

**ABRACON, LLC
ENGINEERING/PROCESS CHANGE NOTIFICATION FORM**

ABRACON ENGINEERING ORIGINATOR:

IMPLEMENTATION DATE: 01/16/2019

Roshni Prasad – Engineering

SCD/DRAWING AFFECTED:
AFAC110020-S698

NOTIFICATION DATE:

REV: I.R.

01/16/2019

NEW REV: A

EFFECTIVITY DATE: 01/16/2019

ECN # 3400

REASON FOR CHANGE:

Technical Specifications Updated

DETAILS OF SPECIFICATION CHANGE:

APPLICATION INFORMATION

Rev. A
Updated SWR, Radiation Pattern, Efficiency and Gain

Safety	Non Safety	Application:
(Check one)		
	○	

(Check one)

○

DISPOSITION OF CURRENT STOCK

- Scrap
- Transfer to: _____
- Use as is
- Return to vendor

ABRACON INTERNAL APPROVAL:

APPROVAL (PRES) Mike Calabria DATE 01/16/2019

GLOBAL QUOTING/PRICING MGR Hector Lopez DATE 01/16/2019

ENGINEERING VP Syed Raza DATE 01/16/2019

PURCHASING MGR Ying Huang DATE 01/16/2019

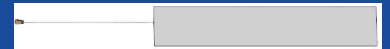
SALES VP Mike White DATE 01/16/2019

QUALITY & PROCEESS IMPROVEMENT MGR: Reuben Quintanilla DATE 01/16/2019

CUSTOMER APPROVAL (If Applicable)

ENGINEERING: NAME: _____ TITLE: _____ DATE: _____

BUYER/PURCHASING: NAME: _____ TITLE: _____ DATE: _____



AFAC110020-S698

110.0 x 20.0 x 0.2 mm
 RoHS/RoHS II Compliant
 MSL - 1

FEATURES

- Operates in 698-2700 MHz
- Linear polarization
- Low VSWR
- Low profile
- Omni-directional pattern
- IPEX connector with cable

APPLICATIONS

- Cellular
- Transportation
- Industrial wearable
- Smart city
- Smart agriculture
- Home automation

Electrical Specifications

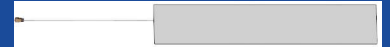
Parameters	Min.	Typ.	Max.	Units	Note
Frequency Range		698~960/1710~2690		MHz	
VSWR			2.0		
Polarization Model	Linear				
Impedance		50		Ω	
Gain		3.0		dBi	

Mechanical Characteristics

Parameters	Description
Connector	IPEX
Cable Type	100mm/RF1.13
Mounting	Embedded
FPC Dimensions	110 x 20 x 0.2 mm

Environmental Characteristics

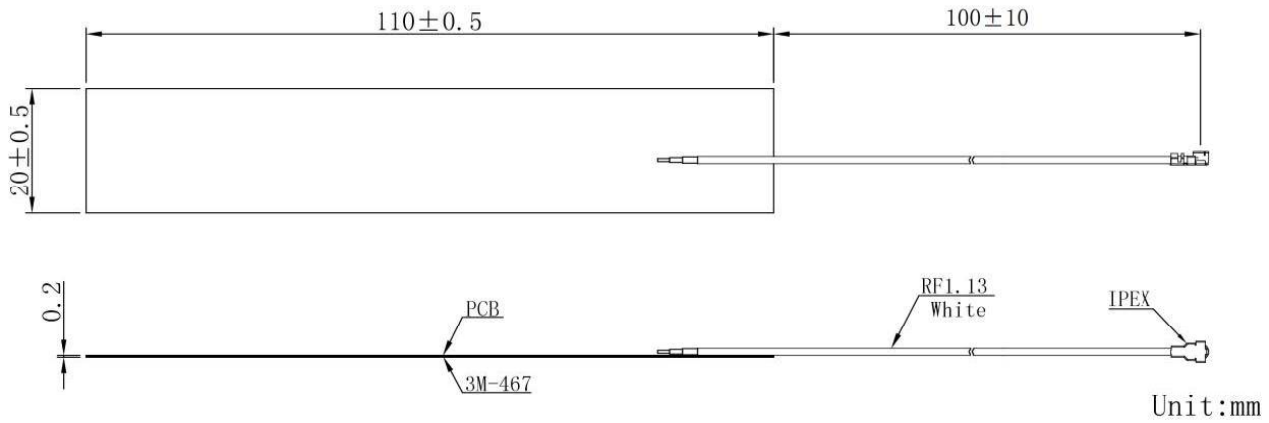
Parameters	Note
Operating Temperature	-40°C to +85°C
Vibration	10 to 55Hz with 1.5mm amplitude 2 hours
ROHS Compliant	Yes
MSL Level	1



