



BKR0892-180  
Portable Antenna, WAHOO  
VHF/7-800  
Preliminary Specification

**Electrical Specifications**

No.	Characteristic	Specification Rev 01112023
1.0	Frequency, VHF	136-174 MHz
2.0	Frequency, 7/800	769-870 MHz
3.0	Return Loss, VHF	>3.7 dB
4.0	Return Loss, 7/800	>10 dB
5.0	Gain, Peak VHF 7/800	0 dBi (-2dBd) 2 dBi (0 dBd)
6.0	Polarization	Vertical, Linear
7.0	Input Power Handling <sup>4</sup> VHF 7/800	10 W (DF=50%) 6W (DF=50%)
8.0	Characteristic Impedance	50 $\Omega$
9.0	Radiator Type	Stranded Wire, Flexible

**Mechanical Specifications**

10.0	Connector Type	SMA Female (Jack) "SF" Type, Flush Dielectric
11.0	Connector Material	303 SS
12.0	Radio Housing Interface Dimensions	BK Radio Specifications
13.0	Antenna Diameter @Radio Housing Interface	15.5mm
14.0	Antenna Housing Material	TPE, Elastollan 1190
15.0	Operational Temperature	-40 to 85 C
16.0	Environmental Ingress	BK Radio Specifications
17.0	Color	Black, UV Resistant
18.0	Texture	BK Radio Specifications
19.0	OAL	242mm
20.0	Dimensions	
20.1	Length, Radiator	185mm
20.2	Diameter, Radiator (includes housing)	5.6mm
20.3	Diameter, Base Interface with Radio Housing	15.5mm
21.0	Marking, Identification, Date Code	"BK VHF 700-800"
22.0	Impact, Drop	Multi-Face Radio Drop, 48 in. (Reference BK Drop Test Requirements)
23.0	Side Load Test <sup>1</sup>	10 lbs., min.
24.0	Torque Test <sup>3</sup>	20 in-lbs., min
25.0	Pull Test, Antenna <sup>2</sup>	40 lbs., min.

1. Side Load force to be applied ½ inch above the radio surface plane.
2. Axial Pull, Antenna (without cap).
3. Antenna properly seated with a hard stop, using a simulated mating connector/test fixture. Apply torque to the antenna outer housing, ½ to 1 inch above the bottom edge of the TPE housing.
4. DF=50%, 1 min (ON), 1 min. (OFF).

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