONS

All data at 25°C, Humidity 40% ~ 80% unless otherwise specified.

ITEMS	SPECIFICATIONS	CONDITIONS
RATED VOLTAGE	3.3 Vo-p	
OPERATING VOLTAGE	2.0V ~ 4.0Vo-p	
RATED CURRENT	MAX 100mA	
COIL RESISTANCE	12 ohm ± 3	
SOUND PRESSURE LEVEL (AT 10cm)	Min 78 dBA	* f=4,500Hz, Vp-p=3.3Vdc *1/2 DUTY SQUARE WAVE
RESONANT FREQUENCY	4,500 Hz	
OPERATING TEMP.	-30°C ~ +70°C	
STORAGE TEMP.	-40°C ~ +85°C	

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°C for 60 minutes. After 72 hours at 40°C 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 0.04g/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 168 HR at full rated power.

COMPONENT SHEAR TEST

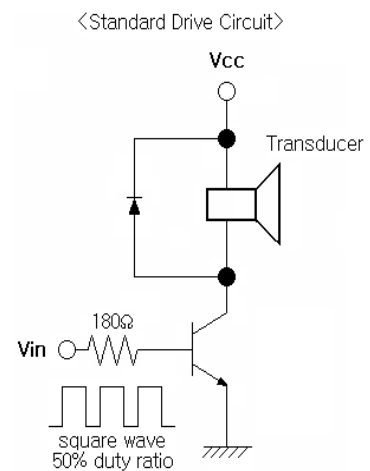
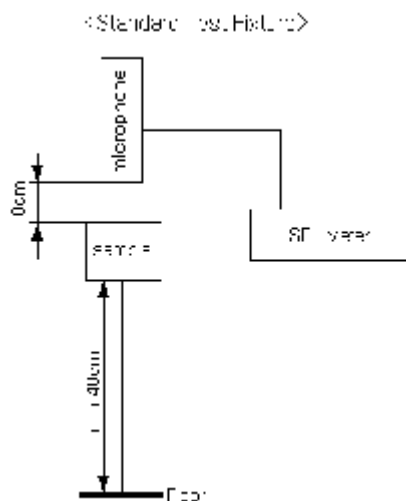
- To subject sample on PC Board to a tensile pull strength of 1Kg force for 30 seconds.

DROP TEST

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

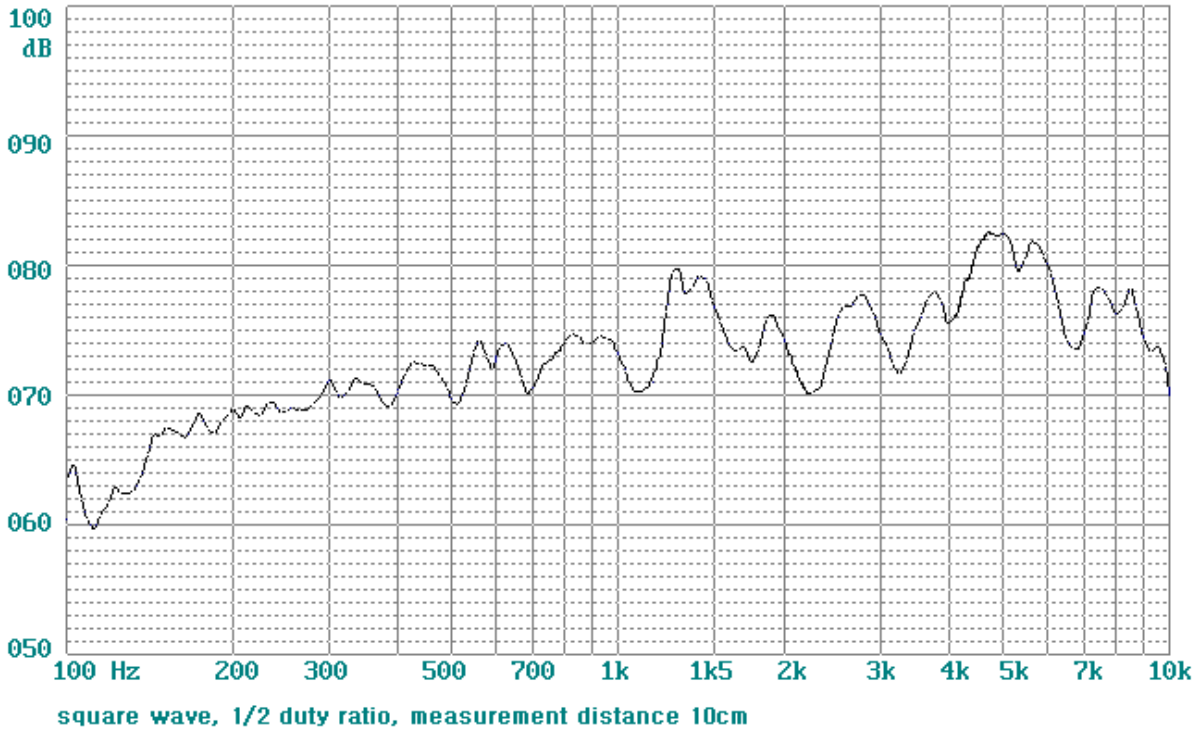
5. ELECTRICAL CHARACTERISTICS MEASUREMENT

