

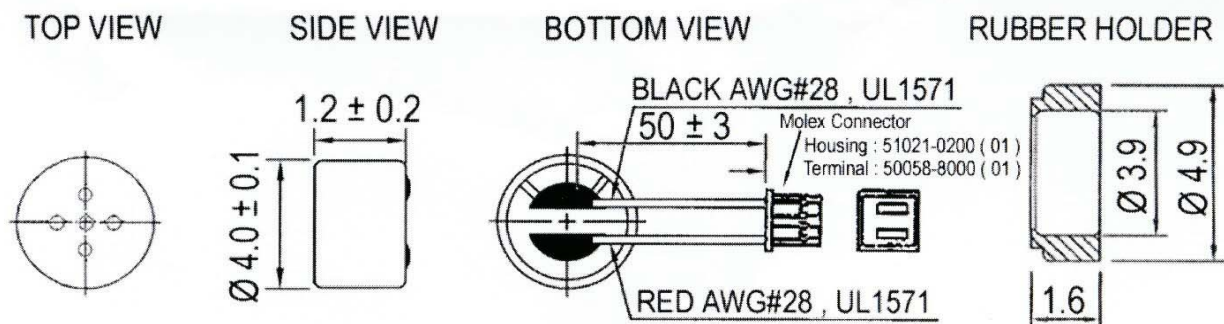
## Condensor Microphone MIC-40/12-O-100

Lead free condensor microphone with rubber holder and connector for wireless communication applications.

### ELECTRICAL SPECIFICATIONS

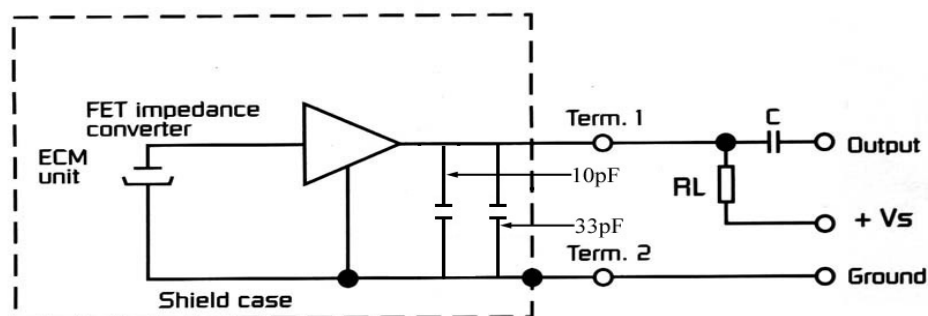
MODEL NO.		MIC-40/12-O-100
DIAMETER ( A ) +/- 0.1	mm	Ø 4.0
HEIGHT ( B ) +/- 0.2	mm	1.2
SENSITIVITY ( 0 dB = 1V / Pa ) AT 1K Hz	dB	- 42 +/- 3
DIRECTIVITY		OMNIDIRECTIONAL
POWER SUPPLY ( Vs )	V	2.0
RESISTANCE LOADING ( RL )	W	2.2 K
OPERATING VOLTAGE RANGE	V	1.0 ~ 10.0
MAX. CURRENT	mA	0.5
TERMINAL		NIL
HOUSING MATERIAL		ALUMINUM
S / N RATIO	dB	MORE THAN 60.0
FREQUENCY RANGE	Hz	100 ~ 10000

Dimensions in mm:



