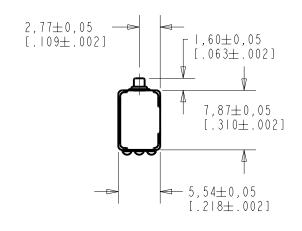
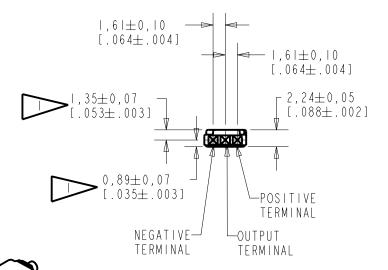
BT-21751-005

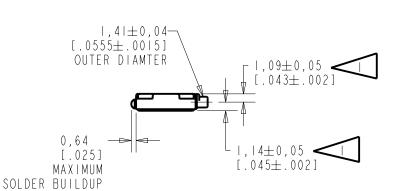
SHT I.I

NOTE:

LOCATED FROM TWO SURFACES FOR CUSTOMER CONVENIENCE. ONLY APPLICABLE FROM ONE SURFACE, NOT TO BE USED TOGETHER. HORIZONTAL LOCATION FOR TERMINAL CENTERED TO ±0,17 [.007].





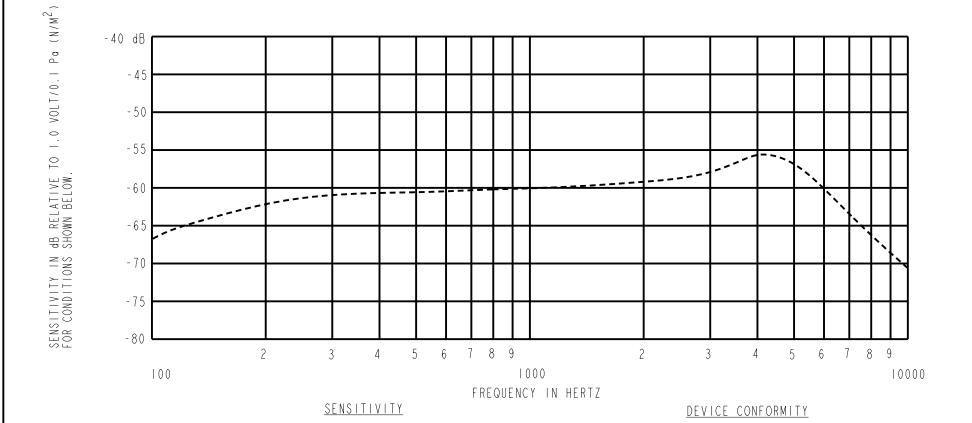


DIMENSIONS IN MILLIMETERS [INCHES]

KNOWLES ELECTRONICS ITASCA, ILLINOIS U.S.A.

	Revision	C.O. #	C.O. # Implementation Date RELEASE LEVEL			REVISION	
	A	M10101301	11-6-06	Release	d	Α	
SCALE: 2:1					DR. BY	DATE	
İ		DO NOT SCALE DRAWING					
ĺ	TITLE:	MIC	ROPHONE	BT-21751-005	GJP APP. BY	- 9 - 06	
		OUTL	INE DRAWING	SHT I.I	GJP	-9-06	

SHEET 2.1



MAX.

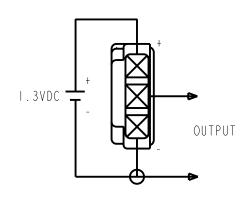
-57.0

NOM.

-67.0

-60.0

-55.5



- | | . 0

0

+ | . 5

RANGE OF DEVIATION FROM IKHZ

-4.0

0

+7.5

NOTES:

I. CASE CONNECTED TO NEGATIVE TERMINAL.

FREQUENCY

1000

≈4200

2. MICROPHONE TO BE FUNCTIONAL WITH 10 VDC SUPPLY.

MIN.

-63.0

3. CONFORMS TO REQUIREMENTS SHOWN ON 'ELECTRET MICROPHONE ENVIRONMENTAL QUALIFICATION TEST, SHEET 2.2'.

PORT DC	DC	AMPLIFIER	SENSITIVITY CHANGE	"A" WEIGHTED NOISE	OUTPUT IMPEDANCE OHMS		CAPACITANCE ±50%		
LOCATION	SUPPLY	CURRENT DRAIN	TO 0.9VDC	(kHz EQUIV. SPL)	MIN.	NOM.	MAX.	I - 2	I - 3
128	1.3V	40 μA MAX.	3 dB MAX.	27.0 dB MAX.	2000	3500	6000	N A	N A

Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
			_	
			l Released	ΙΔΙ
А	M10101301	11-6-06	No rouseu	
				•

KNOWLES ELECTRONICS ITASCA, ILLINOIS U.S.A.