SETTING UP OF MEASURING SYSTEM



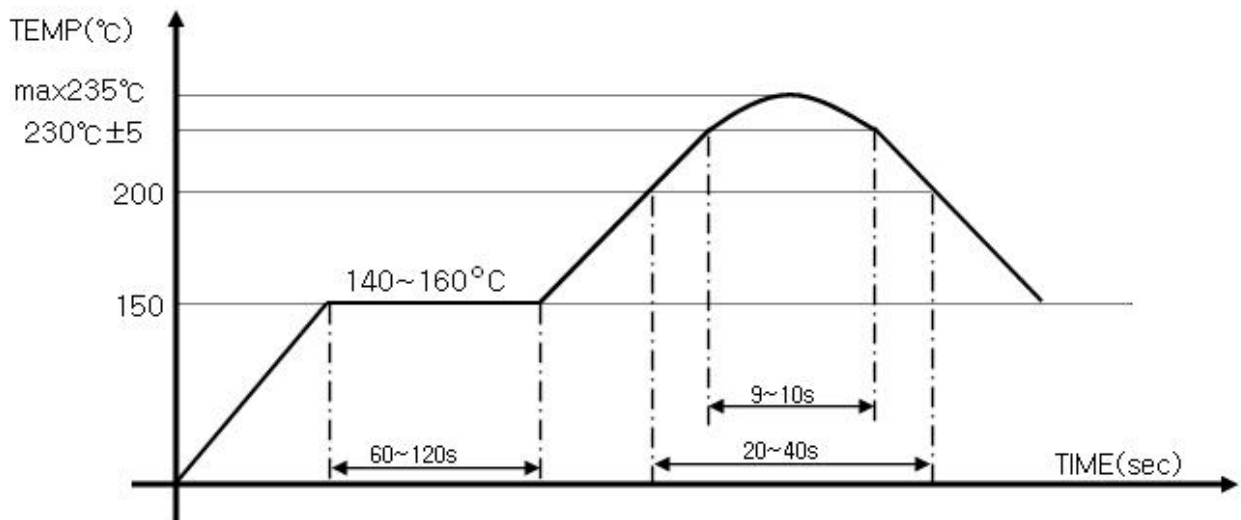
6. FREQUENCY RESPONSE CURVE

Frequency Response Curve

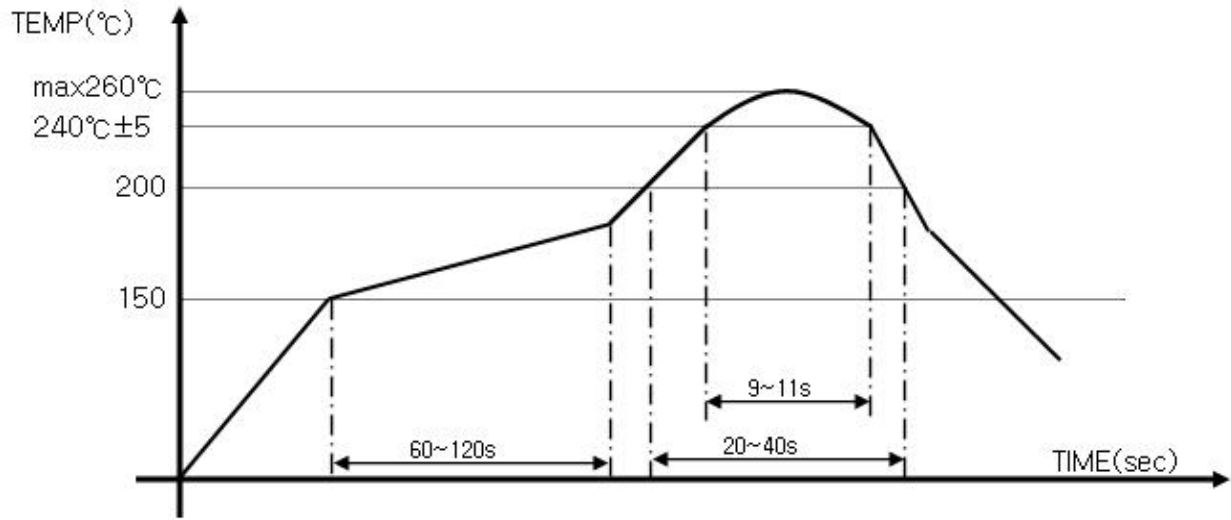


7. REFLOW CONDITION PROFILE