### SCHEMATIC DIAGRAM

$V_s = 2V, R_L = 2.2K \Omega$

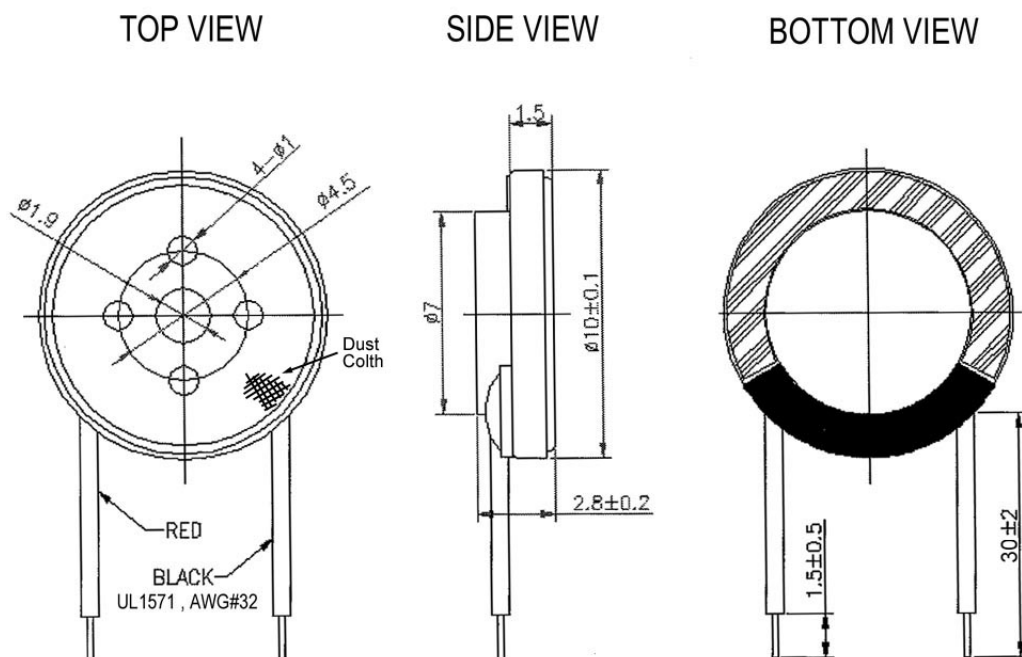


## Speaker LSP-10/2.8-150-100

Lead free condensor microphone with rubber holder and connector for wireless communication applications.

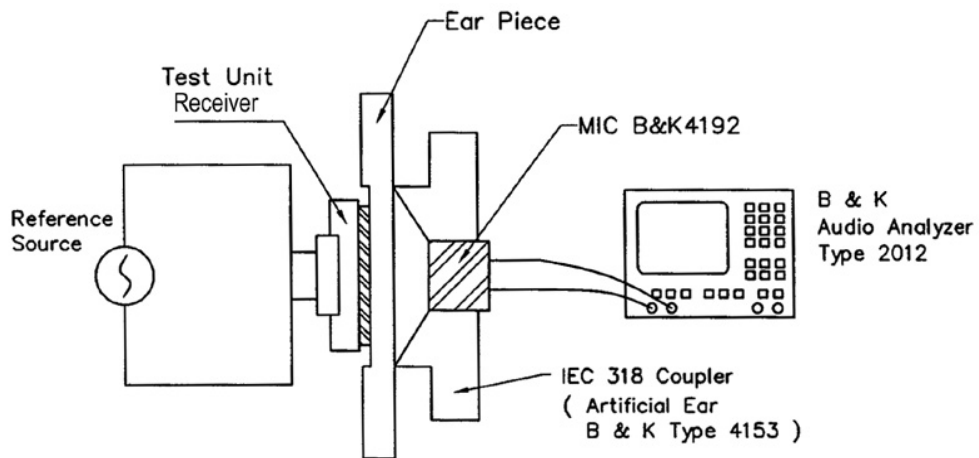
ITEMS	SPECIFICATIONS	CONDITIONS
-IMPEDANCE	150 $\Omega$ +/- 15%	TESTED AT 1000 Hz / 1.0V
-INPUT POWER	179 m V	
-SENSITIVITY	100 +/- 3 dB at 1000 Hz	MEASURED WITH IEC 318 COUPLER WITH OUR TESTING SET UP ( PLEASE SEE DRAWING ATTACHED )
-FREQUENCY RANGE	300 ~ 4000 Hz	
-MF INTENSITY AXIAL		AT 1KHz ( 0 dB = 1 A/M )
-MF INTENSITY RADIAL		AT 1KHz ( 0 dB = 1 A/M )
-OPERATING TEMPERATURE	-20 ~ +60 ° C	
-STORAGE TEMPERATURE	-30 ~ +70 ° C	
DIMENSIONS	SEE DRAWING ATTACHED	
APPEARANCE		THERE SHOULD BE NO REMARKABLE STAINS, RUSTS OR FLAWS.

