

#### AEACBA050018-SG3



50.0 x 50.0 x 18.0 mm RoHS/RoHS II Compliant MSL = 1

#### **Features**

- High positioning accuracy
- GPS/GLONASS/BeiDou/Galileo band support
- IP67 Rated
- Gain of 5.0 dBic
- Active GNSS with integrated LNA
- High LNA gain of 34 dB
- Low VSWR of 1.5
- RHCP polarization
- Adhesive mounting
- Improved GNSS reliability

# **Applications**

- GPS/GLONASS/BeiDou/Galileo applications
- IoT
- M2M
- Surveillance
- Fleet management and asset tracking
- Autonomous driving
- Telematics
- Agriculture
- Instrumentation
- Survey

# **Electrical Specifications**

Parameters	Min.	Typ.	Max.	Units	Note
Frequency Range		1561.098 ~ 1602		MHz	
VSWR			1.5		
Polarization	RHCP			Right Hand Circular Polarization	
Impedance		50		Ω	
Gain		5		dBic	@PCB Zenith
Axial Ratio			3	dB	

LNA Parameters	Min.	Тур.	Max.	Units	Note
Gain	32	34	36	dB	
VSWR			2.0		
Noise Figure			1.5	dB	
Supply Voltage		3~5		V	DC
Current Consumption			20	mA	

#### **Mechanical Characteristics**

Parameters	Description
Connector	SMA
Cable Type	RG174/3M
Mounting	Adhesive
Radom Material	ABS





#### AEACBA050018-SG3

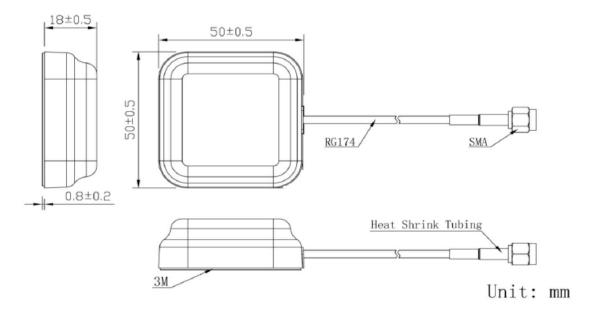


50.0 x 50.0 x 18.0 mm RoHS/RoHS II Compliant MSL = 1

# **Environmental Characteristics**

Parameters	Description
Ingress Protection	IP67 rated
Operating temperature	-40°C to +85°C
Relative Humidity	Up to 95 %
Vibration	10 to 55 Hz with 1.5 mm amplitude 2 hours

#### **Dimensions**



# **Product Image**





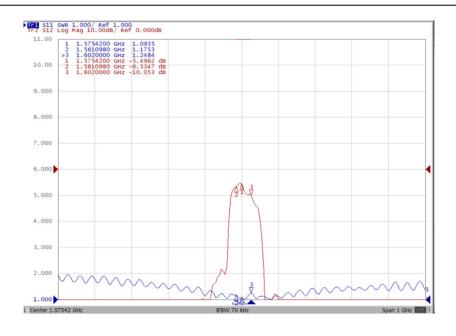


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#### **VSWR**

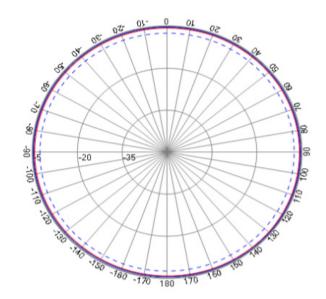


# **Radiation Patterns**

# 2D- Pattern

Frequency: --- 1561 --- 1575 --- 1602

# XY - Plane







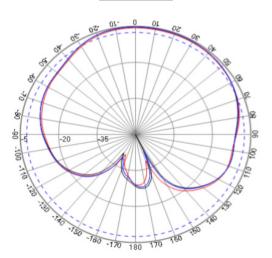
#### AEACBA050018-SG3



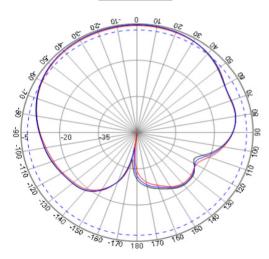
50.0 x 50.0 x 18.0 mm RoHS/RoHS II Compliant MSL = 1

# **Radiation Patterns**

XZ - Plane

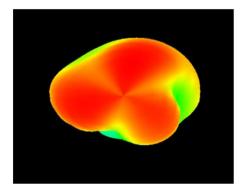


### **YZ - Plane**

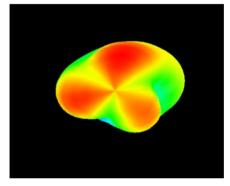


#### 3D- Pattern

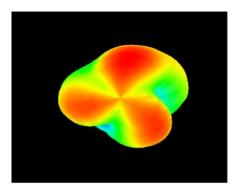
Frequency: 1561 MHz



Frequency: 1575.42 MHz



Frequency: 1602 MHz



# **Packaging**

The carton weighs of 15 Kgs and has 100 pieces in a dimension of 70.0 x 32.0 x 16.0 cm.

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