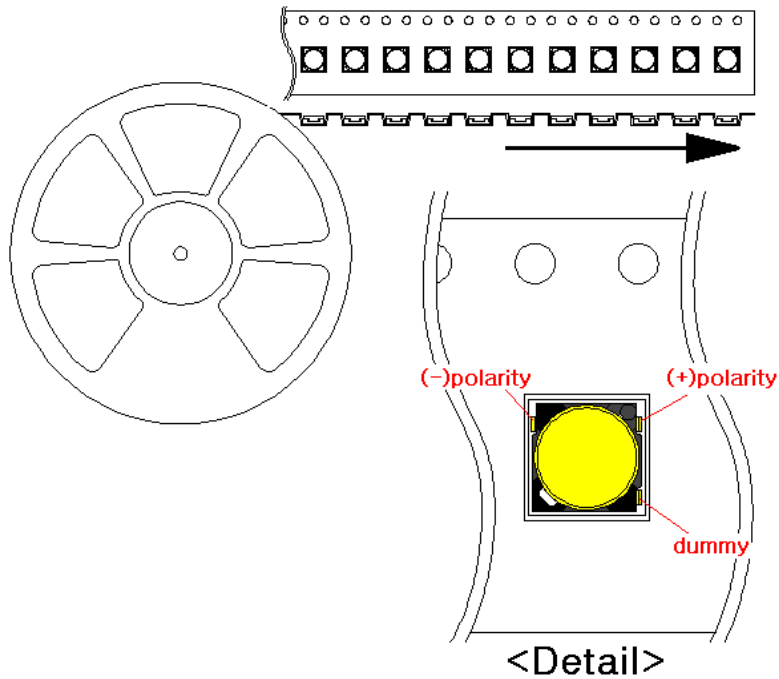
1) lead vream solder



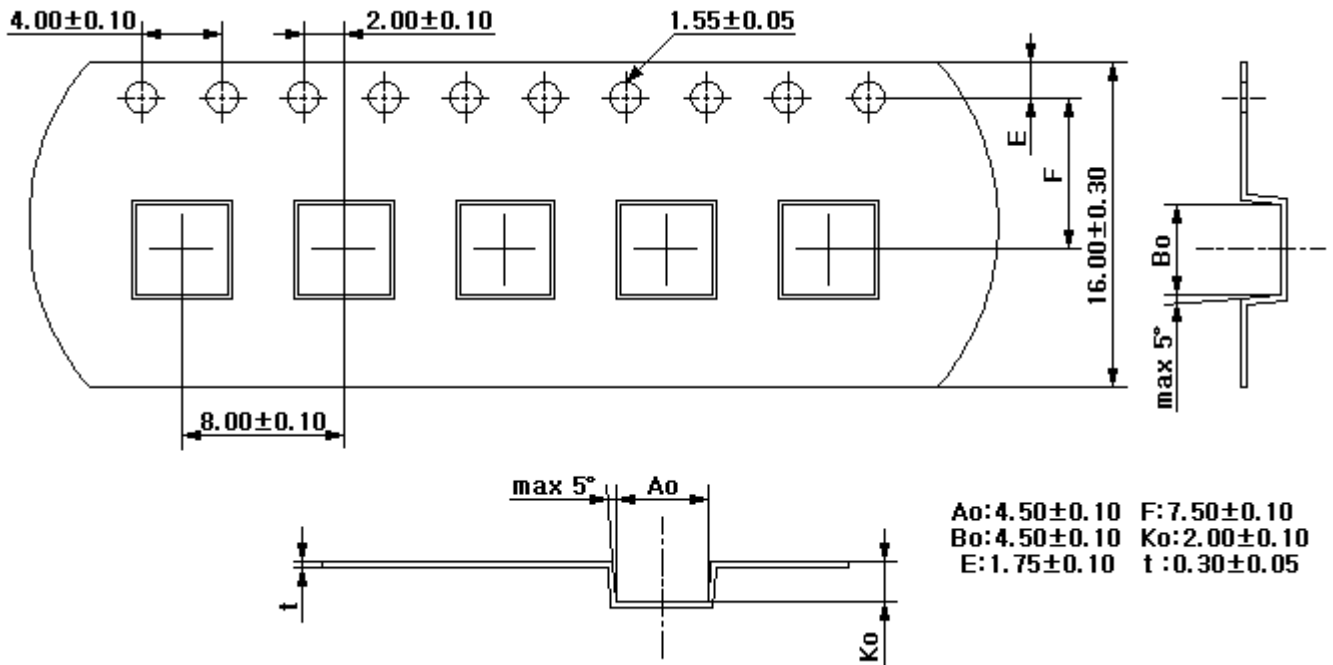
2)lead free cream solder



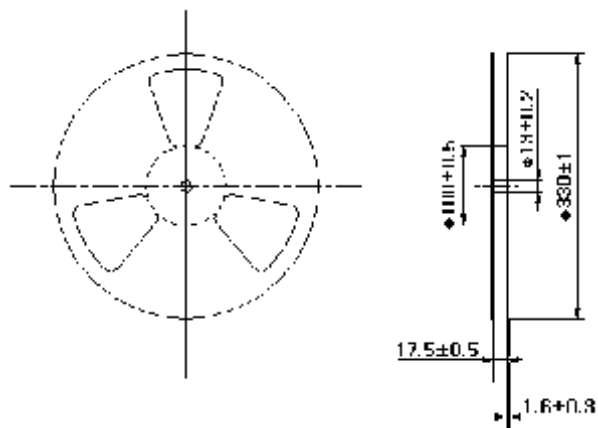
8. ORIENTATION IN TAPE AND REEL PACKING.



9. PACKING FORMAT
DIMENSION OF POCKET



DIMENSION OF REEL



PACKING QUANTITY

3,000 PCS PER REEL

REEL PER INNER BOX (3,000 PCS OF BUZZERS)

5 INNER BOXES PER CARTON BOX (15,000PCS OF BUZZERS)