

METRIC

A-A-59002/4

31 May 1995
Superseding
MIL-L-24223/4 (SH)
(22 October 1986)

COMMERCIAL ITEM DESCRIPTION

LOUDSPEAKER, SHIPBOARD ANNOUNCING SYSTEMS ENCASED,
HIGH POWER, ROTATIONAL, 70.7 VOLT

The General Services Administration has authorized the use of this commercial item description as a replacement for MIL-L-24223/4A which is canceled.

The requirements for acquiring the loudspeaker described herein shall consist of this specification and the latest issue of A-A-59002.

1. **Scope.** This Commercial Item Description covers requirements for a high-power loudspeaker for use in extreme high noise environments or for use over long distances.

2. **Salient characteristics.**

2.1 **Dimensions and weight.** See figure 1.

2.2 **Cable.** Entrance as shown on figure 1. Shall accommodate one cable of two or three 7-strand conductors, armored or unarmored, with a nominal conductor diameter of 1.93 mm. Overall cable diameter is between 10.85 and 11.41 mm for unarmored cable, and between 23.55 and 24.11 mm for armored cable. Stuffing tubes are not required.

2.3 **Enclosure.** Application is for unsheltered use.

2.4 **Rotational base.** Designed for use in foul weather conditions where severe icing occurs. The azimuth position shall be held in place by hand operated knobs or levers to hold the loudspeaker assembly from turning in winds exceeding 40 meters per second. At least 330 degrees of rotation is required.

2.5 **Speaker drivers.** Shall not exceed 10 assemblies. Speaker drivers shall be in accordance with A-A-59002/3.

2.6 **Peak volt-ampere.** Capacity shall be at least three times that specified in table I frequency when tested in accordance with A-A-59002.

2.7 **Voice coil impedance.** Shall be 4 ± 0.4 ohm nominal in accordance with EIA RS 276.

2.8 **Sound pressure output.** Minimum sound pressure output in dB re 20 micropascals at the indicated volt-ampere input shall be as specified in table I, when measured in accordance with A-A-59002.

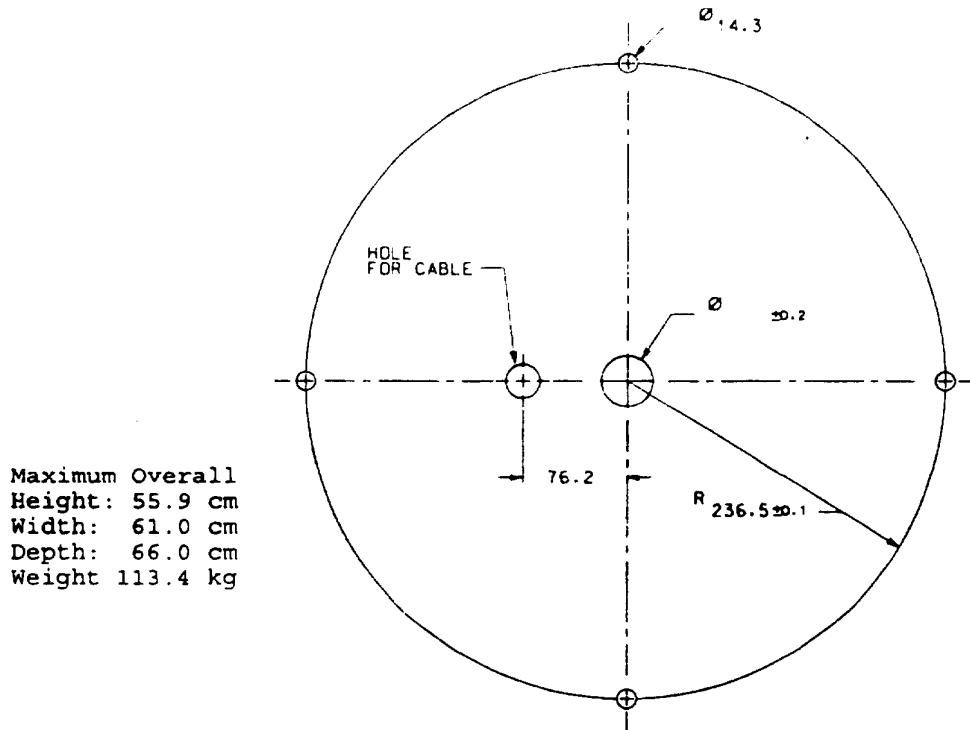
2.9 **Coverage angle.** Shall be at least 25 degrees horizontal, 45 degrees vertical, from 320 to 2000 Hz.

