Part No. 1002292

Balanced LTE/Cellular FPC Antenna

700 / 750 / 850 / 1800 / 1900 / 2100 / 2700 MHz

Supports: Broadband LTE (OCTA-BAND), LTE CAT-M, NB-IoT, LoRa, Cellular LPWA



KYOCERA AVX's 1002292 Balanced LTE/Cellular embedded antenna addresses the challenges facing today's product designers. Designed to increase the independence between the cellular antenna and the ground plane; 1002292 also supports the LTE frequency bands.

Balanced LTE/Cellular FPC Antenna

Low Band : 698-894 MHz

High Band: 1710-2690 MHz

KEY BENEFITS

Reduced Costs and Time-to-Market

Standard antenna eliminates design fees and cycle time associated with a custom solution; getting products to market faster.

Greater Flexibility with Unique Form Factors

KYOCERA AVX technology helps you deliver more advanced ergonomic designs without adverse impact on product performance.

Environmental Compliance

Comply with latest RoHS requirements

APPLICATIONS

- Healthcare (Medical Class I Applications)
- Home Automation
- Smart metering
- M2M, Industrial devices
- IoT
- Firstnet

Electrical Specifications

Typical Performance on 105 x 110 mm PCB using 86 mm cable on PC-ABS

Frequency	698 - 894 MHz	1710 - 2690 MHz
Efficiency	50%	64%
VSWR	3.0:1 max	2.8:1 max
Peak Gain	1.2 dBi	5.0 dBi
Polarization	Linear	
Power Handling	2 Watts CW	
Radiation Pattern	Omni-directional	
Feed Point Impedance	50 ohms unbalanced	

Mechanical Specifications & Ordering Part Number

Ordering Part #	1002292	1002292F0-AA10L0086
Dimensions (mm)	85.2 x 42.1 x 0.2 (2.0 high at cable UV glue)	
Connector / Cable (mm)	Connector: U.FL compatible Length: 28.5, Cable diameter: 1.13, Color: Black	Connector: U.FL compatible Length: 86.0, Cable diameter: 1.13, Color: Black
Weight (grams)	1.8	2.2
Mounting	using 3M468 Adhesive	
Packaging	PE bags 1,800 units/box	
Additional Resources	Download 3D FIT File	

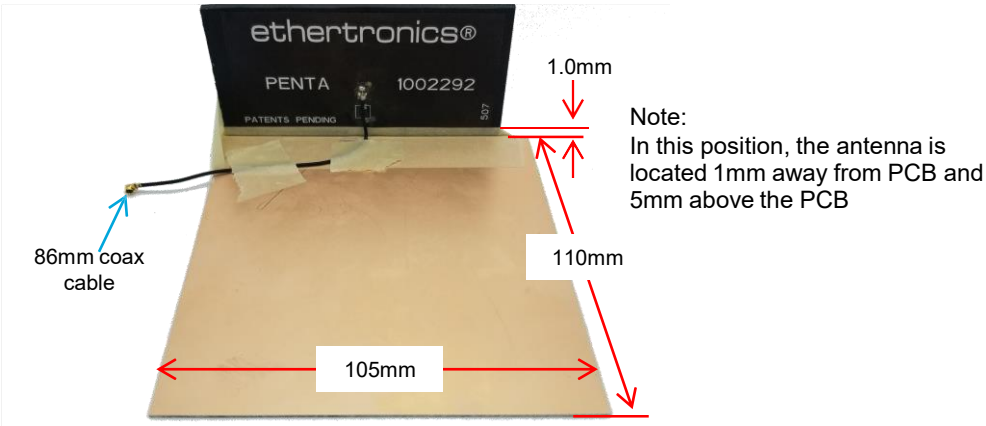
*Additional variations with different cable lengths, colors and connectors are available.

Downloaded from Arrow.com.