AFAC110020-S698

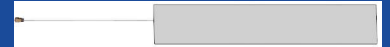
110.0 x 20.0 x 0.2 mm
RoHS/RoHS II Compliant
MSL - 1

Dimensions



Product Image

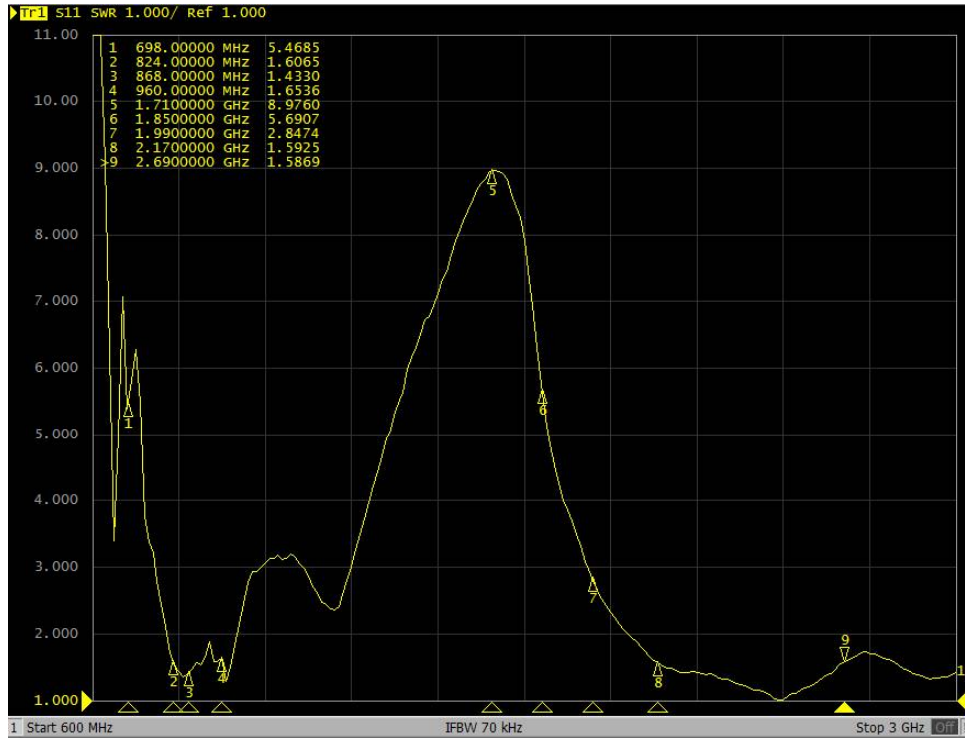


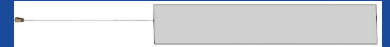


AFAC110020-S698

110.0 x 20.0 x 0.2 mm
RoHS/RoHS II Compliant
MSL - 1

VSWR

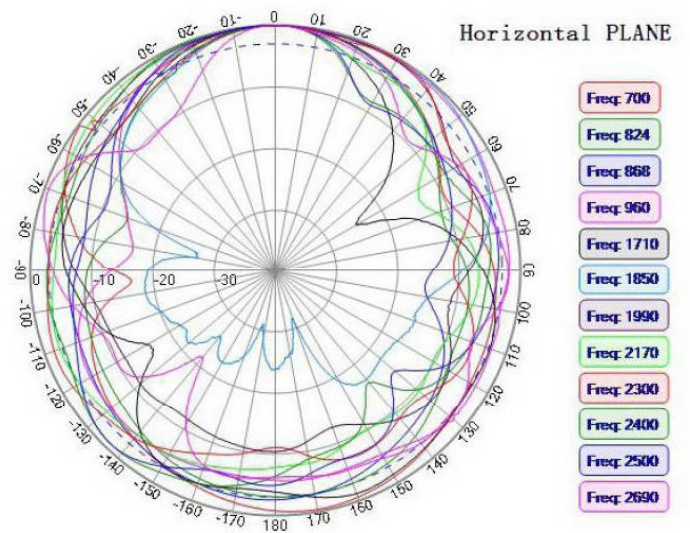
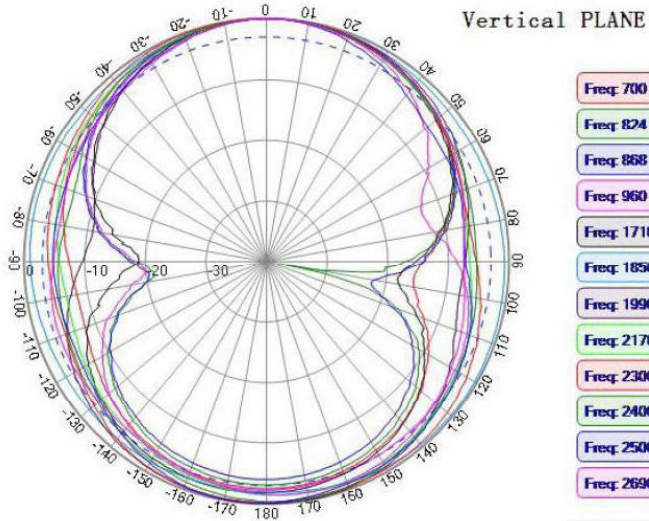


