

INCH-POUND

MIL-DTL-10911/8C  
 20 November 2012  
 SUPERSEDING  
 MIL-L-10911/8B  
 17 March 1995

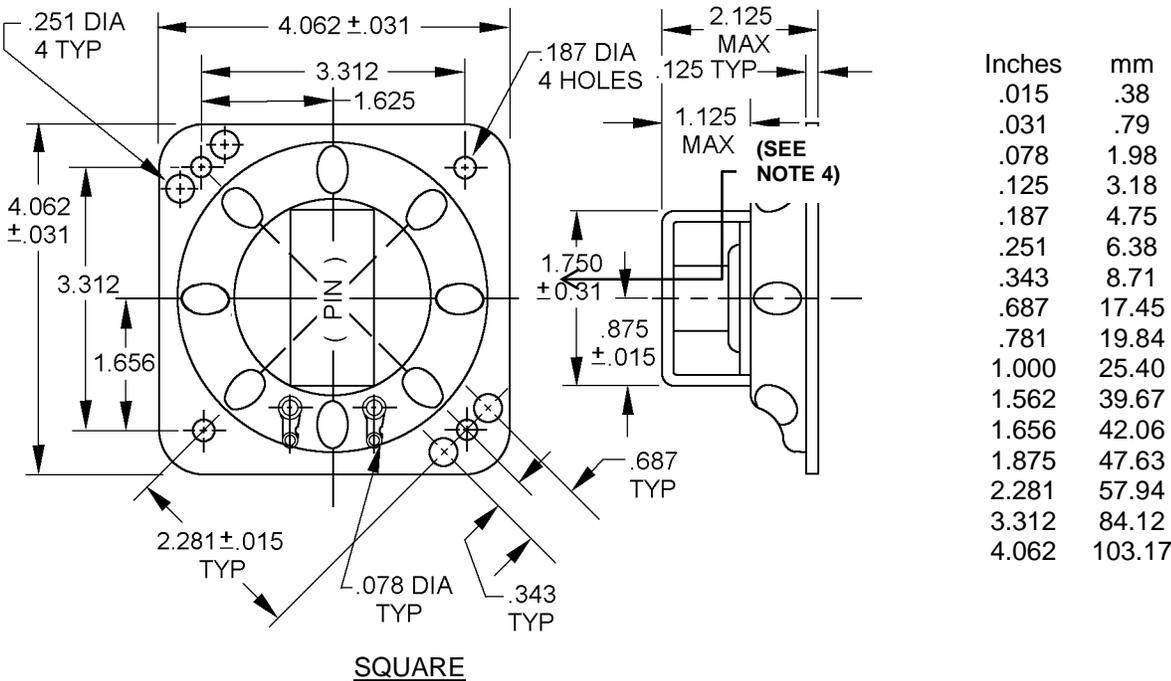
DETAIL SPECIFICATION SHEET

LOUDSPEAKER, PERMANENT MAGNET,  
 (UNENCASED, 4-INCH DIAMETER CONE)

Inactive for new design after March 30, 1999.

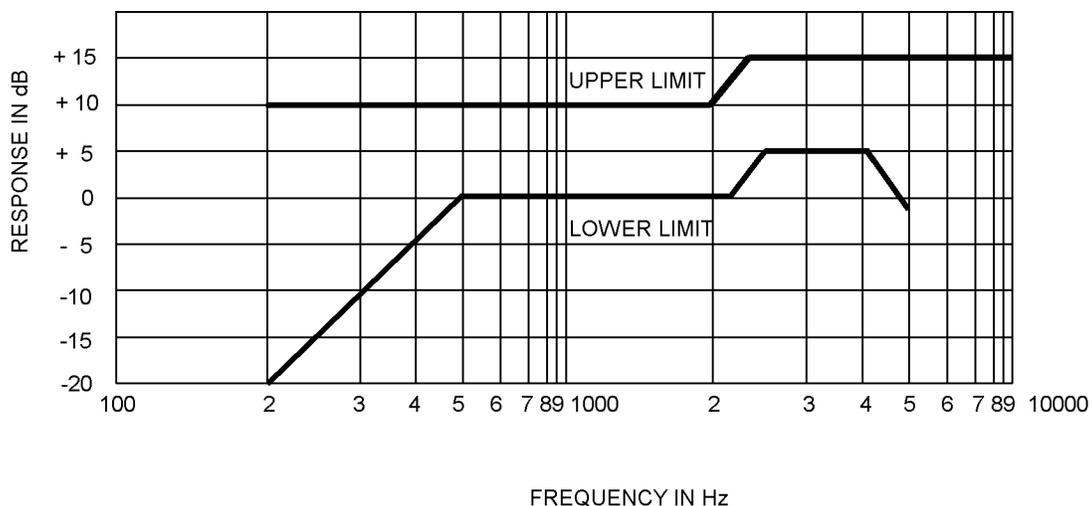
This specification is approved for use by all Departments  
 and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification sheet and MIL-DTL-10911.



