

AECA0401G4Z

Request Samples



Check Inventory (S)



45.2 x 35.8 x 15.2 mm RoHS/RoHS II Compliant MSL Level = 1

Features

- Automotive Grade Antenna
- Manufactured in Automotive Certified line
 - o IATF 16949 certified
- PPAP available upon request
- GNSS/GPS/GLONASS/BeiDou/QZSS
- High Gain of 5 dBi
- High LNA gain of 28±2 dB
- RHCP
- IP67
- Easy installation using built-in adhesive tape
- Fully customizable cable and connector options for RF connection

Applications

- IoT
- M2M
- Automotive Applications
- Geolocation Tracking
- Vehicle Tracking
- Fleet Management
- Smart City
- Transportation
- Smart Agriculture

Product Image







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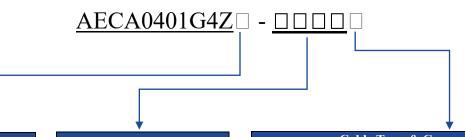


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Part Number Builder



Color / UV Coating		
Code	Description	
S (Standard)	Black without UV coating	
A	Black with UV Coating	
В	White without UV Coating	
C	White with UV Coating	

Cable length in 'mm'		
Code	Description	
3000 (Standard)	3000 mm	
Other Examples :		
0200	200 mm	
2000	2000 mm	

Cable Type & Connector Type			
Code	Cable Type	Connector Type	
S (Standard)		SMA (M)	
A		FAKRA C (F)	
В		RP-SMA (M)	
C		SMB (M)	
D	RG-174	N-Type (M)	
Е		TNC (M)	
F		BNC (M)	
G		MCX (M)	
Н		MMCX (M)	
I		FME (M)	
J		FME (F)	
K		SMA (M)	
L	LMR-100	FAKRA C (F)	
M		RP-SMA (M)	
N		SMB (M)	
О		N-Type (M)	
P		TNC (M)	
Q		BNC (M)	
R		MCX (M)	
T		MMCX (M)	
U		FME (M)	
V		FME (F)	

Example Configurations:

Part Number	UV Protection Coating / Color	Cable length	Cable Type / Connector Type
AECA0401G4ZS-3000S	No / Black	3000 mm	RG-174 with SMA (M) (Standard)
AECA0401G4ZA-1000A	Yes / Black	1000 mm	RG-174 with FAKRA C (M)
AECA0401G4ZB-5000O	No / White	5000 mm	LMR-100 with N-Type (M)

Note:

- For the standard part number (AECA0401G4ZS-3000S), please refer to the packaging at the end of the document.
- For custom configurations (AECA0401G4Z \square - \square \square \square \square), MOQs, pricing and packaging changes may be applicable.





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Electrical Specification

Pai	rameter	Min	Тур	Max	Unit
Cente	r Frequency	1561		1602	MHz
7	VSWR			1.5	
Gair	n (Zenith)			5	dBiC
Pol	arization		RHCP		
Im	pedance		50		Ω
Ax	ial Ratio			3	dB
	LNA				
Noi	se Figure			1.5	dB
	Gain	26	28	30	dB
7	VSWR			2.0	
Ex-band	CF + 50 MHz		12		dB
Attenuation	CF – 50 MHz		16		ав
DC Su	pply Voltage	2.2		5.0	V
Current	Consumption	5		15	mA
FILTER					
Inse	rtion Loss			3.0	dB

Mechanical Specification

Parameter	Specification
Antenna Dimension	45.2 x 35.8 x 15.2 mm
Radome Material	ABS
Mounting Type	Adhesive
RF Connector	SMA (M)
RF Cable	RG-174
Cable Length	3 m

Environmental Specification

Parameter	Specification
Operating Temperature	-40°C to +85°C
Storage Temperature	-40°C to +85°C
RoHS Compliance	Yes
PB Free	Yes
MSL	1
ESD Sensitive	Yes
Vibration	$10 \sim 55$ Hz with 1.5 mm amplitude 2 hrs
UL Rating	UL-94 HB
Ingress Protection	IP67 (excluding cable outlet)



REVISED: 05-12-20



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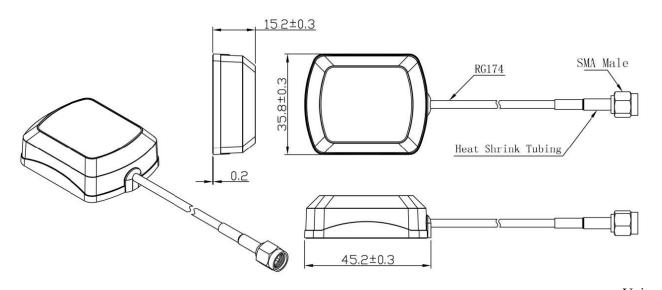


Check Inventory (>)



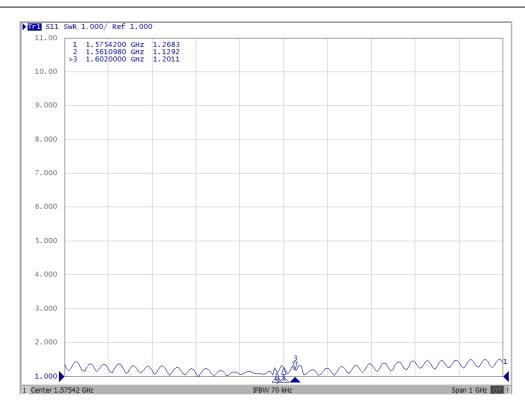
45.2 x 35.8 x 15.2 mm RoHS/RoHS II Compliant MSL Level = 1

Product Dimension



Unit: mm

Test Measurement - VSWR







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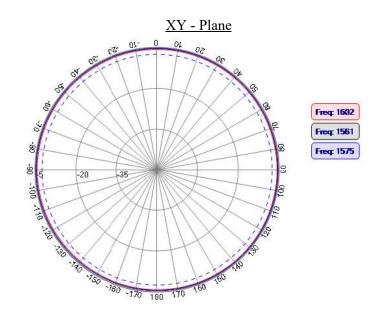
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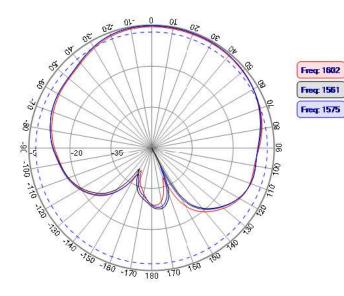
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Radiation Characteristics

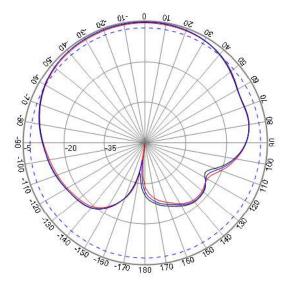
2D Pattern



XZ - Plane



YZ - Plane



Freq: 1602 Freq: 1561 Freq: 1575





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Packaging Information

Number of Antenna/ Carton: 200 pcs Weight of 1 pc of the antenna: 65 g

Dimension of the Carton: 490 x 230 x 270 mm

Weight of the Carton: 14 kg

ATTENTION: Abracon LLC's products are COTS – Commercial-Off-The-Shelf products; suitable for Commercial, Industrial and, where designated, Automotive Applications. Abracon's products are not specifically designed for Military, Aviation, Aerospace, Life-dependent Medical applications or any application requiring high reliability where component failure could result in loss of life and/or property. For applications requiring high reliability and/or presenting an extreme operating environment, written consent and authorization from Abracon LLC is required. Please contact Abracon LLC for more information.



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