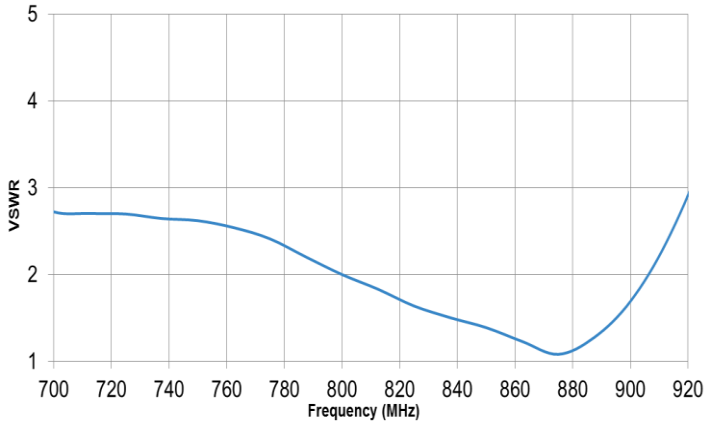
Balanced LTE/cellular FPC Antenna Specifications.
KYOCERA AVX produces a wide variety of standard and custom antennas to meet user needs.

VSWR and Efficiency Plots (Off-Ground)

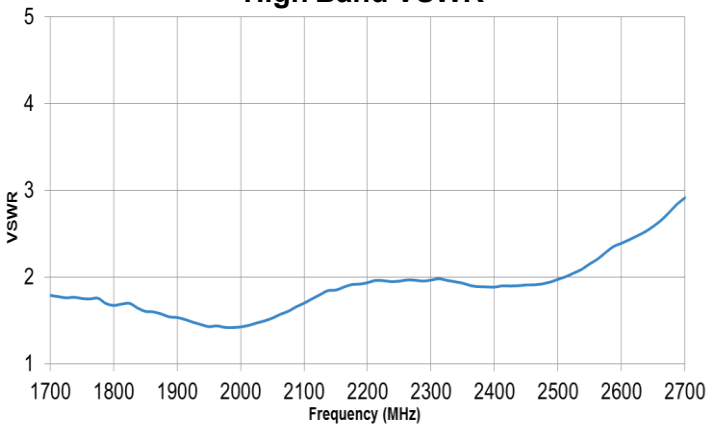
Typical Performance on 105 x 110 mm PCB using 86 mm cable, tested on PC-ABS