### MECHANICAL DRAW

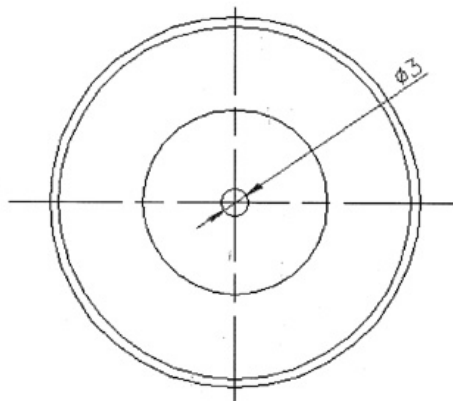
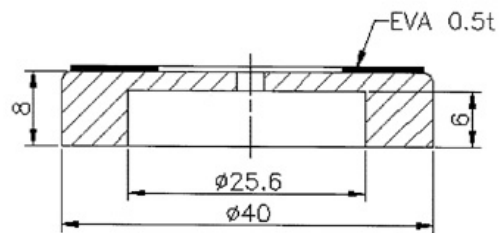


All dimensions in mm tolerance  $\pm 0.2$

## MEASUREMENT SETUP



## EAR PIECE



Tolerance  $\pm 0.2\text{mm}$

## FREQUENCY RESPONSE CURVE

X:1.0000kHz Y:101.57dB ZB:Live Curve SSR Fund.

Steady State Resp

Response: Absolute

Sweep: Log

Start Freq: 100.00Hz

Stop Freq: 6.500kHz

Step Size: 1/12oct

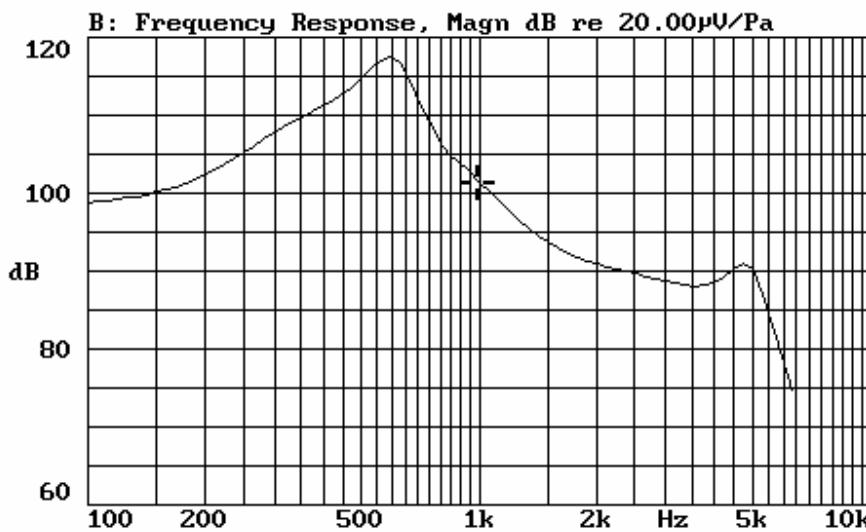
Avg.: Complex Adapt.

Detect. Band: 1.00dB

Detect. Delay: 0.00s

Det. Max Time: 800ms

Page 2, Distortion



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Mode: SSR



## EQUIPMENT LIST

NAME	MODEL
AUDIO NALYSER	BRUEL & KJAER
ACOUSTIC CHAMBER	BRUEL & KJAER
AUDIO CALIBRATOR	BRUEL & KJAER
ARTICIAL EAR	BRUEL & KJAER
AMPLIFIER	BRUEL & KJAER

