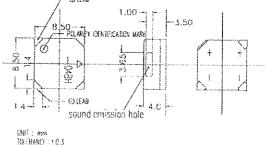
## C) C) oberton Inc.

### Product Data Sheet Part No. ST-04BT Reflow Type (SMD)

## DIMENSIONS -04 BL -04 BH -04 BT





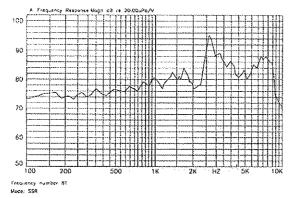
 $8.5 \times 8.5 \times 4.0$ 

4.0 HOUSEC VAREBAL : ECP

Unit	
	Black
(V)	3.6
(V)	2-4
(mA)	MAX.70
(Ω)	15±3
(dB)	87
(Hz)	3200
(C)	-30~+85
(C)	-40~+85
(g)	1
	SMD
mm	8.5 x 8.5 x 4
	(V) (V) (MA) (Ω) (dB) (Hz) (C) (C) (g)

<sup>\*</sup>applied voltage: Rated Voltage, 1/2 duty, square wave

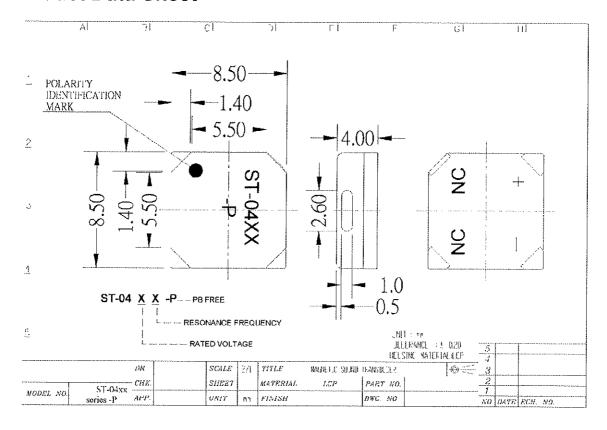
#### FREQUENCY RESPONSE



<sup>\*</sup>distance for measurement 10cm

# C) L)oberton Inc.

#### **Product Data Sheet**





#### RELIABILITY TEST

#### ST-04xx Series -P

Note: No voltage is applied to the part during reliability test No. 1~4

	Item	Test Conditions	Evaluation Standard
pende	Temp. test	(1) High temp. storage life test:  The part shall be capable of withstanding a storage temperature of +85°C for 96 hours.  (2) Low temp. storage life test:  The part shall be capable of withstanding a storage temperature of -40°C for 96 hours.  (3) Temp. cycle:  The part shall be subjected to 10 cycles. One cycle shall consist of;  +85°C  -40°C  30min. 30min.  60min.	After the test the part shall meet specifications without any degradation in
2	Temp. / Humidity cycle test	The part shall be subjected to 10 cycles. One cycle shall be 8 hours and consist of;  +85°C  a b c c 2.5 hrs  a, b: 90 ~ 98% RH c: 80 ~ 98% RH	any degradation in appearance and performance except SPL.  SPL. shall be 87 dl3 or more.



#### RELIABILITY TEST

#### ST-04xx Series -P

Note: No voltage is applied to the part during reliability test No. 1~4

~~~~	Item	Test Conditions	Evaluation Standard
3	Vibration Test	The part shall be subjected to a vibration cycle of 10Hz to 55Hz to 10Hz in a period of 1 minute. Total peak amplitude shall be 1.52mm(9.3G). The vibration test shall consist of 2 hours per plane in each three mutually perpendicular planes for a total time of 6 hours.	
4	Dropping Test	(1) Fixed drop: The part shall be mounted on 100g jig(standard peboard) and dropped from a height of 152cm onto a concrete floor 5 times in each 6 planes. (a total of 30 times.)  (2) Free drop: The part only shall be dropped from a height of 75cm noto a 40mm thick wooden board 3 times in 3 axes (X.Y.Z). (a total of 9 times.)	After the test the part shall meet specifications without any degradation in appearance and performance except SPL.  SPL. shall be 87 dB or more
5	Operating life test	(1) Ordinary temperature: The part shall be subjected to 1000 hours at room temperature (25±10℃) with rated voltage & resonance frequency applied.  (2) High temperature: The part shall be subjected to 500 hours at +70℃ with rated voltage & resonance frequency applied.  (3) Low temperature: The part shall be subjected to 500 hours at -30℃ with rated voltage & resonance frequency applied.	SPL. shall be 87 dB or more.



#### RELIABILITY TEST

#### ST-04xx Series -P

Note: No voltage is applied to the part during reliability test No. 1~4

Item		Test Conditions	Evaluation Standard
6	Solderability	The part shall be dipped into the soldering bath conditioned as follows;  Solder temp.: 260±5℃  Soaking time: 10 - 11 seconds	95% surface of lead pins must be covered with fresh solder and soldering balls should be found.
7	Pin lead strength	3 lead pins shall be solder on the pc board, and the force (10n) shall be applied behind the part for 10±1 seconds.	After the test the part shall meet specifications without any degradation in appearance and performance except SPL.  SPL. shall be 87 dB or more.
8	For infrared reflow oven	<recommended for="" oven="" profile="" reflow="" temperature=""> ( Reference standard ; EIAJ ED-4702 ) 230±5°C 200°C 30±10s 150±10°C 30±30s</recommended>	