# ILOSAM ELECTRONICS CO., LTD.

XY-14

FEATURES:

Case: Black MPP0

Pin: Tin-Plated Copper

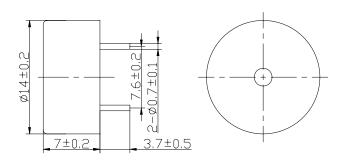
### SPECIFICATIONS:

ТҮРЕ	UNIT	XY-14
◆Min. Sound Output at 10 cm	dB	80
Rated Voltage	V <sub>p-p</sub>	5
Operating Voltage	V <sub>p-p</sub>	1~20
Resonant Frequency	Hz	$4000 \pm 500$
◆Max. Current Consumption	mA	2
Capacitance at 1000Hz	pF	$12000 \pm 30\%$
Operating Temperature	$^{\circ}$ C	-20~+70
Storage Temperature	$^{\circ}$	-30∼+80
Weight	g	2

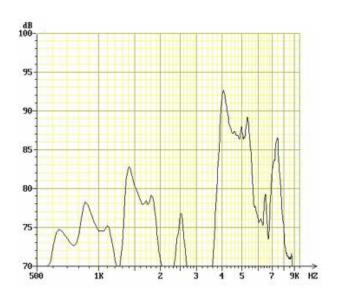
<sup>◆</sup> Value applying at rated voltage

#### **DIMENSIONS:**

(Unit: mm)



## **FREQUENCY RESPONSE:**



Address: Chung-Ang Circulation complex(GA-Dong/3428) #1258 Kurobon-Dong Kuro-Gu SEOUL KOREA

Tel: **82-2-26150158** Fax: **82-2-26151043** 

E-mail: izicom@ilosam.co.kr Web site: www.ilosam.co.kr

# **SPECIFICATION SHEET**

ww DataSheet4II com

## **CUSTOMER:**

**PRODUCT: PIEZO TRANSDUCER** 

**MODEL NUMBER:** XY-14

# ILOSAM ELECTRONICS CO., LTD.





TEL: +82-2-26150158 POST CODE: 152-721

FAX: +82-2-26151043

ADD: Chung-Ang Circulation complex(GA-Dong/3428) #1258 Kurobon-Dong Kuro-Gu SEOUL KOREA

E-mail: izicom@ilosam.co.kr Http://www.ilosam.co.kr

#### 1.SPECIFICATIONS

#### **XY-14**

ITEMS	SPECIFICATIONS	CONDITIONS	
RATED VOLTAGE	5Vp-p/4.0KHz		
MAX.ALLOWABLE INPUT VOLTAGE	20Vp-p		
RATED CURRENT	LESS THAN 2mA/5Vp-p/4.0KHz	APPLYING RATED VOLTAGE	
CAPACITANCE	12000±30%pF		
w.DataSheet4U.com TONE NATURE	SINGLE		
SOUND OUTPUT	MORE THAN 80dB	MIN.SOUND PRESSURE LEVEL AT 10CM/4.0KHz/9Vp-p SQUARE WAVE	
FREQUENCY	4000±500Hz	MEASURING AT THE RATED VOLTAGE	
PIN STRENGTH	MORE THAN 1Kg		
OPERATING TEMPERATURE	-30 ~ +85℃		
DIMENSION	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  $^{\circ}$ C), HUMIDITY (60  $\pm$  20%) AND NORMAL ATMOSPHERIC PRESSURE. IN THE CASE, HOWEVER, THAT THE JUDGMENT IS QUESTIONABLE, THE TEST CONDITIONS ARE TO BE CHANGED TO ROOM TEMPERATURE 20  $\pm$  2  $^{\circ}$ C, RELATIVE HUMIDITY 60-70% AND NORMAL ATMOSPHERIC PRESSURE.