## INSPECTION STANDARD

ITEM TESTED	SYM	STANDARD	AQL	LEVEL	INSPECTION BY MEANS OF	REMARKS
- SENSITIVITY		SHOULD BE WITHIN 100 +/- 3 Db	1	II	AUDIO ANALYSER	MEASURED WITH THE IEC 318 COUPLER AT RATED INPUT POWER
-IMPEDANCE		150 $\Omega$ +/- 15%	0.65	I	IMPEDANCE METER	MEASURED AT 1000 Hz / 1.0V
-OUTER DIMETER		$\varnothing$ 10.0 +/-0.2 (mm)	1.5	S-3	ELECTRONIC CALIPERS	TO BE MEASURED AT THE MAXIMUM DIA.
-HEIGHT		2.9 +/- 0.2 (mm)	1.5	S-3	ELECTRONIC CALIPERS	TO BE MEASURED AT THE MAXIMUM HEIGHT ON THE BODY ONLY.
RUST			1	II	VISUAL	ANY RUST SHOULD NOT BE ACCEPTED.
STAIN			1.5	II	VISUAL	THERE SHOULD BE NO REMARKABLE STAINS.
ADHESION			1.5	II	VISUAL	ADHESION SHOULD BE MADE SUFFICIENTLY AND THERE SHOULD BE NO OUTFLOW OF ADHESIVE AGENT.
OTHER APPEARANCE			1.5	II	VISUAL	

## RELIABILITY TEST

ITEM	METHOD OF THE TEST	STANDARD
OPERATING TEMPERATURE	DRIVING FROM THE LOWEST OPERATING TEMPERATURE TO THE HIGHEST OPERATING TEMPERATURE WITHIN 30 MINUTES FOR 2 CYCLES THEN EXPOSE TO THE ROOM TEMP FOR 2 HOURS	ALL SPECIFICATIONS MUST BE SATISFIED AFTER THE TEST.
STORAGE IN HIGH TEMP.	STORAGE IN TEST BOX FOR 96 HOURS UNDER THE HIGHEST OPERATING TEMPERATURE THEN EXPOSE TO THE ROOM TEMP FOR 2 HOURS	ALL SPECIFICATIONS MUST BE SATISFIED AFTER THE TEST.
STORAGE IN LOW TEMP.	STORAGE IN TEST BOX FOR 96 HOURS UNDER THE LOWEST OPERATING TEMPERATURE THEN EXPOSE TO THE ROOM TEMP FOR 2 HOURS	ALL SPECIFICATIONS MUST BE SATISFIED AFTER THE TEST.

ITEM	METHOD OF THE TEST	STANDARD
LIFE TEST IN THE ROOM TEMP.	OPERATE THE BUZZER CONTINUOUSLY FOR 1000 HOURS WITH APPLYING AT THE RATED SIGNAL.	ALL SPECIFICATIONS MUST BE SATISFIED AFTER THE TEST.
TEMP CYCLE TEST	MAKE THE TEST FOR 5 CYCLES WITHOUT APPLYING POWER AS FIG 3, THEN EXPOSE TO THE ROOM TEMP FOR 2 HOURS.	ALL SPECIFICATIONS MUST BE SATISFIED AFTER THE TEST.
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	ALL SPECIFICATIONS MUST BE SATISFIED AFTER THE TEST.
VIBRATION TEST	MAKE THE TEST FOR THE DIRECTIONS OF X, Y, AND Z AS FIG 5 FOR 2 HOURS EACH (TOTAL 6 HOURS). TO-AND-FRO SWEEP TIME (FROM 10 TO 55 Hz AND THEN 55 TO 10) IS 1 MINUTE.	ALL SPECIFICATIONS MUST BE SATISFIED AFTER THE TEST.
DROP TEST	DROP A BUZZER NATURALLY FROM THE HEIGHT OF 700mm ONTO THE SURFACE OF 10mm THICK WOODEN BOARD. TWO DIRECTIONS; THAT IS, UPPER AND SIDE OF THE BUZZER ARE TO BE APPLIED FOR THIS DROP TEST.	ALL SPECIFICATIONS MUST BE SATISFIED AFTER THE TEST.

