

DA-868-01

868 MHz Dipole Antenna Datasheet



DESCRIPTION

Powercast's DA-868-01 antenna is a dipole antenna designed to work in the UHF RF range. It has linear polarization and an omnidirectional radiation pattern. It utilizes a sleeve-like balun to eliminate impedance mismatches when being fed from an unbalanced source. This, along with the SMA connector, makes it ideal when testing with development kits that need UHF RF energy, specifically RFID and energy harvesting.

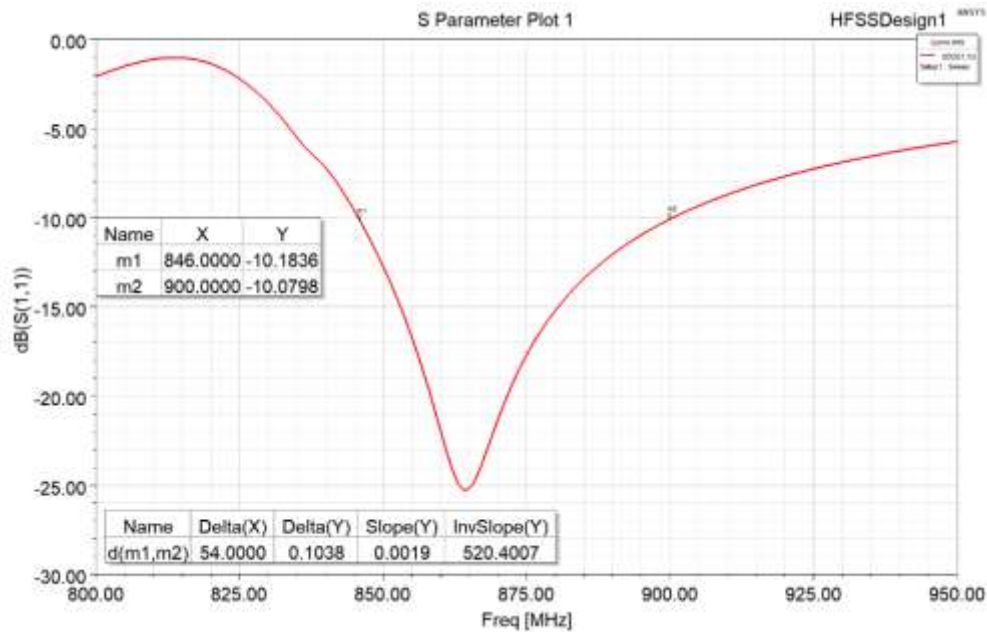
ANTENNA PARAMETERS

Parameter	Specification
Frequency Range	863 – 870 MHz
Peak Gain	1.50 (1.77 dBi)
Return Loss	< -10dB (846 – 900 MHz)
Impedance	50 ohms
Radiation Pattern	Omni-Directional
Half-Power Beamwidth	80°
Polarization	Linear – Vertical (lengthwise)
VSWR	< 2:1 (845 – 904 MHz)
Connector	SMA

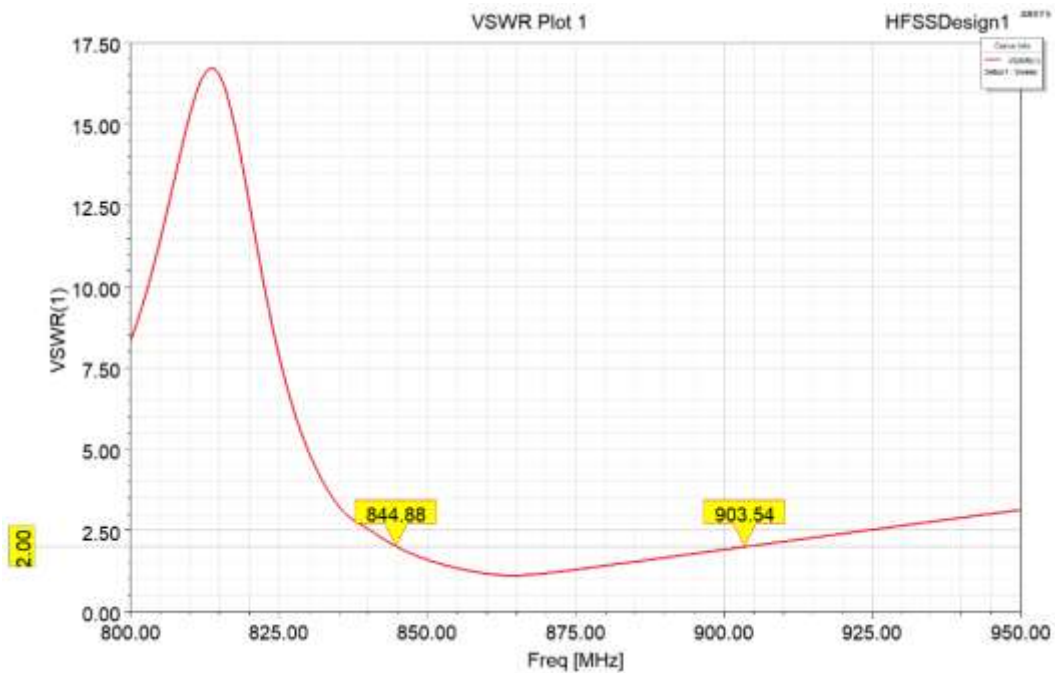


Powercast products and technology are covered by one or more patents with other patents pending. All patent and trademark information can be found at <http://www.powercastco.com/IP/>

