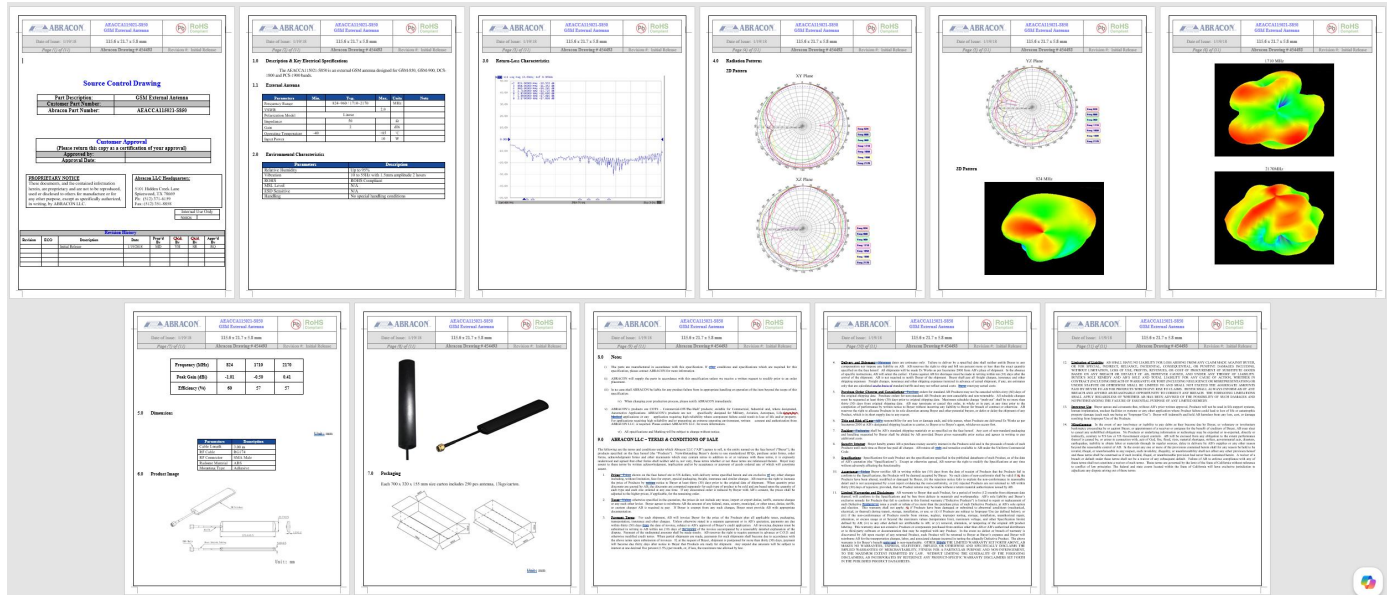


ECN/PCN No.: R0516

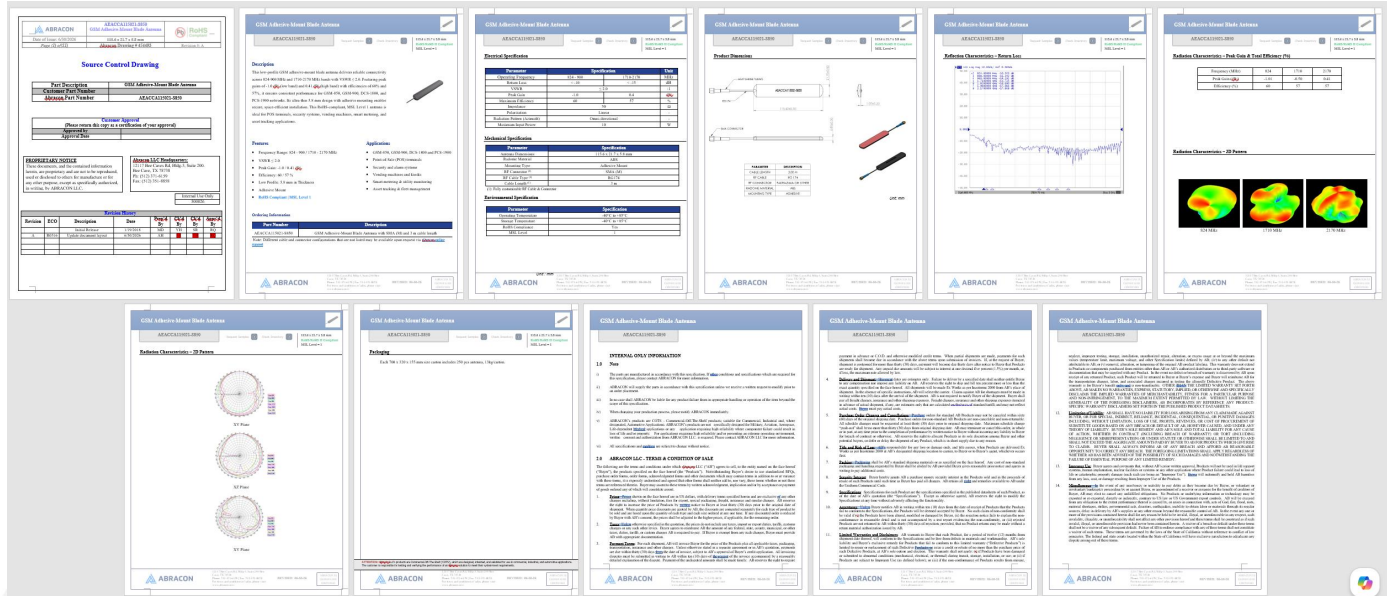
For Manufacturer

Product Description: GSM Adhesive-Mount Blade Antenna	Abracon Part Number / Part Series: AEACCA115021-S850	☐ Documentation only ☒ ECN ☐ EOL ☐ Series ☐ Part Number
Affected Revision: IR	New Revision: A	Application: ☐ Safety ☒ Non-Safety

Prior to Change:



After Change:



Cause/Reason for Change: Update document layout

Change Plan

Effective Date: 06/30/2026	Additional Remarks:
--------------------------------------	----------------------------

Change Declaration:

Form #7020C | Rev. G | Effective: 02/22/2021 |

Page 1 of 2

Issued Date: 06/30/2026	Issued By: Allan	Issued Department: Engineering
Approval: <i>Saravanan Subramanian</i> Engineering Director	Approval: <i>Reuben Quintanilla</i> Quality Director	Approval: <i>Ying Huang</i> Purchasing Director
For Abracon EOL only		
Last Time Buy (if applicable):	Alternate Part Number / Part Series:	
Additional Approval:	Additional Approval:	Additional Approval:
Customer Approval (If Applicable)		
Qualification Status: ☐ Approved ☐ Not accepted <i>Note: It is considered approved if there is no feedback from the customer 1 month after ECN/PCN is released.</i>		
Customer Part Number:		Customer Project:
Company Name:	Company Representative:	Representative Signature:
Customer Remarks:		

GSM Adhesive-Mount Blade Antenna



AEACCA115021-S850

Request Samples



Check Inventory



115.6 x 21.7 x 5.8 mm
RoHS/RoHS II Compliant
MSL Level = 1

Description

