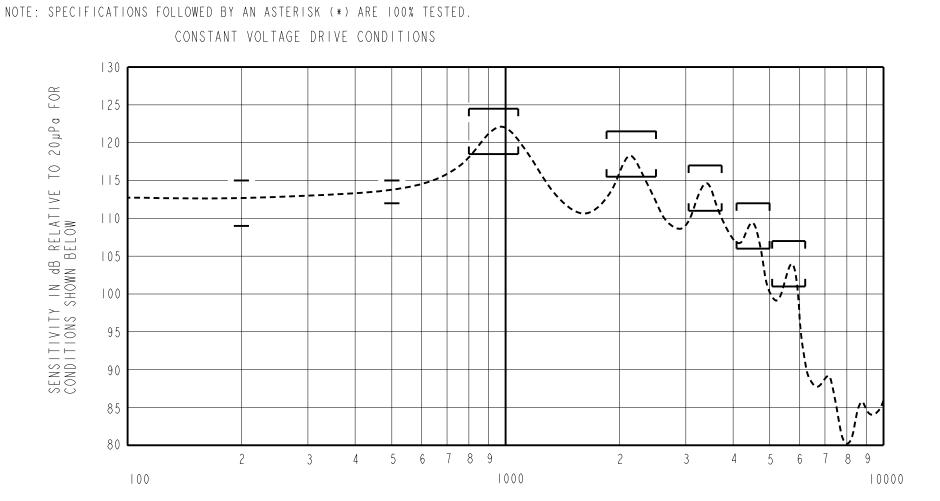


THE DTEC-31116-000 IS A PAIR OF BALANCED ARMATURE RECEIVERS INTENDED FOR USE IN BTE HEARING AIDS. IT HAS A LOW DCR TO IMPEDANCE RATIO, HAS THE CENTER TERMINAL CONNECTED TO CASE AND IS THE SAME SIZE AS AN EF RECEIVER

NO DAMPING

DTEC-31116-000 SHEET 2.1



FREQUENCY IN HERTZ

ACOUSTICAL

SENSITIVITY*

DEVICE WILL PRODUCE THE SPL LISTED BELOW UNDER TEST CONDITIONS DESCRIBED IN TABLE 3. NOMINAL SENSITIVITY AT 500 Hz is dB relative to 20 μ Pa. All other values in dB relative to the sensitivity at 500 Hz.

| FREQUENCY (Hz) | MINIMUM | NOMINAL | MAXIMUM |
|----------------|-----------|-----------|-----------|
| 200 | - 4 . 5 | -1.5 | + . 5 |
| 500 | -1.5 | 113.5 | + . 5 |
| 800-1080 | +5.0 | +8.0 | + . 0 |
| 1850-2500 | +2.0 | +5.0 | +8.0 |
| 3050-3730 | -2.5 | +0.5 | +3.5 |
| 4085-4995 | -7.5 | - 4 . 5 | -1.5 |
| 5075-6205 | - 4 . 0 | - . 0 | -8.0 |

TABLE I

TOTAL HARMONIC DISTORTION* DEVICE WILL NOT EXCEED TOTAL HARMONIC DISTORTION LEVELS LISTED BELOW.

| FREQUENCY (Hz) | AC DRIVE (V rms) | DC BIAS (mA) | LIMIT (%) |
|----------------|------------------|--------------|-----------|
| 315 | 0.164 | 0 | 5 |
| 470 | 0.164 | 0 | 5 |
| 470 | 0.328 | 0 | 10 |
| TABLE 2 | | | · |

ELECTRICAL

| DC RESISTANCE | 22 OHMS ± 10% * |
|----------------------|-----------------|
| IMPEDANCE @ 500 Hz | 38 OHMS ± 15% * |
| INDUCTANCE @ 500 Hz | 16 mH TYPICAL |
| CAPACITANCE @ IO MHz | 2 pF TYPICAL |