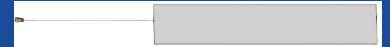


AFAC110020-S698

110.0 x 20.0 x 0.2 mm
RoHS/RoHS II Compliant
MSL - 1

Radiation Patterns





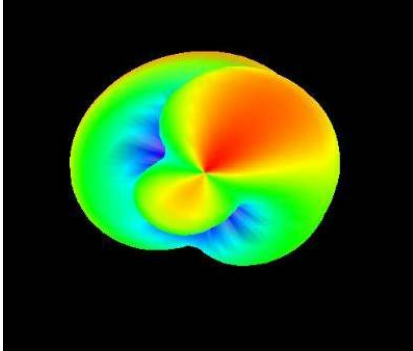
AFAC110020-S698

110.0 x 20.0 x 0.2 mm
RoHS/RoHS II Compliant
MSL - 1

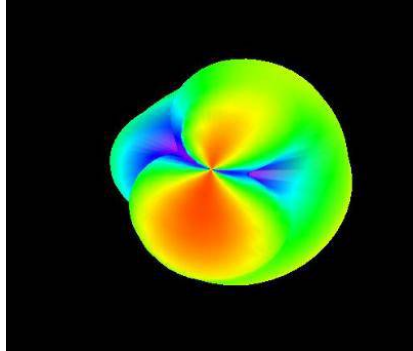
Radiation Patterns

3D-Pattern

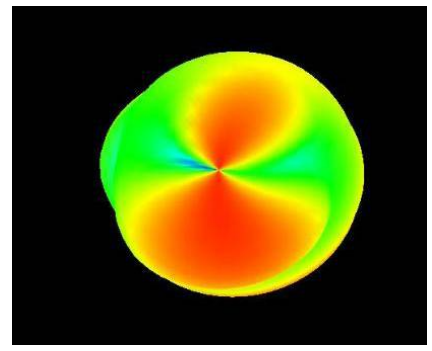
698 MHZ



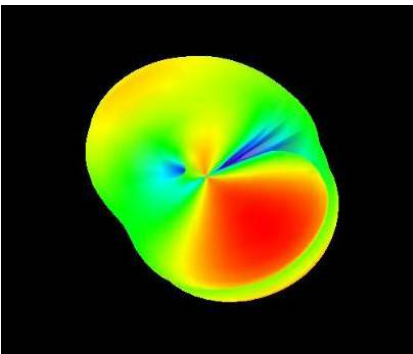
824 MHZ



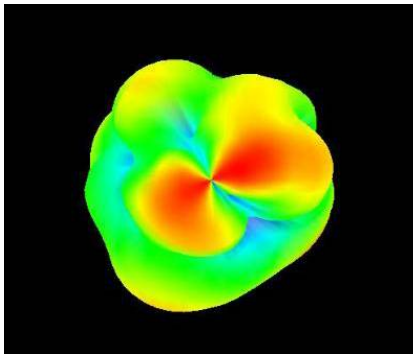
868 MHZ



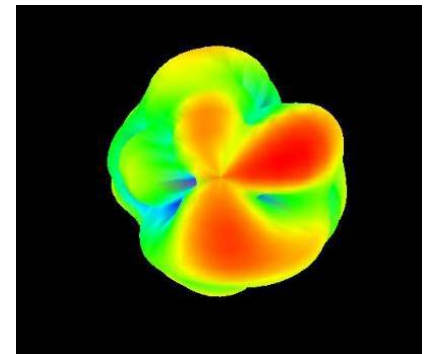
960 MHZ