This low-profile GSM adhesive-mount blade antenna delivers reliable connectivity across 824-900 MHz and 1710-2170 MHz bands with $VSWR \leq 2.0$. Featuring peak gains of -1.0 dBi (low band) and 0.41 dBi (high band) with efficiencies of 60% and 57%, it ensures consistent performance for GSM-850, GSM-900, DCS-1800, and PCS-1900 networks. Its ultra-thin 5.8 mm design with adhesive mounting enables secure, space-efficient installation. This RoHS-compliant, MSL Level 1 antenna is ideal for POS terminals, security systems, vending machines, smart metering, and asset tracking applications.



Features

- Frequency Range: 824 - 900 / 1710 - 2170 MHz
- $VSWR \leq 2.0$
- Peak Gain: -1.0 / 0.41 dBi
- Efficiency: 60 / 57 %
- Low Profile: 5.8 mm in Thickness
- Adhesive Mount
- [RoHS Compliant](#) | [MSL Level 1](#)

Applications

- GSM-850, GSM-900, DCS-1800 and PCS-1900
- Point-of-Sale (POS) terminals
- Security and alarm systems
- Vending machines and kiosks
- Smart metering & utility monitoring
- Asset tracking & fleet management

Ordering Information

Part Number	Description
AEACCA115021-S850	GSM Adhesive-Mount Blade Antenna with SMA (M) and 3 m cable length

Note: Different cable and connector configurations that are not listed may be available upon request via [Abracon online support](#)



12117 Bee Caves Rd, Bldg-3, Suite 200 Bee
Cave, TX 78738
Phone: 512-371-6159 | Fax: 512-351-8858
For terms and conditions of sales, please visit:
www.abracon.com

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GSM Adhesive-Mount Blade Antenna



