

# SPECIFICATIONS

**CUSTOMER:**

**PRODUCT:** PIEZO BUZZER

**MODEL NUMBER:** FY-14

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ILOSAM

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## 1. SPECIFICATIONS

**FY-14**

ITEMS	SPECIFICATIONS	CONDITIONS
RATED VOLTAGE	12VDC	
OPERATING VOLTAGE	3-16VDC	
RATED CURRENT	LESS THAN 8mA	APPLYING DC RATED VOLTAGE
TONE NATURE	Continuous	
SOUND OUTPUT	MORE THAN 85dB	DISTANCE AT 10 CM FROM A MICROPHONE WITH APPLYING DC RATED VOLTAGE
FREQUENCY	$4000 \pm 500\text{Hz}$	MEASURING AT THE RATED DC VOLTAGE
PIN'S STRENGTH	MORE THAN 1kg	
OPERATING TEMPERATURE	$-20 \sim +70^{\circ}\text{C}$	
STORAGE TEMPERATURE	$-30 \sim +80^{\circ}\text{C}$	
DIMENSIONS	SEE FIG. 1 ATTACHED	
APPEARANCE		THERE SHOULD BE NO REMARKABLE STAINS, RUSTS OR FLAWS.

### NOTE:

TEST SHOULD BE MADE UNDER THE CONDITIONS OF ROOM TEMPERATURE ( $20 \pm 10^{\circ}\text{C}$ ), RELATIVE HUMIDITY ( $60 \pm 20\%$ ) AND NORMAL ATMOSPHERIC PRESSURE. IN THE CASE OF DOUBTFUL JUDGMENT , THE TESTING CONDITIONS ARE TO BE CHANGED TO ROOM TEMPERATURE  $20 \pm 2^{\circ}\text{C}$  , RELATIVE HUMIDITY 60-70% AND NORMAL ATMOSPHERIC PRESSURE.

## 2. INSPECTION STANDARD

**FY-14**

ITEM TESTED	SYM	STANDARD	AQL	LEVEL	INSPECTION BY MEANS OF	REMARKS
NO SOUNDING		3-16V <sub>DC</sub>	0.25	II	EARS	AT EACH 3, 12 AND 16 V <sub>DC</sub> THERE SHOULD BE NO NON-SOUNDING, HARSH SOUND
SOUND OUTPUT		MORE THAN 85dB WHEN APPLYING RATED VOLTAGE	1	II	SOUND PRESSURE LEVEL METER	DISTANCE AT 10CM WITH MOUNTING TO INSPECTION DEVICE IN A STANDARD MANNER(A RANGE)
CURRENT		LESS THAN 8mA WHEN APPLYING RATED VOLTAGE	0.65	I	MULTIMETER	
BASIC FREQUENCY		4000±500Hz	0.65	I	FREQUENCY METER	
OUTER DIAMETER	A	Φ 14±0.2	1.5	S-3	ELECTRONICS CALIPERS	TO BE MEASURED AT THE MAXIMUM DIAMETER.
OVERALL THICKNESS	B	7.8±0.2				
PIN'S PITCH	C	7.6±0.2				
PIN'S LENGTH	D	5.5±0.5				
PIN'S DIAMETER	E	Φ 0.7±0.1				
STRENGTH OF TERMINAL PINS		MORE THAN 1KG				BY PULLING EACH PIN
STATIONARY STRENGTH OF BASE		MORE THAN 1KG	1	II	TENSION GAUGE	BY PULLING THE BASE
STATE OF SOLDER			1	II	MAGNIFYING GLASSES	SOLDERED POINTS AND /OR COIL DISPOSITION SHOULD BE PROPER. (CROSSED COIL WIRE ARE NOT ACCEPTED)
RUST			1.5	II	EYES	ANY RUST SHOULD NOT BE ACCEPTED.
STAIN			1.5	II	EYES	THERE SHOULD BE NO RE-MARKABLE STAINS.
ADHESION			1.5	II	EYES	ADHESION SHOULD BE MADE SUFFICIENTAL AND THERE SHOULD BE NO OUTFLOW OF ADHESIVE AGENT.
OTHER APPEARANCE					EYES	

