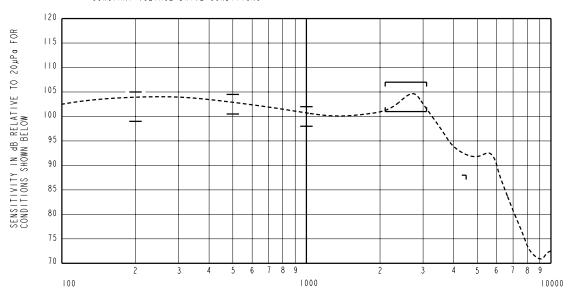


FERROFLUID AND TYPE III DAMPING FFC-26795-104 SHEET 2.1

THE FFC-26795-104 IS A FERROFLUID 8 TYPE III DAMPED RECEIVER WITH A PEAK OF 4dB RELATIVE TO THE SENSITIVITY AT IKHZ UNDER CONSTANT VOLTAGE DRIVE CONDITIONS.





FREQUENCY IN HERTZ

## **ACOUSTICAL**

SENSITIVITY DEVICE WILL PRODUCE THE SPL LISTED BELOW UNDER TEST CONDITIONS DESCRIBED IN TABLE 3. NOMINAL SENSITIVITY AT IKHZ IS dB RELATIVE TO 20µPa. ALL OTHER VALUES IN dB RELATIVE TO THE SENSITIVITY AT IKHZ.

| FREQUENCY (Hz) | MINIMUM | NOMINAL | MAXIMUM |
|----------------|---------|---------|---------|
| 200            | -1.0    | +2.0    | +5.0    |
| 500            | +0.5    | +2.5    | +4.5    |
| 1000           | -2.0    | 100.0   | +2.0    |
| 2100 - 3100    | +1.0    | +4.0    | +7.0    |
| 4500           | -12.0   |         |         |

TABLE I

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

| FREQUENCY (Hz) | AC DRIVE (V rms) | DC BIAS (V) | LIMIT (%) |
|----------------|------------------|-------------|-----------|
| 500            | 0.22             | 0           | 10        |
| 870            | 0.11             | 0           | 5         |
| 1300           | 0.11             | 0           | 5         |

TABLE 2

## TEST CONDITIONS

| NOMINAL SOURCE VOLTAGE | O.II V rms, O mA DC BIAS                                    |
|------------------------|---|
| SOURCE IMPEDANCE       | <  Ohm  |
| TUBING                 |   |
| COUPLER CAVITY         | 2 CM <sup>3</sup> , SIMULATED ANSI S3.7 TYPE HA-3 (IEC 126) |
| TABLE 3                | •   |

## **ELECTRICAL**

| DC RESISTANCE      | 25 Ohms ± 10% |
|--------------------|---------------|
| IMPEDANCE @ 500 Hz | 35 Ohms ± 15% |
| IMPEDANCE @ IkHz   | 60 Ohms ±15%  |

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

TEMPERATURE: OPERATING RANGE FROM 0°C TO 63°C (SENSITVITY WILL NOT VARY BY MORE THAN ±3 dB WITHIN RANGE)
SENSITIVITY AT 0°C IS 2dB LOWER THAN THE SENSITIVITY AT ROOM TEMPERATURE.
DELTA PEAK IS 1.5dB HIGHER AT BODY TEMPERATURE (37°C)
STORAGE RANGE FROM -40°C TO 63°C

|  |  |           |                     | DELETCE LEVEL |                       | DEVICTOR |
|--|--|-----------|---------------------|---------------|-----------------------|----------|
|  | Revision   | C.O. #    | Implementation Date | Released      |                       | REVISION |
|  | A  | C10103603 | 1-17-06             |               |                       | Α        |
|  | 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<br>1 - 1 7 - 0 6 |          |
|  |  |           |                     | CK. BY        | DATE                  |          |
|  | TITLE:   | RF        | CELVER              | FFC-26795-104 | GJP                   | 1-19-06  |
|  |  | 1, 6      | CLIVEN              | 110 20100 104 | APP. BY               | DATE     |
|  |  | PERFORMAN | NCE SPECIFICATION   | SHT 2.1       | GJP                   | 1-19-06  |

PORT LOCATION: 12C

## KNOWLES ELECTRONICS ITASCA, ILLINOIS U.S.A.