

MR-33378-000

SHT 1.1

0,939±0,101  
[.0370±.0040]

2,300±0,101  
[.0906±.0040]

7,595  
[.2990]  
MAX.

∅ 18,974±0,101  
[.7470±.0040]

∅ 16,385±0,125  
[.6451±.0050]

∅ 22,098±0,101  
[.8700±.0040]

202,057±4,953  
[7.9550±.1950]

ORIENTATION OF HOLE  
PATTERN NOT FIXED

NOTE:

RESISTANCE OF  
100 KILO OHM  
MINIMUM BETWEEN  
BLACK -ve LEAD  
AND FRONT HOUSING

RED +ve

BLACK -ve

WHITE OUTPUT

NOMINAL WEIGHT  
3.05 GRAM

DIMENSIONS IN MILLIMETERS [INCHES]

| Revision | C.O. #    | Implementation Date | RELEASE LEVEL | REVISION |
|----------|-----------|---------------------|---------------|----------|
| B        | MI0107503 | 8-17-17             | Active        | B        |
| A        | MI0107237 | 4-13-17             |               |          |

SCALE: 1:1

DO NOT SCALE DRAWING

DR. BY DATE

NANC 4-13-17

CK. BY DATE

GJP 4-13-17

APP. BY DATE

GJP 4-13-17

TITLE: WATERPROOF MICROPHONE

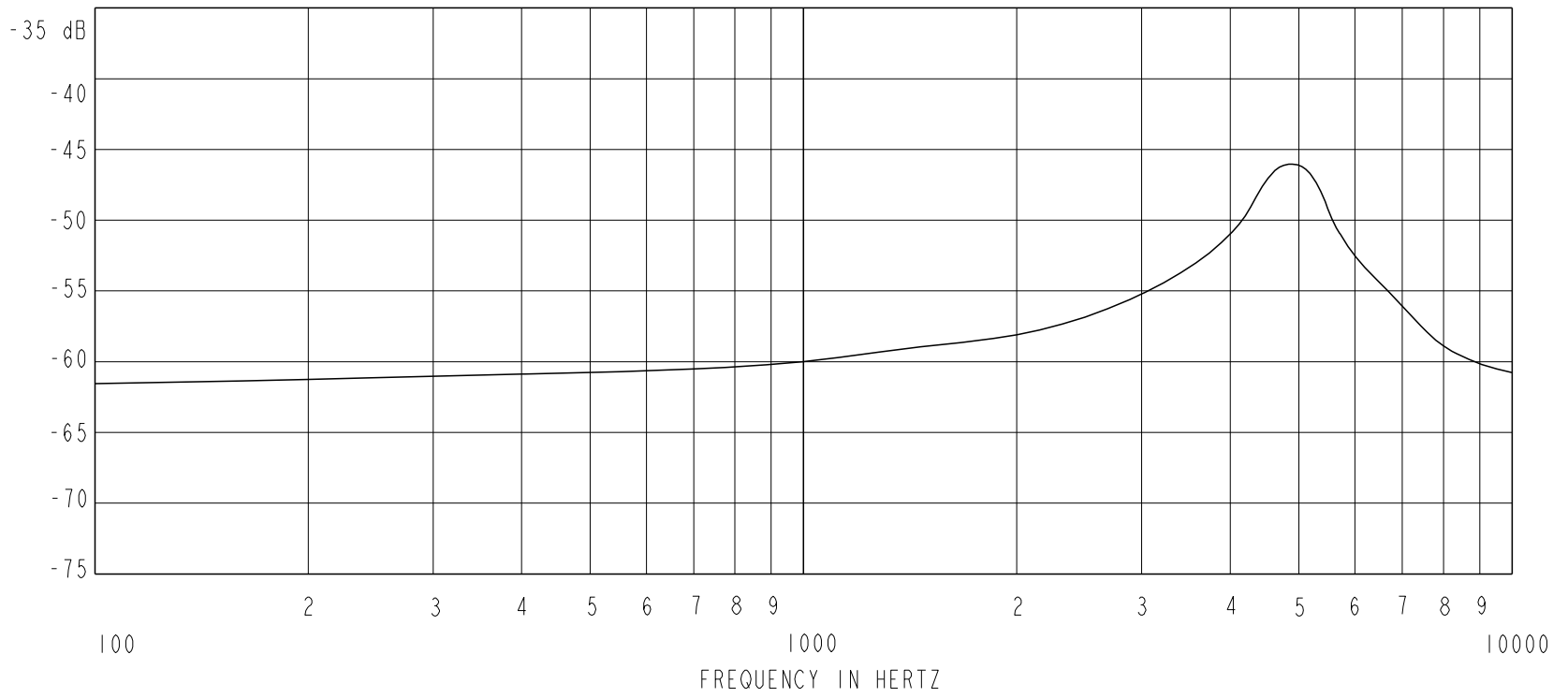
MR-33378-000

OUTLINE DRAWING

SHT 1.1

**KNOWLES CORPORATION**

SENSITIVITY IN dB RELATIVE TO 1.0 VOLT/0.1 Pa (N/M<sup>2</sup>) FOR CONDITIONS SHOWN BELOW.



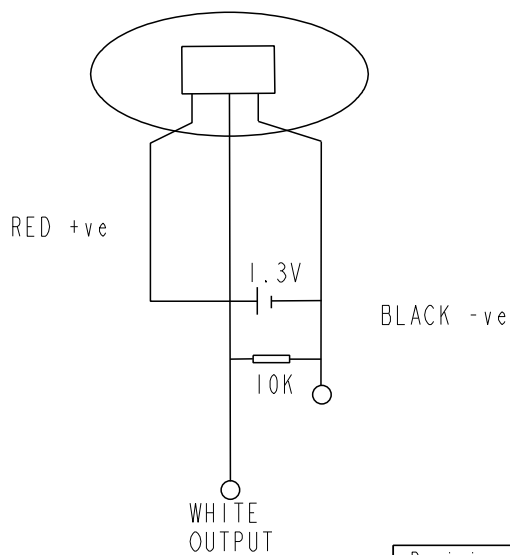
| FREQUENCY   | SENSITIVITY |       |       | DEVICE CONFORMITY            |       |
|-------------|-------------|-------|-------|------------------------------|-------|
|             | MIN.        | NOM.  | MAX.  | RANGE OF DEVIATION FROM 1KHZ |       |
| 100         | ---         | -61.5 | ---   | -4.0                         | +2.0  |
| 1000        | -65.0       | -60.0 | -58.0 | ---                          | ---   |
| 4700 APPROX | ---         | -47.0 | ---   | +8.0                         | +20.0 |