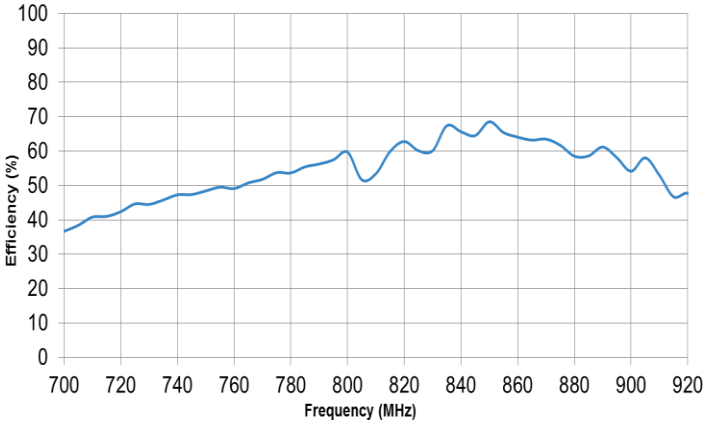
Low Band VSWR



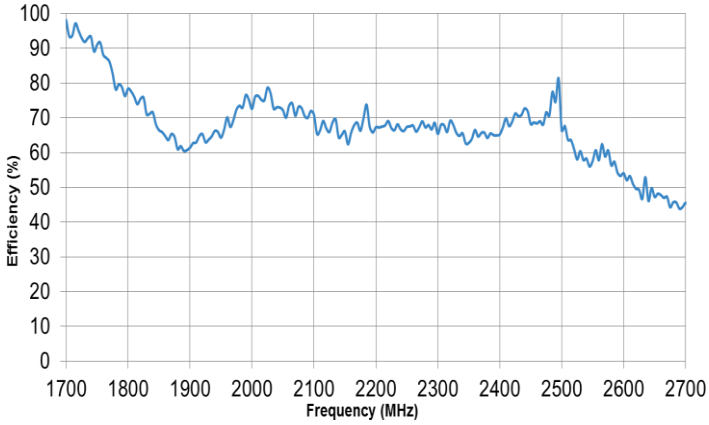
High Band VSWR



Low Band Efficiency



High Band Efficiency



© 2026 KYOCERA AVX

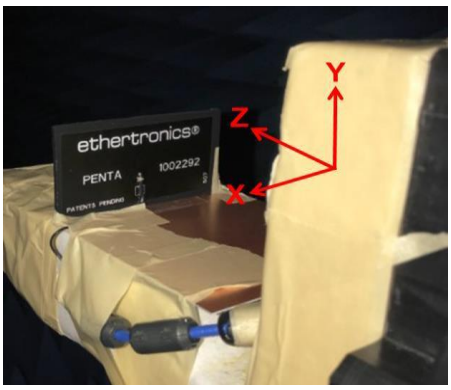
tel +(1) 858.550.3820
email: antenna.info@kyocera-avx.com
1 Avx Blvd, Fountain Inn, SC 29644

Downloaded from Arrow.com.

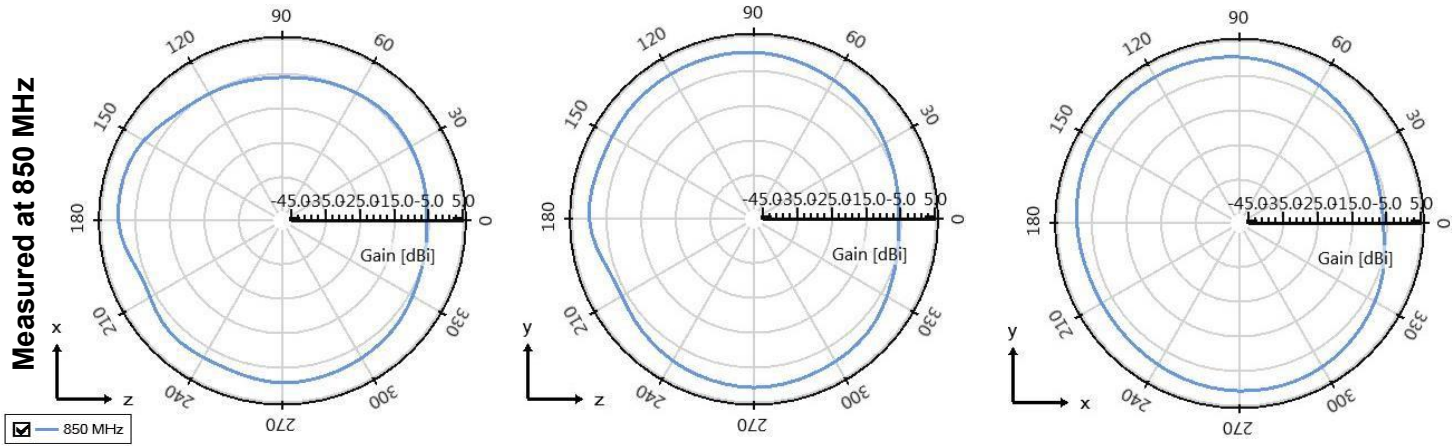
Balanced LTE/Cellular FPC Antenna Specifications.
KYOCERA AVX produces a wide variety of standard and custom antennas to meet user needs.