**3. RELIABILITY TEST****FY-14**

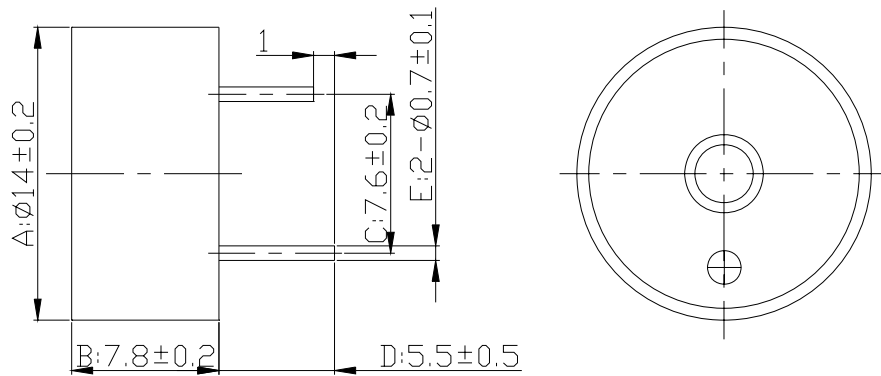
ITEM	METHOD OF TEST	STANDARD
OPERATING TEMP.	-20 ~ +70°C	ALL SPECIFICATIONS MUST BE SATISFIED AFTER THE TEST.
STORAGE IN HIGH TEMP.	STORAGE IN 80°C TEST BOX FOR 96 HOURS THEN EXPOSE TO THE ROOM TEMP. FOR 2 HOURS.	
STORAGE IN LOW TEMP.	STORAGE IN -30°C TEST BOX FOR 96 HOURS THEN EXPOSE TO THE ROOM TEMP. FOR 2 HOURS.	
LIFE TEST IN THE ROOM TEMP.	OPERATE THE BUZZER CONTINUOUSLY AT 5 SECONDS ON AND 5 SECONDS OFF FOR 500 HOURS AT RATED VOLTAGE.	
TEMP. CYCLE TEST	MAKE THE TEST FOR 5 CYCLES WITHOUT APPLYING POWER AS FIG.3, THEN EXPOSE TO THE ROOM TEMP. FOR 2 HOURS.	
TEMP./HUMIDITY CYCLE TEST	MAKE THE TEST FOR 10 CYCLES WITHOUT APPLYING POWER AS FIG.4, THEN EXPOSE TO THE ROOM TEMP. FOR 2 HOURS.	
VIBRATION TEST	MAKE THE TEST FOR THE DIRECTIONS OF X,Y,AND Z FOR 0.5 HOURS EACH (TOTAL 1.5 HOURS) TO-AND-FRO SWEEP TIME (FROM 10 TO 55 Hz AND THEN FORM 55Hz TO 10Hz) UNDER SINGLE AMPLITUDE OF 0.75 mm IS 1 MINUTE.	
DROP TEST	DROP A BUZZER NATURALLY FROM THE HEIGHT OF 700mm ONTO THE SURFACE OF 10mm THICK WOODEN BOARD. TWO DIRECTIONS: THE UPPER AND SIDE OF THE TRANSDUCER ARE TO BE APPLIED FOR THIS DROP TEST RESPECTIVELY ONCE.	

**NOTE: THE PINS ARE ALLOWABLE TO DEFORM AFTER DROP TEST.**

## DIMENSIONS

(UNIT: mm)