NOTES:

1. CASE OF MICROPHONE CONNECTED TO NEGATIVE BLACK LEAD.
2. BELLOWS HOUSING INSULATED FROM MICROPHONE CASE.
3. MICROPHONE TO BE FUNCTIONAL WITH 20 VDC SUPPLY.
4. OTHER MICROPHONE PERFORMANCES IN BELOW TABLE ARE TESTED AT BT-21759-134 MIC LEVEL.

| DC SUPPLY V | OUTPUT IMPEDANCE OHMS |      |      | AMPLIFIER CURRENT DRAIN uA MAX. | "A" WEIGHTED NOISE 1KHZ EQUIVALENT SPL dB SPL MAX |
|-------------|-----------------------|------|------|---------------------------------|---|
|             | MIN.                  | MOM. | MAX. |                                 |   |
| 1.3         | 2000                  | 3500 | 6000 | 50                              | 30  |
|             |                       |      |      |                                 |   |

5. TEST CONDITION FOR MR AS SHOWN IN BELOW SCHEMATIC WITH 1.3V DC SUPPLY COUPLED WITH 10K OHMS RESISTOR ON OUTPUT.



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| B        | M10107503 | 8-17-17             | Active        | B        |
| A        | M10107237 | 4-13-17             |               |          |

**KNOWLES CORPORATION**

|  |  |         |         |
|--|--|---------|---------|
| WHEN TEST LIMITS ARE USED TO ESTABLISH INCOMING INSPECTION ACCEPTANCE/REJECTION CRITERIA, CORRELATION OF TEST EQUIPMENT WITH KNOWLES IS ALSO REQUIRED FOR ELIMINATION OF EQUIPMENT AND TEST METHOD VARIATION |  | DR. BY  | DATE    |
| TITLE: WATERPROOF MICROPHONE PERFORMANCE SPECIFICATION   |  | NANC    | 4-13-17 |
|  |  | CK. BY  | DATE    |
| MR-33378-000 SHT 2.1   |  | GJP     | 4-13-17 |
|  |  | APP. BY | DATE    |
|  |  | GJP     | 4-13-17 |