- NOTES:
1. Dimensions are in inches.
  2. Metric equivalents are given for general information only.
  3. Tolerances are ± .005 (0.13 mm) for three place decimals and ± .02 (0.51 mm) for two place decimals.
  4. All Part or Identifying Numbers (PIN) shall be as specified in MIL-DTL-10911.

FIGURE 1. Loudspeaker M10911/8-01 and M10911/8-02.



Frequency Points (Hertz)	200	500	2,000	2,200	2,400	2,600	4,000	5,000
Upper Limits (dB)	+10.0	+10.0	+10.0	+12.59 (see note)	+15.0	+15.0	+15.0	+15.0
Lower Limits (dB)	-20.0	0.0	0.0	0.0	+2.39 (see note)	+5.0	+5.0	-1.0

NOTE: Decibel (dB) limits between key break points are calculated, using the slope method.

FIGURE 2. Frequency response limits.

REQUIREMENTS:

Design and construction:

Dimensions and configuration: See figure 1.

Testing enclosure for measuring frequency response, harmonic distortion, vibration, and shock: 5 x 5 x 3-inch test cabinet with 2.75-inch diameter loudspeaker opening.

Terminal finish: Hot-dip solder (finish M221 of MIL-DTL-14072).

Power capacity: 2 watts, rms.

Peak power capacity: 5 watts, rms.

Dielectric withstanding test voltage: 400 ± 5 volts.

Voice coil impedance:

Dash number 01: 4-8 ohms.

Dash number 02: 45 ohms.

Frequency response range: 200 to 5,000 Hz.

Frequency response: Within the limits of figure 2; 0 dB = 94 dB (see figure 2) relative to 20 micropascals ( $\mu$ PA) (0.0002 dynes per square centimeter) between 200 to 5,000 Hz.

Harmonic distortion:

Dash number 01: 1 percent maximum.

Dash number 02: 5 percent maximum.

Cold resistance: The chamber shall be maintained at -80 degrees F +0, -5 degrees F for 24 hours and then stabilized at -65 degrees F +0, -5 degrees F.

Solderability (dash number 01): Applicable.

Vibration, high frequency (dash number 01): Method 204 of MIL-STD-202, test condition D.

Shock (specified pulse) (dash number 01): Applicable.

Marking:

Part Identifying Number (PIN): M10911/8-01 or M10911/8-02 as specified.

Date code (dash number 01): Applicable.

Interchangeability: The loudspeaker M10911/8-01 is interchangeable with the LS-455/U.

NOTE: Impedance variations may be accomplished by either the use of voice coils wound to meet the specified impedance, or the installation of impedance matching transformers, providing other performance characteristics are not adversely affected.

The margins of this specification sheet are marked with vertical lines to indicate where changes from the previous issue were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based upon the entire content, regardless of the marginal notations and relationship to the last previous issue.

Referenced documents. In addition to MIL-DTL-10911, this document references the following:

MIL-DTL-14072  
MIL-STD-202

#### CONCLUDING MATERIAL

Custodians:

Army – CR  
Navy – EC  
Air Force – 85  
DLA – CC

Preparing activity:

DLA – CC  
  
(Project 5965-2012-035)

Review activity:

Air Force – 99

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <https://assist.dla.mil>.