AEACCA115021-S850

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115.6 x 21.7 x 5.8 mm
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MSL Level = 1

Electrical Specification

Parameter	Specification		Unit
Operating Frequency	824 - 900	1710-2170	MHz
Return Loss	< -10	< -15	dB
VSWR	≤ 2.0		:1
Peak Gain	-1.0	0.4	dBi
Maximum Efficiency	60	57	%
Impedance	50		Ω
Polarization	Linear		-
Radiation Pattern (Azimuth)	Omni-directional		-
Maximum Input Power	10		W

Mechanical Specification

Parameter	Specification
Antenna Dimensions	115.6 x 21.7 x 5.8 mm
Radome Material	ABS
Mounting Type	Adhesive Mount
RF Connector ⁽¹⁾	SMA (M)
RF Cable Type ⁽¹⁾	RG174
Cable Length ⁽¹⁾	3 m

(1): Fully customizable RF Cable & Connector

Environmental Specification

Parameter	Specification
Operating Temperature	-40°C to +85°C
Storage Temperature	-40°C to +85°C
RoHS Compliance	Yes
MSL Level	1

Unit : mm



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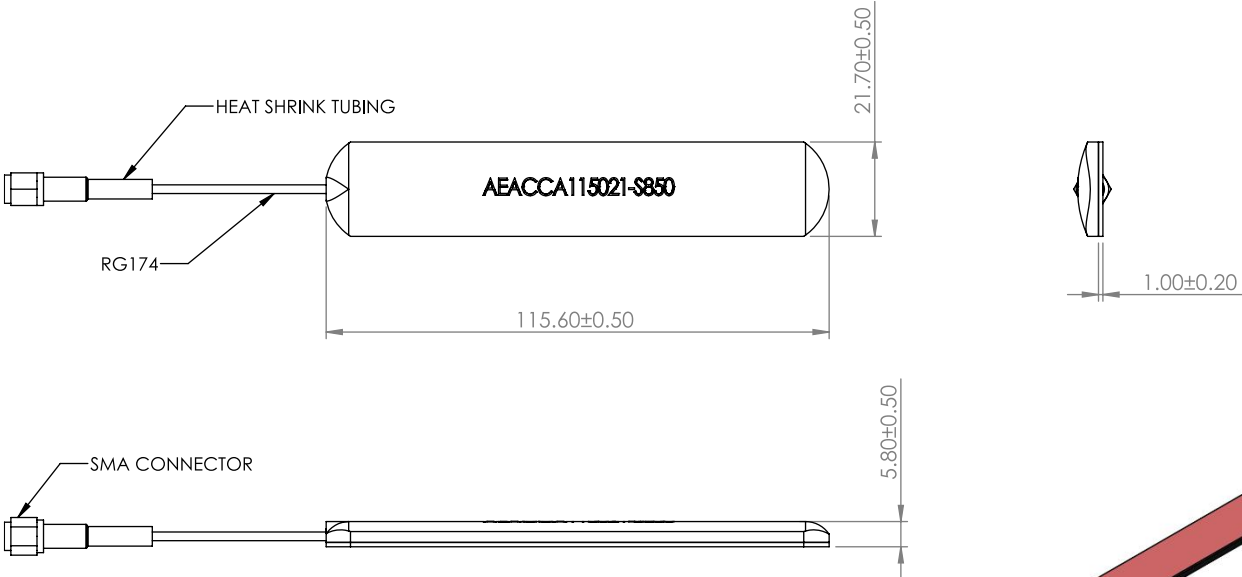


Check Inventory

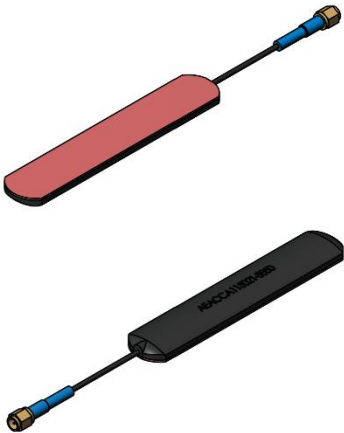


115.6 x 21.7 x 5.8 mm
RoHS/RoHS II Compliant
MSL Level = 1

Product Dimensions



PARAMETER	DESCRIPTION
CABLE LENGTH	3.00 m
RF CABLE	RG 174
RF CONNECTOR	FAKRA/SMA OR OTHER
RADOME MATERIAL	ABS
MOUNTING TYPE	ADHESIVE