AMSC N/A

FSC 6320

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NOTE: All dimensions in millimeters.
FIGURE 1. Mounting Dimensions for LS397()/SIC

TABLE I. Minimum on axis sound pressure (rms dBp).

Nomenclature	Distance to test MIC (meters)	Volt-ampere input (max)	Warble bands-Hz					
			320 to 500	500 to 800	800 to 1250	1250 to 2000	2000 to 3200	3200 to 5000
LS 397()/SIC	9.144	250	-	108	113	114	114	-

2.10 **Frequency.** Frequency response shall be within figure 2 limits over the band shown.

2.11 **Volume selection.** None required.

2.12 **Fundamental resonance.** At least one corner element and at least one middle element with both mounted in the complete assembly (less rotational base if desired) shall be measured and reported.

2.13 **Temperature.** The operating temperature limits shall be -25°C to +65°C. The non-operating temperature limits shall be -40°C to +70°C, for unsheltered shipboard use.

2.14 **Shock.** Conducted with the rotational base locked so that the speaker axis is along one of the orthogonal directions of shock.

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2.15 **Vibration.** Conducted with the base locked so that the speaker axis is along one of the orthogonal directions of vibration.

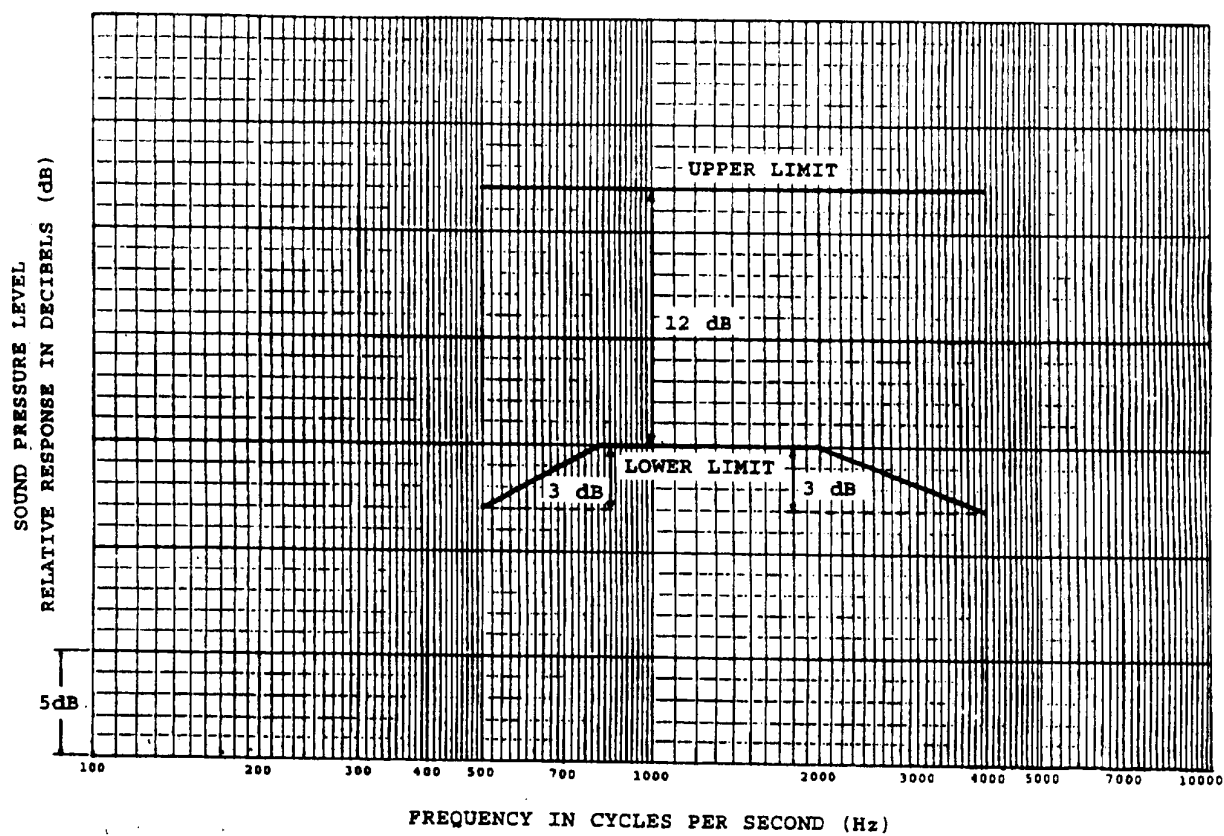


FIGURE 2. Frequency response.

Preparing Activity:
Navy - SH
(Project 6320-0045)