





FREQUENCY IN HERTZ

MECHANICAL

PORT LOCATION: 12S 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.

ACOUSTICAL

SENSITIVITY

FOR

SENSITIVITY IN dB RELATIVE TO 204Pa CONDITIONS SHOWN BELOW

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

| LIMIT TYPE | FREQUENCY (Hz) | MINIMUM | NOMINAL | MAXIMUM |
|------------|----------------|---------|---------|-----------|
| REL | 200 | - 3 . 5 | -0.5 | +2.5 |
| REL | 500 | -2.0 | 0.0 | +2.0 |
| REF | 1000 | -2.0 | 101.2 | +2.0 |
| PEAKI | 2565-3165 | +5.0 | +8.0 | + . 0 |
| VALLEYI | 4500-5500 | -8.0 | | |
| PEAK2 | 5500-6500 | - 4 . 5 | -1.5 | +1.5 |

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 (%) |
|----------------------|------------------|-------------|-----------|
| 1/3 PEAKI (TYP.955) | 0.146 | 0 | 5 |
| 1/2 PEAKI (TYP.1433) | 0.146 | 0 | 5 |
| 1/3 PEAKI (TYP.955) | 0.411 | 0 | 10 |
| 1/2 PEAKI (TYP.1433) | 0.411 | 0 | 10 |

TABLE 2

TEST CONDITIONS

| NOMINAL SOURCE VOLTAGE | 0.146 V rms, 0 mA DC BIAS |
|------------------------|---|
| SOURCE IMPEDANCE | <0.2 Ohm |
| TUBING | |
| COUPLER CAVITY | 2 CM ³ , SIMULATED ANSI S3.7 TYPE HA-3 (IEC 60318-5) |

TABLE 3

ELECTRICAL

| DC RESISTANCE | 25.0 Ohms ± 10%* |
|--------------------|------------------|
| IMPEDANCE @ 500 Hz | 26.8 Ohms ± 15%* |
| IMPEDANCE @ IkHz | 30.1 Ohms ± 15%* |

TABLE 4

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

| A | C10114301 | 2-18 | - 3 | Active | | 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 LSY CK. BY | DATE 2 - 8 - 3 DATE | |
| TITLE: | RE | CEIVE | R | DWFK-31785-000 | GJP APP. BY | 2 - 22 - 13 DATE |

RELEASE LEVEL

SHT 2.1

REVISION

2-22-13

Revision C.O. # Implementation Date

PERFORMANCE SPECIFICATION

KNOWLES ELECTRONICS ITASCA, ILLINOIS U.S.A.