FIG.1 TEMP. CYCLE TEST

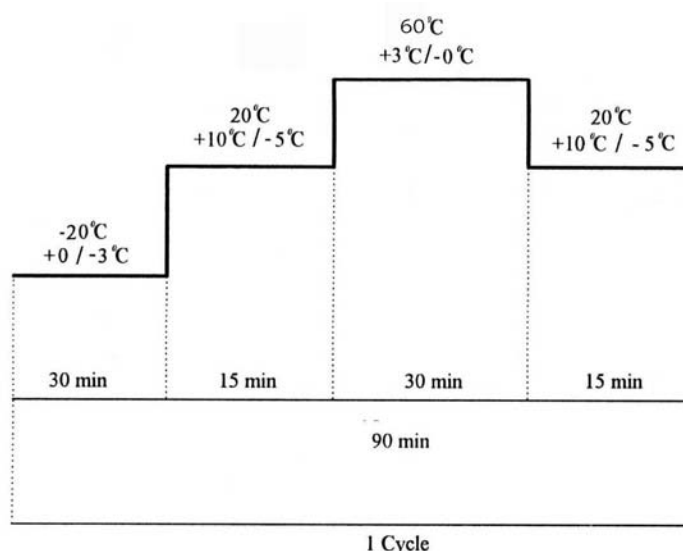


FIG. 2 TEMP. / HUMIDITY CYCLE TEST

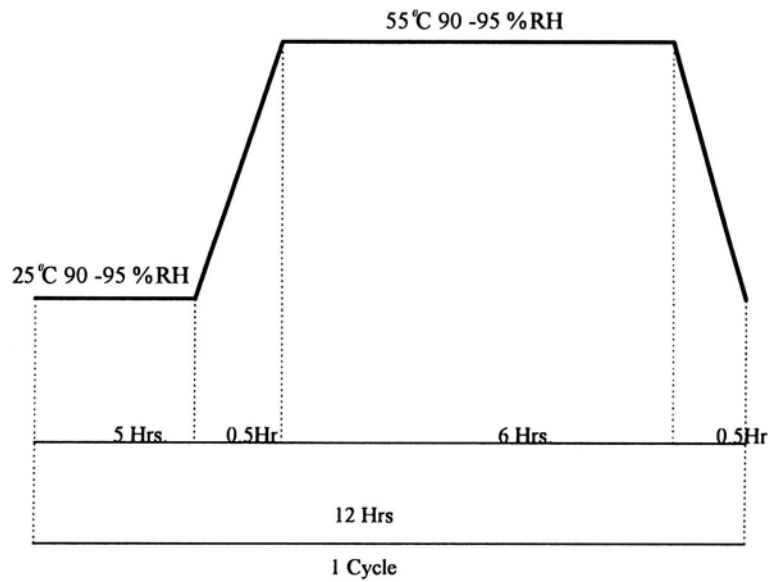


FIG. 3 VIBRATION TEST

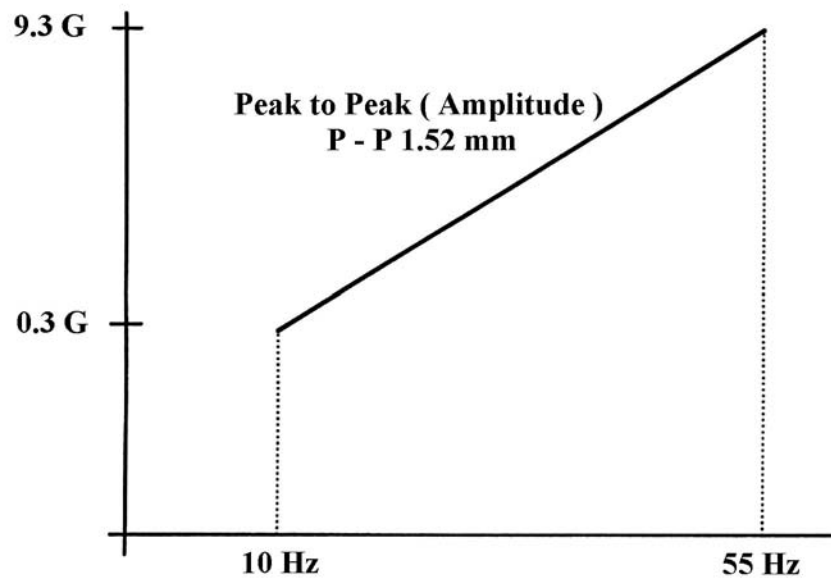


FIG. 4 DROP TEST