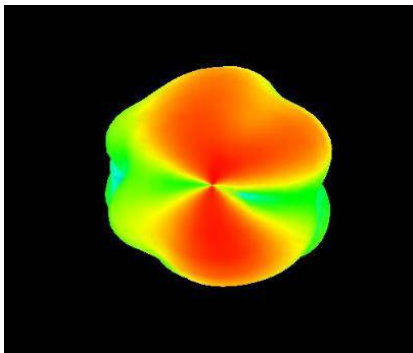
1710 MHZ



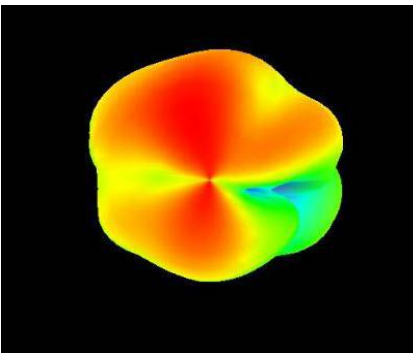
1850 MHZ



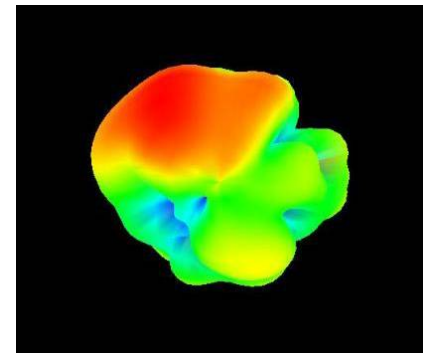
1990 MHZ

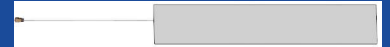


2170 MHZ



2690 MHZ





AFAC110020-S698

110.0 x 20.0 x 0.2 mm
RoHS/RoHS II Compliant
MSL - 1

Gain and Efficiency

Frequency (MHz)	Efficiency	Gain (dBi)
698	0.43	0.53
824	0.58	3.02
868	0.59	3.04
960	0.46	2.82
1710	0.39	-6.96
1850	0.42	-0.69
1990	0.47	1.51
2170	0.56	2.46
2690	0.56	2.53

Packaging

Each 37 x 36 x 17 cm size carton includes 1000 pcs antenna, weighs 8 kg