RETURN LOSS

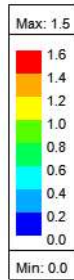
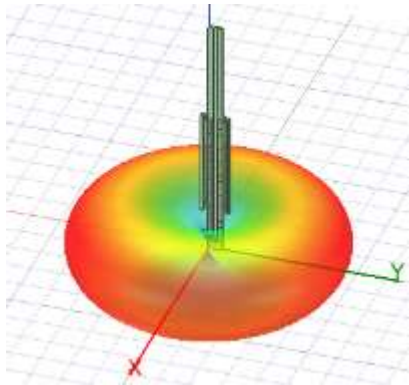


VSWR

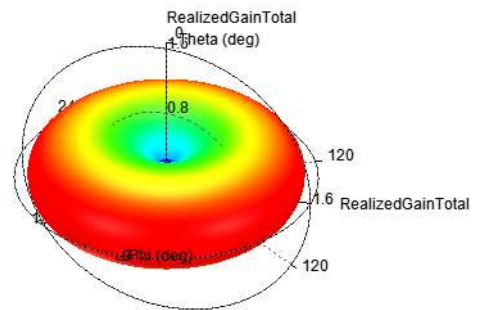


RADIATION PATTERN, LINEAR

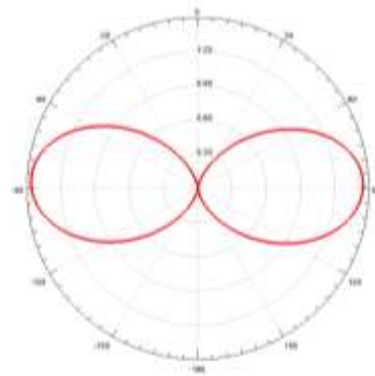
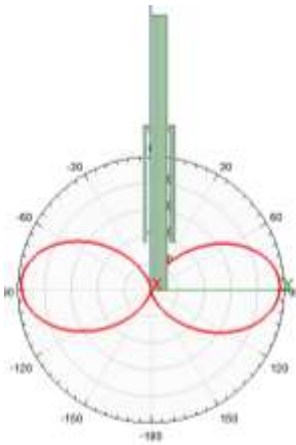
Radiation Pattern



Realized Gain Plot 1



Front Radiation Pattern

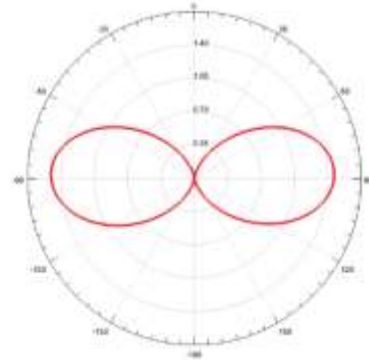
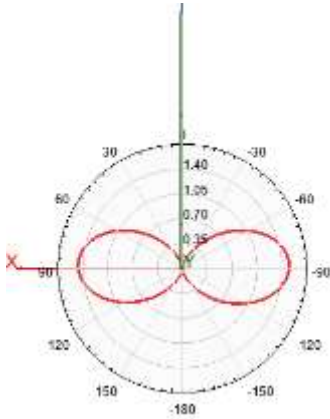


DA-868-01

868 MHz Dipole Antenna Datasheet



Side Radiation Pattern



IMPORTANT NOTICES

Information furnished by Powercast Corporation (Powercast) is believed to be accurate and reliable. However, no responsibility is assumed by Powercast for its use, nor for any infringements of patents or other rights of third parties that may result from its use. Specifications are subject to change without notice.

No license is granted by implication or otherwise under any patent or patent rights of Powercast. Trademarks and registered trademarks are the property of their respective owners.

CRITICAL APPLICATIONS DISCLAIMER

POWERCAST PRODUCTS (INCLUDING HARDWARE AND/OR SOFTWARE) ARE NOT DESIGNED OR INTENDED TO BE FAIL-SAFE, FAULT TOLERANT OR FOR USE IN ANY APPLICATION THAT COULD LEAD TO DEATH, PERSONAL INJURY OR SEVERE PROPERTY OR ENVIRONMENTAL DAMAGE (INDIVIDUALLY AND COLLECTIVELY, "CRITICAL APPLICATIONS"), SUCH AS LIFE-SUPPORT OR SAFETY DEVICES OR SYSTEMS, CLASS III MEDICAL DEVICES, NUCLEAR FACILITIES, APPLICATIONS THAT AFFECT CONTROL OF A VEHICLE OR AIRCRAFT, APPLICATIONS RELATED TO THE DEPLOYMENT OF AIRBAGS, OR ANY OTHER CRITICAL APPLICATIONS. CUSTOMER AGREES, PRIOR TO USING OR DISTRIBUTING ANY SYSTEMS THAT INCORPORATE POWERCAST PRODUCTS, TO THOROUGHLY TEST THE SAME FOR SAFETY PURPOSES. CUSTOMER ASSUMES THE SOLE RISK AND LIABILITY OF ANY USE OF POWERCAST PRODUCTS IN CRITICAL APPLICATIONS, SUBJECT ONLY TO APPLICABLE LAWS AND REGULATIONS GOVERNING LIMITATIONS ON PRODUCT LIABILITY.

Powercast warrants its products in accordance with Powercast's standard warranty available at www.powercastco.com/terms-conditions



Powercast Corporation

620 Alpha Drive, Suite 1
Pittsburgh, PA, USA 15238
www.powercastco.com
contact@powercastco.com
+1 (412)-455-5800