Unit: mm



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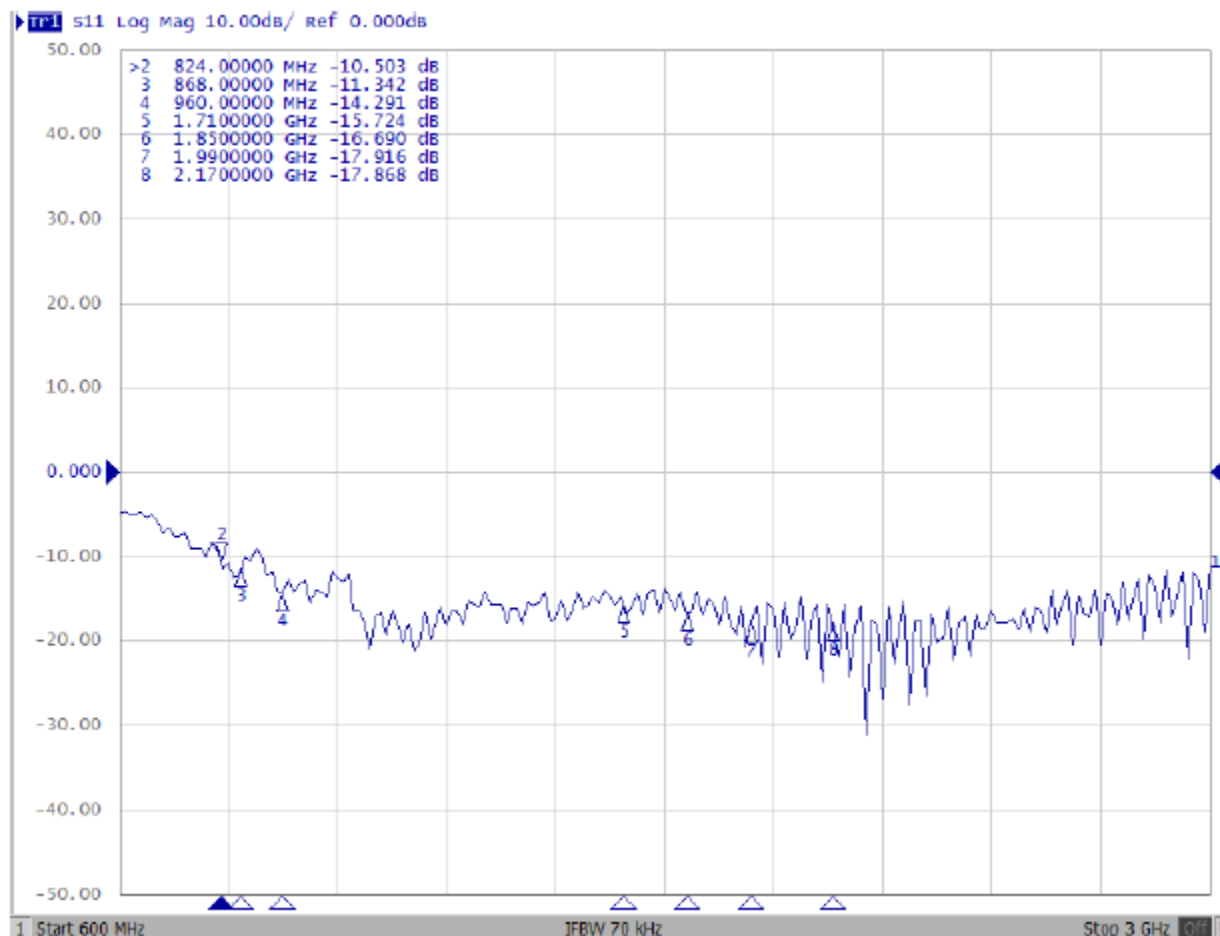


Check Inventory



115.6 x 21.7 x 5.8 mm
RoHS/RoHS II Compliant
MSL Level = 1

Reflection Characteristics – Return Loss



GSM Adhesive-Mount Blade Antenna



AEACCA115021-S850

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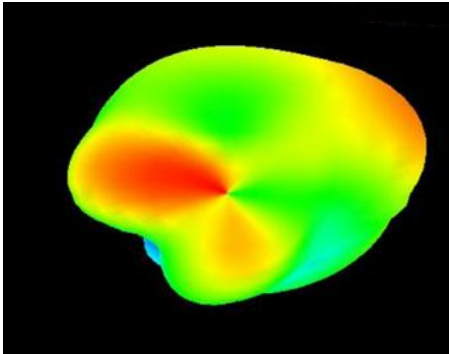