Antenna Radiation Patterns

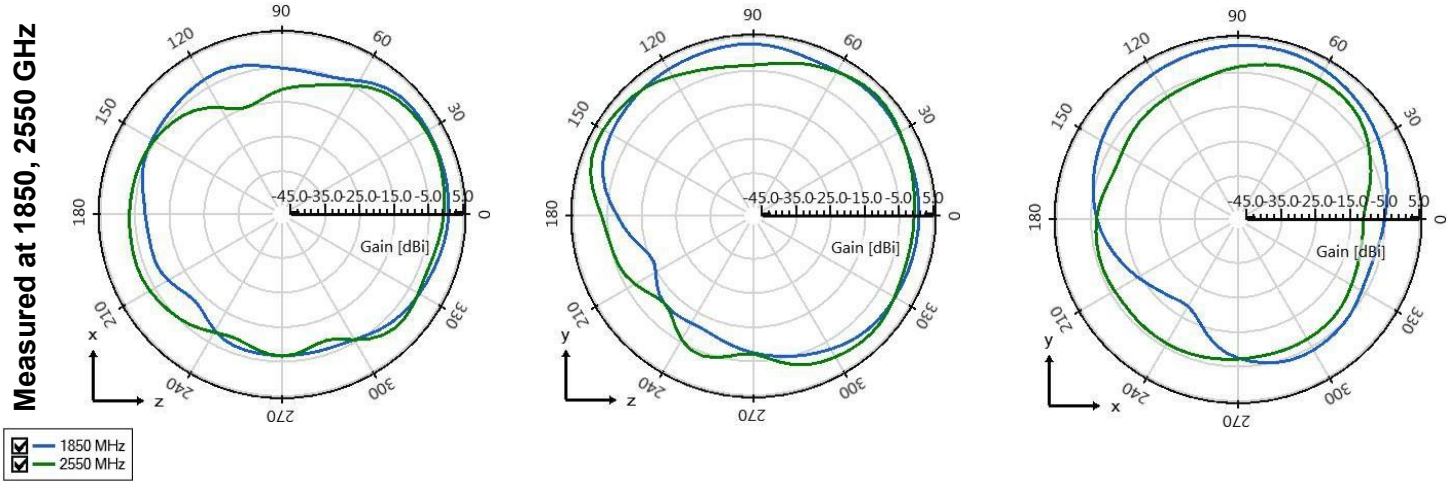
Typical Performance on 105 x 110 mm PCB using 86 mm cable, tested on PC-ABS
Measured @ 850, 1850, 2550 MHz



Measured at 850 MHz



Measured at 1850, 2550 GHz



Downloaded from Arrow.com.

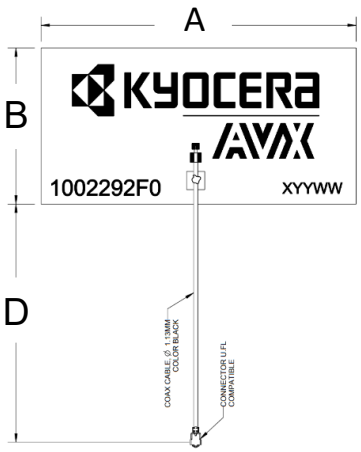
Balanced LTE/Cellular FPC Antenna Specifications.
KYOCERA AVX produces a wide variety of standard and custom antennas to meet user needs.

Mechanical Dimensions

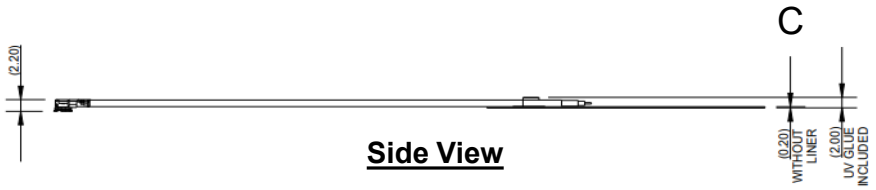
Typical antenna dimensions (mm)

Part Number	A (mm)	B (mm)	C (mm)	D (mm)	Connector
1002292	85.2 ± 0.3	42.1 ± 0.3	0.2 ± 10%	28.5 ± 3.0	MHF (U.FL)
1002292F0-AA10L0086	85.2 ± 0.3	42.1 ± 0.3	0.2 ± 10%	86.0 ± 3.0	MHF (U.FL)
1002292F0-AA10L0100	85.2 ± 0.3	42.1 ± 0.3	0.2 ± 10%	100.0 ± 3.0	MHF (U.FL)