TABLE 4

ISOLATION: CASE WILL BE ELECTRICALLY ISOLATED FROM THE COIL CIRCUIT. *

MECHANICAL

PORT LOCATION: 12C

SOLDER TYPE: SAC305

TEMPERATURE

OPERATING: SENSITIVITY WILL NOT VARY MORE THAN +1/-3 dB FROM -17°C TO 63°C STORAGE: -40°C TO 63°C

SHT 2.1

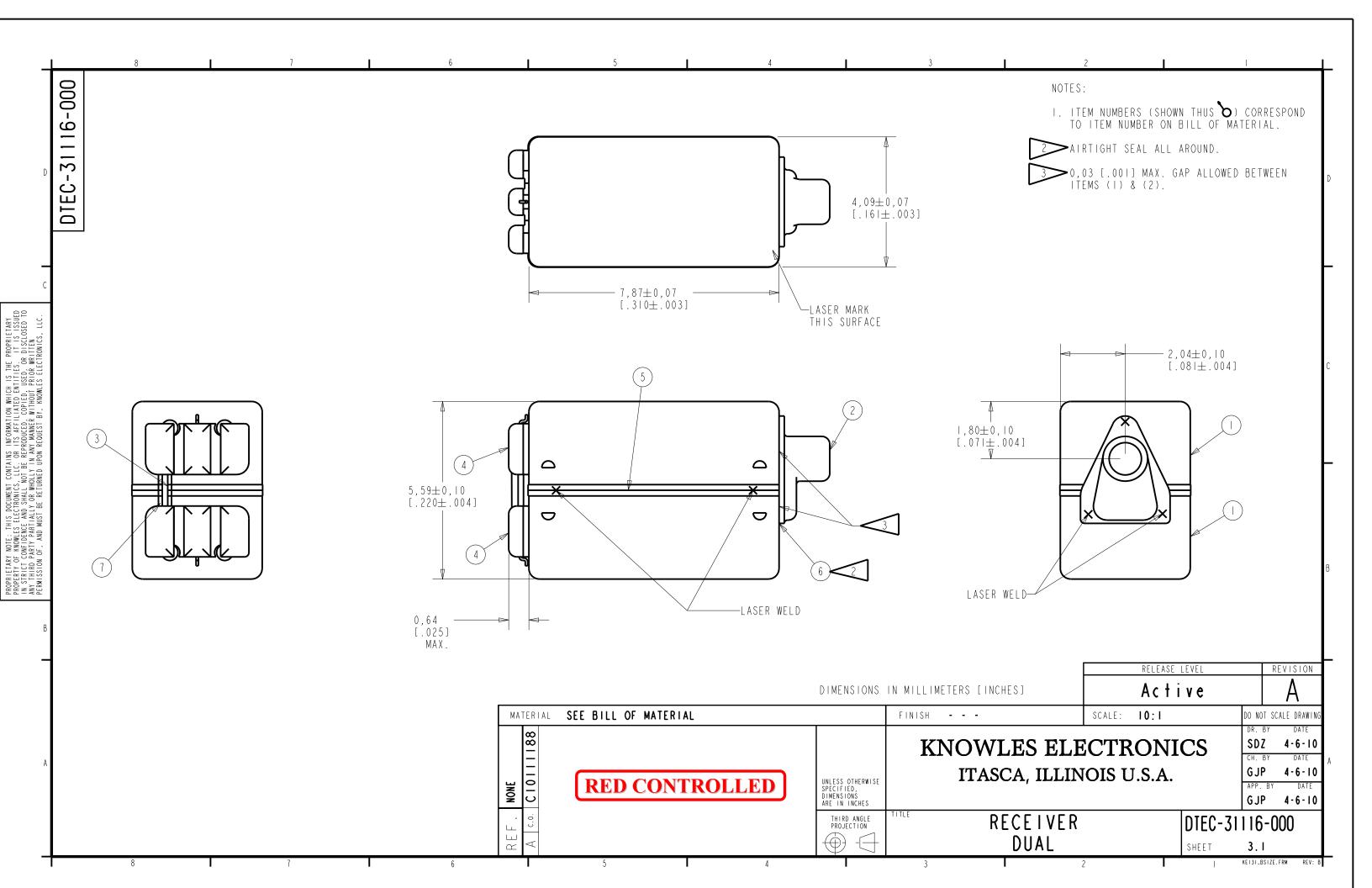
GJP

4 - 6 - 1 0

TEST CONDITIONS

| NOMINAL SOURCE VOLTAGE | 0.164 V rms, TO DELIV | ER 0.70 mVA | AT 500 H: | 2 | | | | | | |
|--|--|-----------------------------|---|--|------------------------------|---------|--|---------------------------|-------------------------|------------------------|
| SOURCE IMPEDANCE | <l ohm<="" td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></l> | | | | | | | | | |
| TUBING | 8mm X Imm ID + 28mm | X I.5mm ID | EAR HOOK | SIMULATOR + 25mm | X 2mm | ID TUBE | + I8mm | X 3mm | ID T | UBE |
| COUPLER CAVITY | 2 cm ³ , SIMULATED ANSI | S3.7 TYPE | HA-3 (IEC | 603 8-5) | | | | | | |
| TABLE 3 | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| RED CON | TROLLED | | | | | | | | | |
| RED CON | TROLLED | Revision | C.O. # | Implementation Date | | REL | EASE LEV | EL | | REVISION |
| RED CON | TROLLED | Revision | C.O. # | Implementation Date | _ | | | | | ٨ |
| RED CON | TROLLED | Revision A | | Implementation Date | | | ease lev : † i v | | | REVISION |
| RED CON | TROLLED | Revision A WHEN TEST | C.O. # CI0111188 LIMITS ARE US | 4-6-10 SED TO ESTABLISH INCOMI | NG INSPE | A C | Ctiv PTANCE/RE | e | DR. BY | ٨ |
| | | A WHEN TEST CRITERIA. | CI0IIII88 LIMITS ARE US CORRELATION C | 4-6-10 SED TO ESTABLISH INCOMI F TEST EQUIPMENT WITH | NG INSPE | A C | Ctiv PTANCE/RE | e EJECTION | | A |
| | | A WHEN TEST CRITERIA. | CI0IIII88 LIMITS ARE US CORRELATION C | 4-6-10 SED TO ESTABLISH INCOMI | NG INSPE | A C | Ctiv PTANCE/RE | C EJECTION DR | dr. by SDZ ck. by | А |
| RED CON KNOWLES ELE ITASCA, ILLING | CTRONICS | A WHEN TEST CRITERIA. | CIOIIII88 LIMITS ARE US CORRELATION C DN OF EQUIPMEN | 4-6-10 SED TO ESTABLISH INCOMI F TEST EQUIPMENT WITH | NG INSPE KNOWLES ATION | A C | C † i v PTANCE/RE QUIRED FC | e Jection DR | SDZ | Д Date 4 - 6 - 1 |