WHEN TEST LIMITS ARE USED TO ESTABLISH INCOMING INSPECTION ACCEPTANCE/REJECTION DR. BY CRITERIA, CORRELATION OF TEST EQUIPMENT WITH KNOWLES IS ALSO REQUIRED FOR ELIMINATION OF EQUIPMENT AND TEST METHOD VARIATION

MICROPHONE

PERFORMANCE SPECIFICATION

ES 15 ALSO REQUIRED FOR	MMM	11-6-06
	CK. BY	DATE
BT-21751-005	GJP	11-9-06
D1 21131 003	APP. BY	DATE
SHT 2.1	GJP	11-9-06

DATE

SHEET 2.2

WHEN THESE TESTS ARE USED TO ESTABLISH PRODUCT QUALIFICATION, CORRELATION OF TEST EQUIPMENT WITH KNOWLES ELECTRONICS IS ALSO REQUIRED TO ELIMINATE EQUIPMENT AND TEST METHOD VARIATION.

BECAUSE THIS IS AN ACCELERATED LIFE TEST, IT FOLLOWS THAT THE UNITS WHICH HAVE BEEN TESTED WILL NOT QUALIFY AS IN-WARRANTY RETURNS. SINCE THESE TESTS ARE DESTRUCTIVE IN NATURE, DEVICES SUBJECTED TO THESE TESTS SHOULD NOT BE USED IN PRODUCTION.

I. ACCELERATED DAMP HEAT TEST.

I.I PRECONDITIONING:

TIME - 16 HOURS TEMPERATURE - 22°C ±1°C HUMIDITY - 60% MAX. R.H.

1.2 TEST CONDITIONS:

TIME AT CONDITIONS: - 1000 HOURS
TEMPERATURE - 63°C ±1°C
HUMIDITY - 95% R.H. ±2%
VOLTAGE STRESS - DETAILED FIG. 1

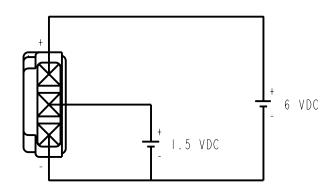


FIG. I

(AVOID CONDENSATION FALLING ON UNITS UNDER TEST.)

1.3 INITIAL MEASREMENTS:

AFTER PRECONDITIONING, MEASURE SENSITIVITY PER SHEET 2.1 OF THE APPLICABLE KNOWLES ELECTRONICS MICROPHONE PERFORMANCE SPECIFICATION.

I.4 TEST PROCEDURE:

INSERT UNIT(S) INTO TEST CHAMBER PER CONDITIONS OF 1.2.

1.5 RECOVERY:

TIME - 2 HOURS
TEMPERATURE - 22°C ± 1°C
HUMIDITY - 60% MAX. R.H.

1.6 FINAL MEASUREMENTS:

MEASURE SENSITIVITY PER CONDITIONS DESCRIBED ON SHEET 2.1.

1.7 REQUIREMENT:

NO UNITS WILL BE INOPERATIVE FOLLOWING THE TEST AND RECOVERY CYCLE.

2. SHOCK TEST

2.1 PRECONDITIONING:

TIME - 16 HOURS TEMPERATURE - 22°C ± 1°C HUMIDITY - 60% MAX. R.H.

2.2 TEST CONDITIONS:

HALF-SINE IMPULSE DURATION - 100 MICROSECONDS PEAK AMPLITUDE - 20,000 g

SPURIOUS DEVIATIONS IN THE HALF-SINE IMPULSE CURVE SHALL BE REDUCED TO WHERE RESULTS ARE NOT APPRECIABLY AFFECTS.

UNIT(S) TO BE SUBJECTED TO THE TEST CONDITIONS EITHER IN THE COVER UP OR COVER DOWN ORIENTATION.

2.3 INITIAL MEASUREMENTS:

AFTER PRECONDITIONING, MEASURE AND RECORD THE 1 kHz SENSITIVITY PER SHEET 2.1 OF THE APPLICABLE KNOWLES ELECTRONICS MICROPHONE PERFORMANCE SPECIFICATION.

2.4 TEST PROCEDURE:

STRESS UNIT(S) ACCORDING TO THE ABOVE 2.2 TEST CONDITIONS.

2.5 RECOVERY:

UNITS TO BE MEASURED IMMEDIATELY AFTER TEST CYCLE.

2.6 FINAL MEASUREMENTS:

MEASURE AND RECORD THE I kHz SENSITIVITY PER SHEET 2.1.

2.7 REQUIREMENT:

THE UNIT(S) SHALL SHOW A MAXIMUM CHANGE IN IKHZ SENSITIVITY (INITIAL TO FINAL) OF 1.0 dB AS A RESULT OF THE TEST CYCLE.

Revision	C.O. #	Implementation Date	RELEASE LEVEL		REVISION
			Released		Δ
А	M10101301	11-6-06			/ \
WHEN TEST I	LIMITS ARE US	SED TO ESTABLISH INCOMING	INSPECTION ACCEPTANCE/REJECTION	DR. BY	DATE

KNOWLES ELECTRONICS ITASCA, ILLINOIS U.S.A.

WHEN TEST LIMITS ARE USED TO ESTABLISH INCOMING	DR. BY	DATE	
CRITERIA, CORRELATION OF TEST EQUIPMENT WITH KNOWN ELIMINATION OF EQUIPMENT AND TEST METHOD VARIATION	MMM	11-6-06	
	CK. BY	DATE	
MICROPHONE	BT-21751-005	GJP	11-9-06
PITCHOI HONE	B1 211 31 003	APP. BY	DATE

SHT 2.2

GJP

11-9-06

PERFORMANCE SPECIFICATION