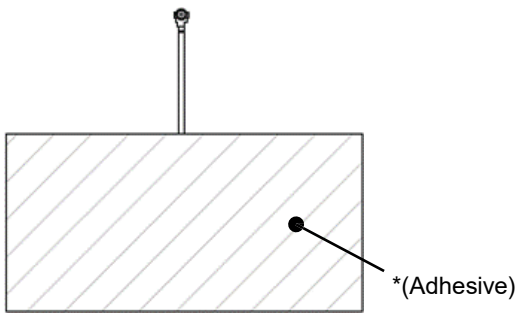
***Total Height of 2.0 mm includes the cable UV glue**
***Height "C" of 0.2 mm includes FPC + adhesive thickness**



Top View



Side View



Bottom View

Downloaded from Arrow.com.

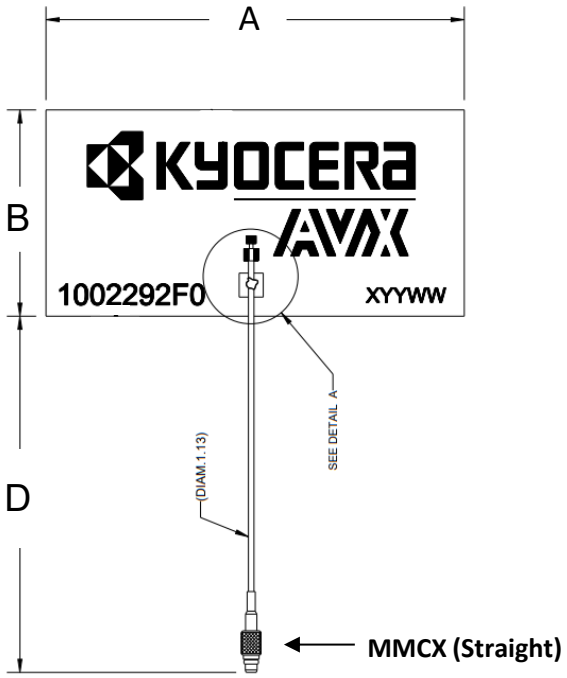
Balanced LTE/Cellular FPC Antenna Specifications.
KYOCERA AVX produces a wide variety of standard and custom antennas to meet user needs.

Mechanical Dimensions

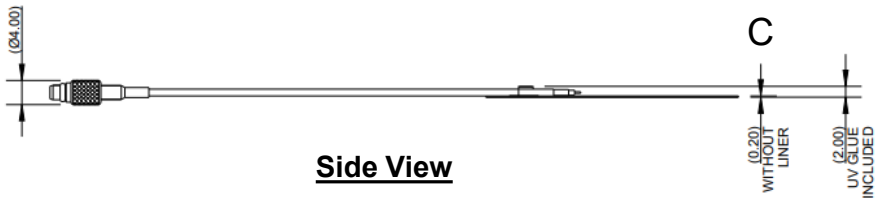
Typical antenna dimensions (mm)

Part Number	A (mm)	B (mm)	C (mm)	D (mm)	Connector
1002292F0-AM30L0330R	85.2 ± 0.3	42.1 ± 0.3	0.2 ± 10%	330.0 ± 5.0	MMCX (90 deg angled)
1002292F0-AM20L0330	85.2 ± 0.3	42.1 ± 0.3	0.2 ± 10%	330.0 ± 5.0	MMCX (Straight)

***Total Height of 2.0 mm includes the cable UV glue**
***Height "C" of 0.2 mm includes FPC + adhesive thickness**



Top View



Side View

tel +(1) 858.550.3820
email: antenna.info@kyocera-avx.com
1 Avx Blvd, Fountain Inn, SC 29644

Downloaded from Arrow.com.

Balanced LTE/Cellular FPC Antenna Specifications.
KYOCERA AVX produces a wide variety of standard and custom antennas to meet user needs.

Additional Resources - 1002292

3D FIT File:
https://www.kyocera-avx.com/download/antennas/ME-FIT/1002292_ME_fit.zip

tel +(1) 858.550.3820
email: antenna.info@kyocera-avx.com
1 Avx Blvd, Fountain Inn, SC 29644

Downloaded from Arrow.com.