## 2. INSPECTION STANDARD

## **XY-14**

ITEM TESTED	SYM	STANDARD	AQL	LEVEL	INSPECTION BY MEANS OF	REMARKS
NO SOUNDING		5Vp-p/4.0KHz	0.25	II	EARS	AT EACH 1Vp-p, 5Vp-p, 20Vp-p/4.0KHz THERE SHOULD BE NO NONSOUNDING, HARSH SOUND
SOUND OUTPUT		MORE THAN 80dB WHEN APPLYING RATED VOLTAGE	1	II	SOUND PRESSURE LEVEL METER	MIN. SOUND PRESSURE LEVEL AT 10CM/4KHz/5Vp-p SQUARE WAVE
DataS CURRENT		LESS THAN 2mA WHEN APPLYING RATED VOLTAGE	0.65	I	MULTIMETER	
CAPACITANC E		12000±30%pF	0.65	I	LC METER	
BASIC FREQUENCY		4000±500Hz	1	II		
OUTER DIAMETER	A	Φ14.0±0.2			ELECTRONICS CALIPERS	TO BE MEASURED AT THE MAXIMUM DIAMETER
OVERALL HEIGHT	В	$7.0 \pm 0.2$	1.5	S-3		
PIN'S LENGTH	С	3.7±0.5				TO BE MEASURED AT THE FOOT OF THE PINS
PIN'S PITCH	D	$7.6 \pm 0.2$				
PIN'S DIAMETER	Е	$0.7 \pm 0.1$				
PIN'S STRENGTH		MORE THAN 1KG	0.65	S-3	TENSION GAUGE	BY PULLING EACH PIN
STATE OF SOLDER			1	II	MAGNIFYING GLASS	SOLDERED POINTS AND /OR COIL DISPOSITION SHOULD BE PROPER. (CROSSED COIL WIRE ARE NOT ACCEPTED)
RUST			1	II	EYES	ANY RUST SHOULD NOT BE ACCEPTED
STAIN			1.5	II	EYES	THERE SHOULD BE NO REMARKBLE STAINS
ADHESION			1.5	II	EYES	ADHESION SHOULD BE MADE SUFFICIENTLY AND THERE SHOULD BE NO OUTFLOW OF ADHESIVE AGENT.
OTHER APPEARANC E			1.5	II	EYES	

## 3. RELIABILITY TEST

## **XY-14**

Ī			
	ITEM	METHOD OF TEST	STANDARD
	OPERATING TEMP.	-20 ~ +60°C	
		STORAGE IN 70°C TEST BOX FOR	
	STORAGE IN HIGH TEMP.	96 HOURS THEN EXPOSE TO THE	
		ROOM TEMP. FOR 2 HOURS.	
		STORAGE IN -30°C TEST BOX FOR	
	STORAGE IN LOW TEMP	96 HOURS THEN EXPOSE TO THE	
tal	Sheet4U.com	ROOM TEMP. FOR 2 HOURS.	
		OPERATE THE TRANSDUCER	
	LIFE TEST IN THE ROOM	CONTINUOUSLY AT 5 SECONDS ON	
	TEMP	AND 5 SECONDS OFF FOR 500	
		HOURS AT RATED VOLTAGE.	
		MAKE THE TEST FOR 5 CYCLES	
	TEMPONOI E TECT	WITHOUT APPLYING POWER AS	
	TEMPCYCLE TEST	FIG.3, THEN EXPOSE TO THE	
		ROOM TEMP. FOR 2 HOURS.	
		MAKE THE TEST FOR 10 CYCLES	
	TEMP./HUMIDITY	WITHOUT APPLING POWER AS	ALL SPECIFICATIONS MUST
	CYCLE TEST	FIG.4, THEN EXPOSE TO THE	BE SATISFIED AFTER THE
		ROOM TEMP. FOR 2 HOURS	TEST
		MAKE THE TEST FOR THE	
		DIRECTIONS OF X,Y,AND Z FOR 0.5	
		HOURS EACH (1.5 HOURS)	
	VIDD ATION TEST	TO-AND-FRO SWEEP TIME (FROM	
	VIBRATION TEST	10Hz TO 55 Hz AND THEN FROM	
		55Hz TO 10Hz) UNDER SINGLE	
		AMPLITUDE OF 0.75mm IS 1	
		MINUTE.	
		DROP A TRANSDUCER	
		NATURALLY FROM THE HEIGHT	
		OF 700mm ONTO SURFACE OF	
	DROP TEST	10mm THICK WOODEN BOARD.	
		TWO DIRECTIONS: THE UPPER	
		AND SIDE OF THE TRANSDUCER	
		ARE TO BE APPLIED FOR THIS	
		DROP TEST RESPECTIVELY ONCE.	

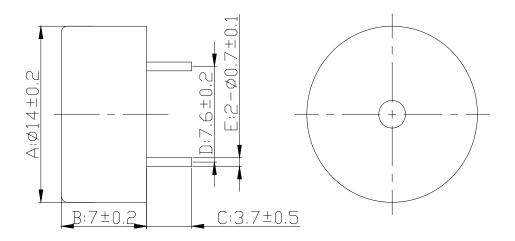
www.DataSheet4U.com

# **DIMENSION**

(UNIT: mm)

**PART NUMBER: XY-14** 

www.DataSheet4U.com



NOTE:

PLEASE SEE A.B.C.D.E. IN THE SECOND VOLUME "SYM" IN PAGE 2

FIG. 1

## FREQUENCY RESPONSE (typical curve of type XY-14)

ww.DataSheet4U.cor

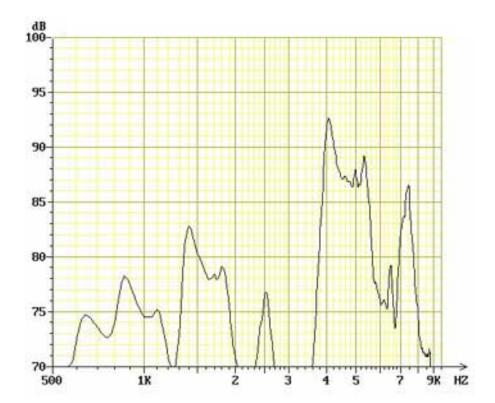
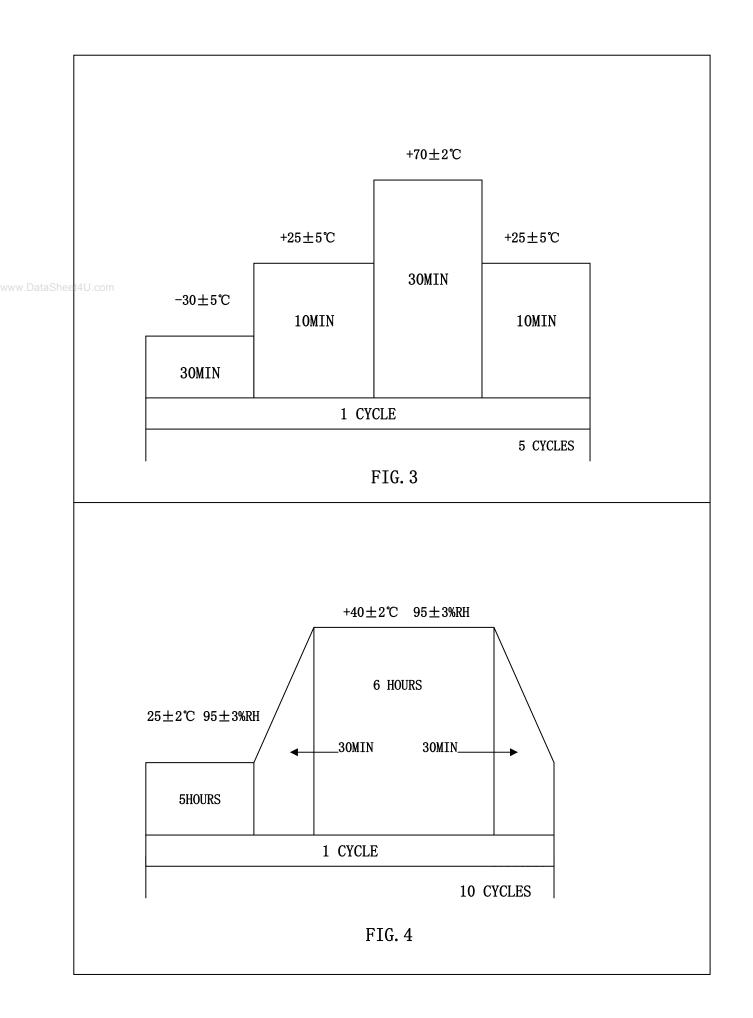
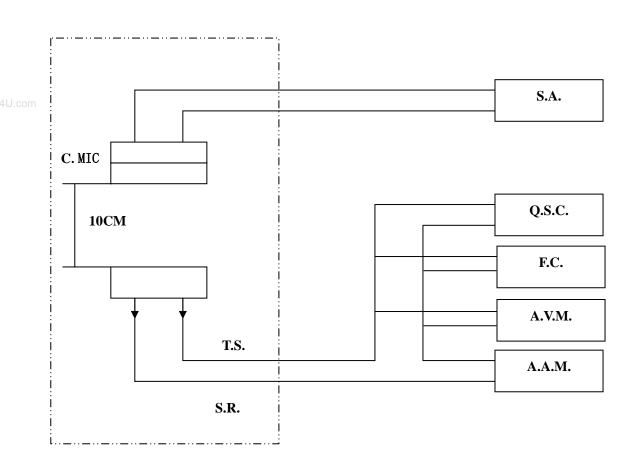


FIG. 2



#### ELECTRICAL CHARACTERISTIC TEST METHOD



S.A. :SPECTRUM ANALYAER
F.C :FREQUENCY COUNTER
A.A.M. :AC AMPERE METER
S.R. :SOUNDPROOF ROOM
A.V.M. :AC VOLT. METER
T.S. :TESTING SAMPLE
C.MIC :CONDENSER MIC
Q.S.C. :OSCILLATOR

FIG.5