PERFORMANCE SPECIFICATION



| DTE Sheet | C-31116 | | | | DTEC-3111 Sheet 4 | 6-0 4.1 |)00 | |
|--------------------|--------------------------------|------------------------------------|-------------------|-----------------------------|----------------------|-------------------------------------|----------|----------|
| Dr. Ch. App. | By SDZ GJP GJP | Date 4-6-10 4-6-10 4-6-10 | Subje | Subject: RECEIVER DUAL A | | Release L Activ | | |
| | COL. I Part or Dwg. no. | | 2 Tot. Req. | 3 Nomenclature: | | 4 Applicable Specs or Remarks | ltem No. | Line No. |
| TEC-31 BI-013 | 8 - 000 | | 2 I | RECEIVER ASSEMBLY TUBE | | | 1 | 2 |
| 103-07 285-00 | | | A / R A / R | WIRE SOLDER LEAD FREE | | | 3 4 | 3 4 |
| 3 - 0 9 2 | - 30 0 - 30 1 E | | A/R A/R | CEMENT CEMENT | | | 567 | 5 |
| | - 30 09 | | A / R | CEMENT | | | 7 | 7 |

| | RED | CONTROLLED |
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CI011188

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REVISION

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DTEC-31116-000 Sheet 4.1

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DTEC-31116-000 SHEET 5.1

PRODUCTION TEST INFORMATION

| SOFTWARE REVISION PXI FCART | SOFTWARE I.73 MIN. |
|-----------------------------|--------------------|
| HARDWARE REVISION PXI FCART | KE 1065C.008G MIN. |

RED CONTROLLED

| | Revision | C.O. # | Implementation Date | RELEASE LEVEL | | REVISION |
|-------------------------|----------------|---------------|---|--|----------------|---------------------|
| | A | C1011188 | 4 - 6 - 1 0 | Active | | А |
| | CRITERIA, | CORRELATION C | ED TO ESTABLISH INCOMING F TEST EQUIPMENT WITH KNO T AND TEST METHOD VARIAT | INSPECTION ACCEPTANCE/REJECTION DWLES IS ALSO REQUIRED FOR ION | dr. by SDZ | date 4 - 6 - 1 0 |
| KNOWLES ELECTRONICS | eenst with the | | n nub reor mernob vantar | | СК. ВУ | DATE |
| ITASCA, ILLINOIS U.S.A. | TITLE: | RE | CEIVER | DTEC-31116-000 | GJP APP. BY | 4 - 6 - 1 0 DATE |
| | | PERFORMAN | ICE SPECIFICATION | SHT 5.1 | GJP | 4 - 6 - 1 0 |