**PART NUMBER: FY-14**



**NOTE:**

**PLEASE REFER TO A.B.C.D.E IN THE SECOND VOLUME “SYM” IN PAGE 2**

FIG. 1

## TYPICAL CHARACTERISTIC CURVES OF FY-14

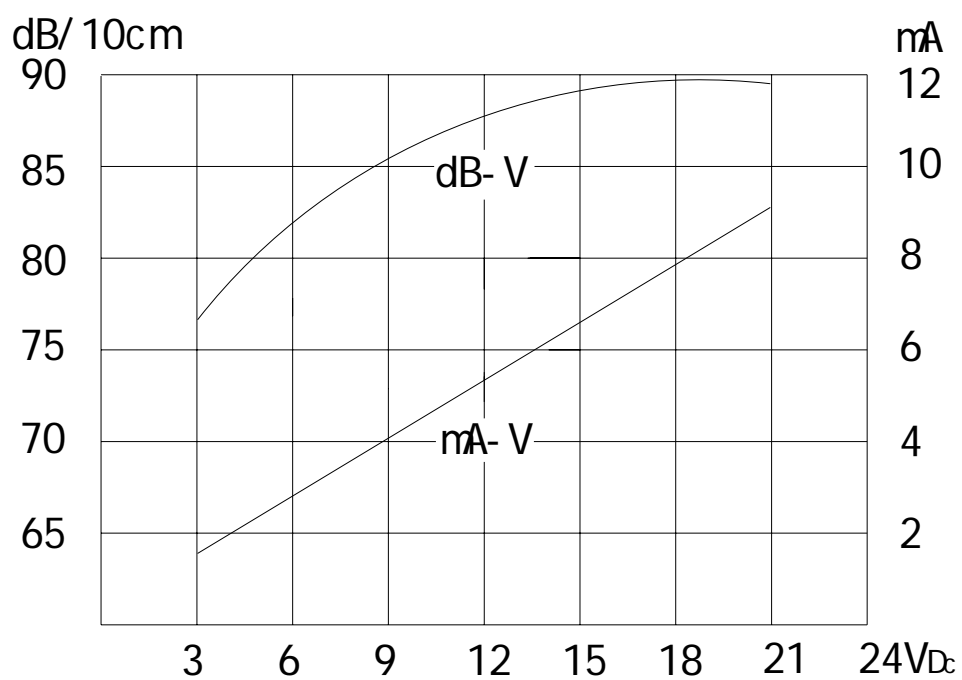
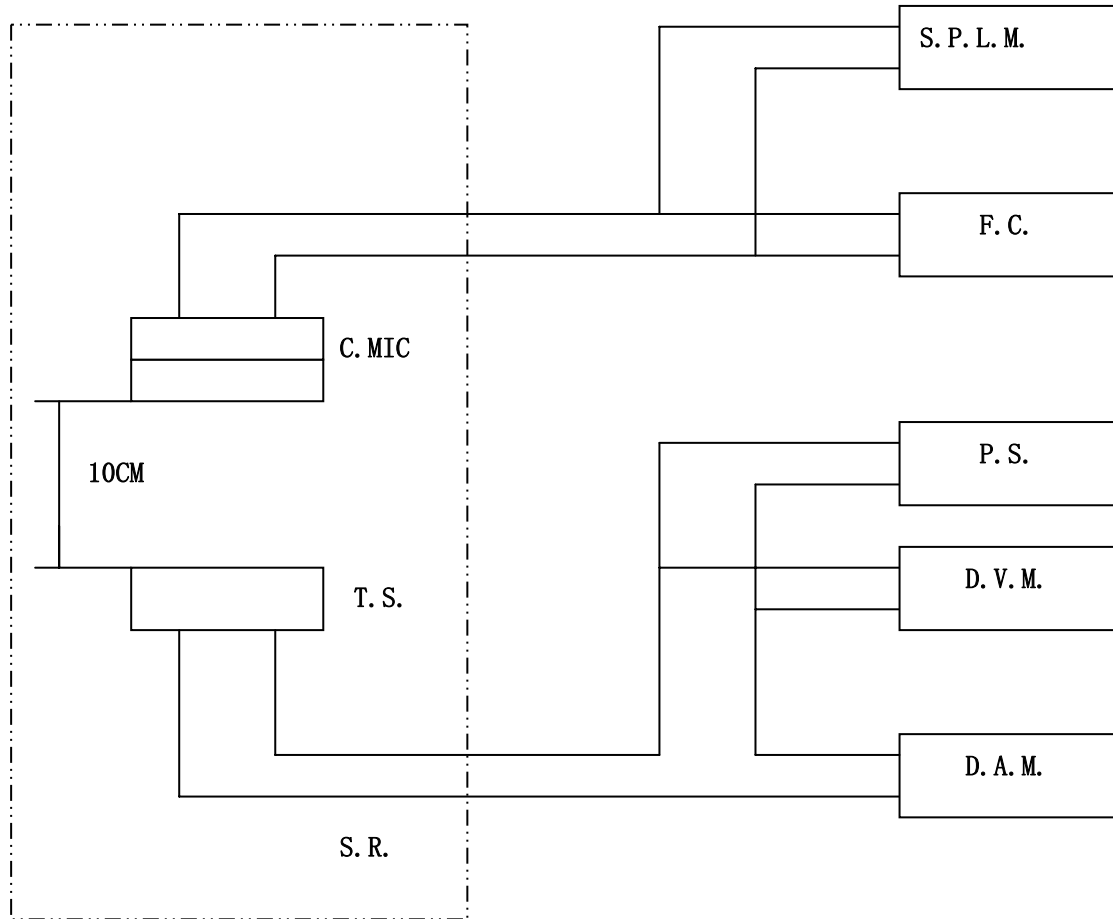


