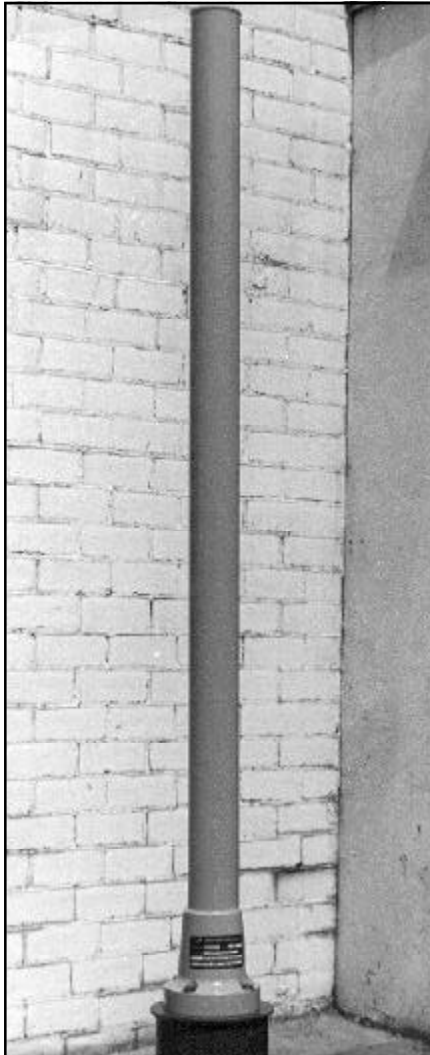


SB-102/1

- OMNIDIRECTIONAL
- VERTICALLY POLARIZED
- EXTREME MARINE ENVIRONMENT

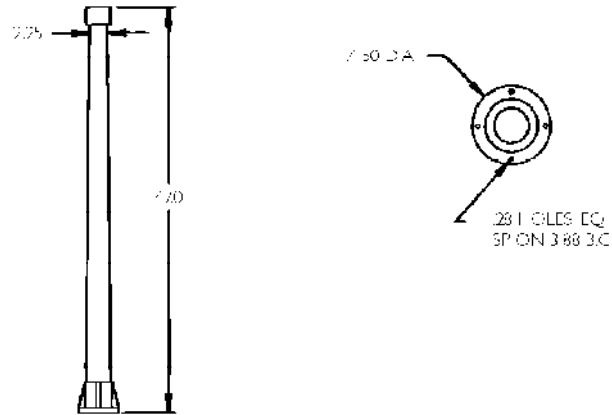


Applications

The SB-102/1 is a VHF shipboard antenna designed for receive or transmit applications. The antenna provides vertically polarized, omnidirectional coverage in the 115 to 162 MHz frequency range. The antenna is enclosed in a fiberglass housing, making it suitable for use in the extreme marine shipboard environment. The dipole antenna design allows for mounting the antenna in proximity to ship structures without significantly degrading antenna performance.

Features

The SB-102/1 VHF shipboard antenna will withstand the shipboard marine environment. The lightweight element construction is secured inside the housing and damps all vibration frequencies specified in MIL-STD-167, Type I vibration. The SB-102 design withstands the shock loads as specified in MIL-S-901C for Grade A shock. The antenna elements are electrically isolated from the feed system to provide a balanced feed. Military designation is AS-2809.



SPECIFICATIONS

Frequency	115-162 MHz	Shock	MIL-S-901C, Grade A, Class I
Polarization	Vertical	Vibration	MIL-STD-167-1, Type I
Impedance	50 Ohms unbalanced	Humidity	0 to 100%
VSWR	2:1 maximum	Wind	100 knots
Gain	2 dBi	Ice	4.5 psf on all exposed surfaces
Azimuth Coverage	Omnidirectional within ± 1 dB	Salt Fog (spray)	Withstand 100 hrs test
Elevation Coverage	Sinusoidal pattern with max at horizon	Height	47 inches
Power Handling Capacity	100 watts	Housing Diameter	3 inches nominal
Input Connector	Type "N"	Base	4.5 inches dia.
Temperature Range		Mounting	$\frac{1}{4}$ inch bolts on a 3.88 inch bolt circle
Operating	-54°C to +65°C	Weight	7.5 lbs
Non-Operating	-62°C to +71°C	Construction	Fiberglass housing mounting flange
Dust (fine sand)	Test per MIL-STD-810 Method 510.2		