115.6 x 21.7 x 5.8 mm
RoHS/RoHS II Compliant
MSL Level = 1

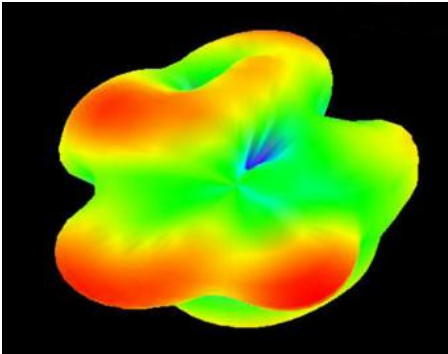
Radiation Characteristics – Peak Gain & Total Efficiency (%)

Frequency (MHz)	824	1710	2170
Peak Gain (dBi)	-1.01	-0.50	0.41
Efficiency (%)	60	57	57

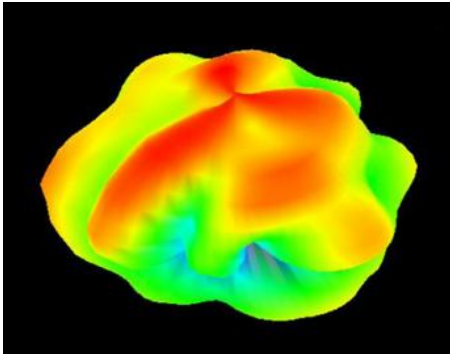
Radiation Characteristics – 3D Pattern



824 MHz



1710 MHz



2170 MHz



AEACCA115021-S850

Request Samples

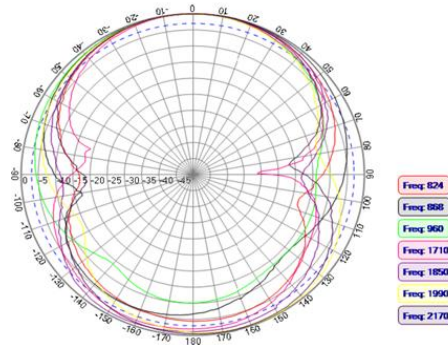


Check Inventory

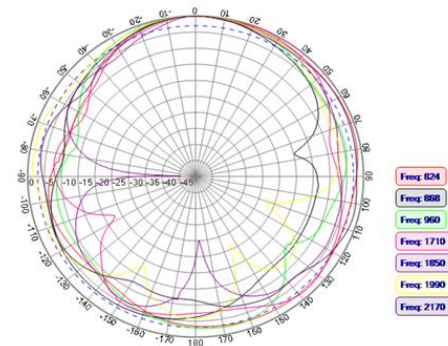


115.6 x 21.7 x 5.8 mm
RoHS/RoHS II Compliant
MSL Level = 1

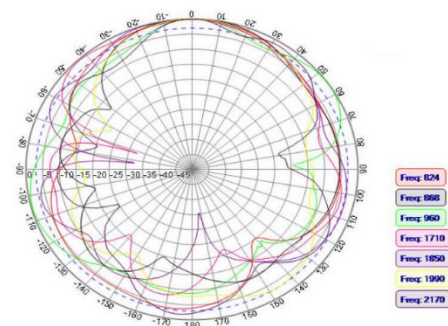
Radiation Characteristics – 2D Pattern



XY Plane



XZ Plane



XY Plane

GSM Adhesive-Mount Blade Antenna



AEACCA115021-S850

Request Samples



Check Inventory



115.6 x 21.7 x 5.8 mm

RoHS/RoHS II Compliant

MSL Level = 1

Packaging

Each 700 x 320 x 155 mm size carton includes 250 pcs antenna, 13kg/carton.

ATTENTION: Abracon LLC's products are Commercial-Off-The-Shelf ("COTS"), which are designed, intended, and validated for use in commercial, industrial, and automotive applications. The customer is responsible for testing and verifying the performance of an Abracon solution to meet their system-level requirements.



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Brand	Affected PN	Discontinued/EOL PN	Added PN	Series	ECO#	Datasheet Link	ECN Notification Link
Abracon	AEACCA115021-S850			AEACCA115021-S850	R0516	https://abracon.com/datasheets/AEACCA115021-S850.pdf	https://abracon.com/downloads/ECN-PCN/ECN-PCN-Notification_ECOR0516_AEACCA115021-S850.pdf