FIG.2

## ELECTRICAL CHARACTERISTIC TEST METHOD



S. P. L. M.: SOUND PRESSURE LEVEL METER  
F. C. : FREQUENCY COUNTER  
D. A. M. : DC AMPERE METER  
S. R. : SOUNDPROOF ROOM  
D. V. M. : DC VOLT. METER  
T. S. : TESTING SAMPLE  
C. MIC : CONDENSER MIC  
P. S. : POWER SUPPLY

FIG. 5

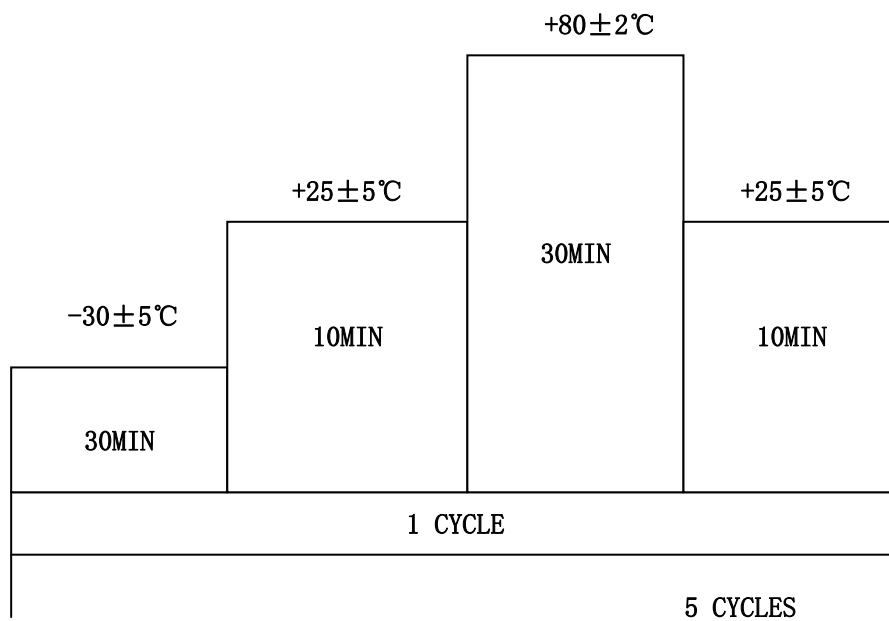


FIG. 3

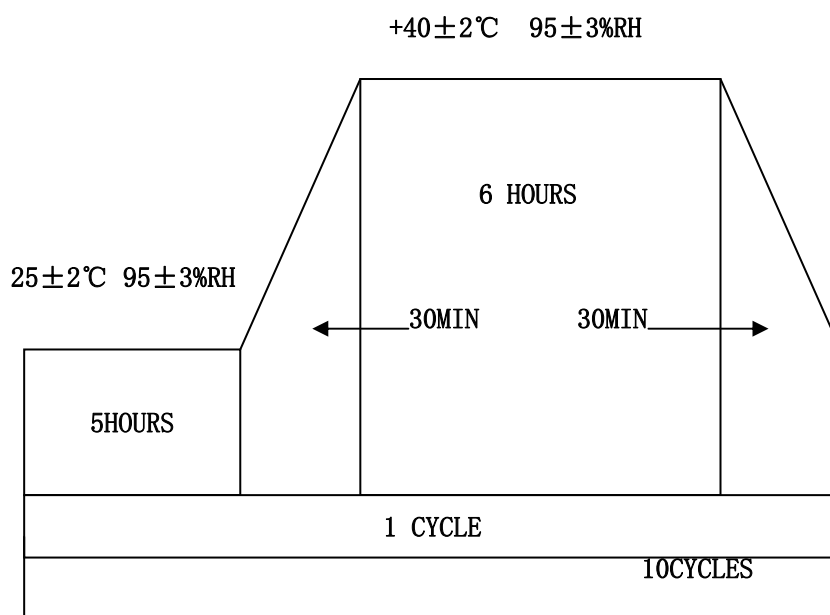


FIG. 4