

CUSTOMER: _____

DATE: _____

SPECIFICATION

PRODUCT NAME: Multi-layer Chip Antenna

YOUR PART NO.:

OUR PART NO.: MGMA3216H2450-A02

VERSION.: V3.1

RECEPTION THE SPECIFICATION HAS BEEN ACCEPTED. DATE: COMPANY:		
CFMD	CHKD	RCVD

This datasheet consists of 9 pages.

MANUFACTURING NAME

SHENZHEN MICROGATE TECHNOLOGY CO., LTD
TEL: 86-755-28085000
FAX: 86-755-28085605

CFMD.	CHKD.	DSGD.
Qixin Liang	Lule Hu	Yanfeng Zeng

MODIFY HISTORY OF SPECIFICATION

Ver.	DATE	CONTENT	APPROVED
1.0	2006- 10-25	Constitute	Haien Zhang
2.0	2019-03-06	Update the Document Address	Yinghua Fu
3.0	2020-07-07	Update the Electrical Characteristics	Yinghua Fu
3.1	2021-07- 13	Add Power Capacity	Yinghua Fu

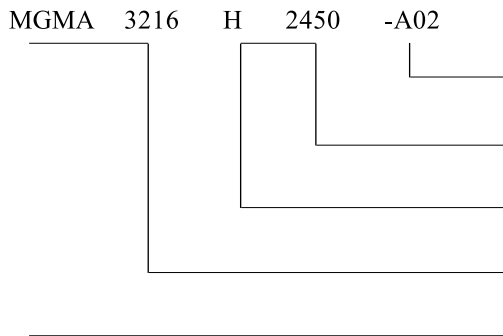
CATALOG

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1 Scope

"Microgate" Microwave Multilayer Chip Antenna series are designed to be used in WLAN 、 Home RF、 Bluetooth 、 Module 、 etc. , small size SMD chip design.

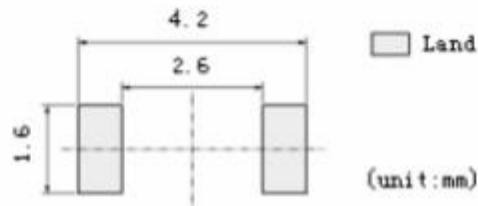
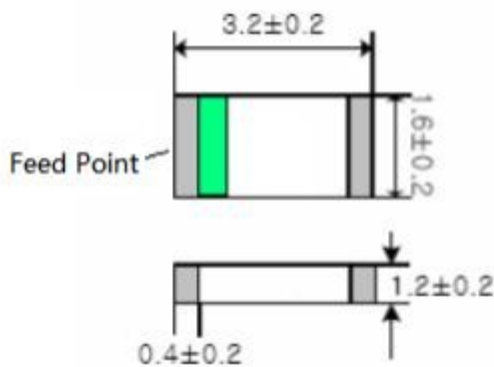
2 Product Identification



Normal Type: A02
 Center Frequency: 2450MHz
 H: Structure Series
 Size: 3.2mm × 1.6mm
 Multi-layer Chip Antenna

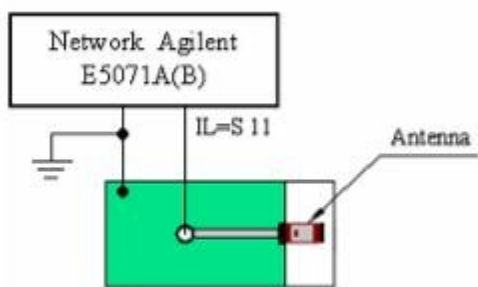
3 Appearance and Dimensions

Unit: mm

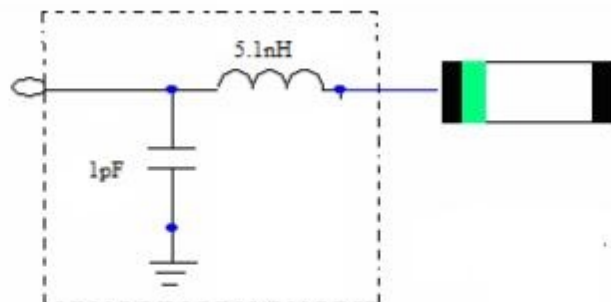


All the technical data and information specified herein are subject to variation without prior notice

4 Test Circuit and Testing Conditions



No Matching Circuit Testing



LC Matching Circuit Testing

<Unless otherwise specified>

Temperature : Ordinary Temperature (-40 to +85C)

Humidity : Ordinary Humidity (25 to 85% RH)

Atmospheric Pressure : 86 to 106 kPa

5 Electrical Characteristics

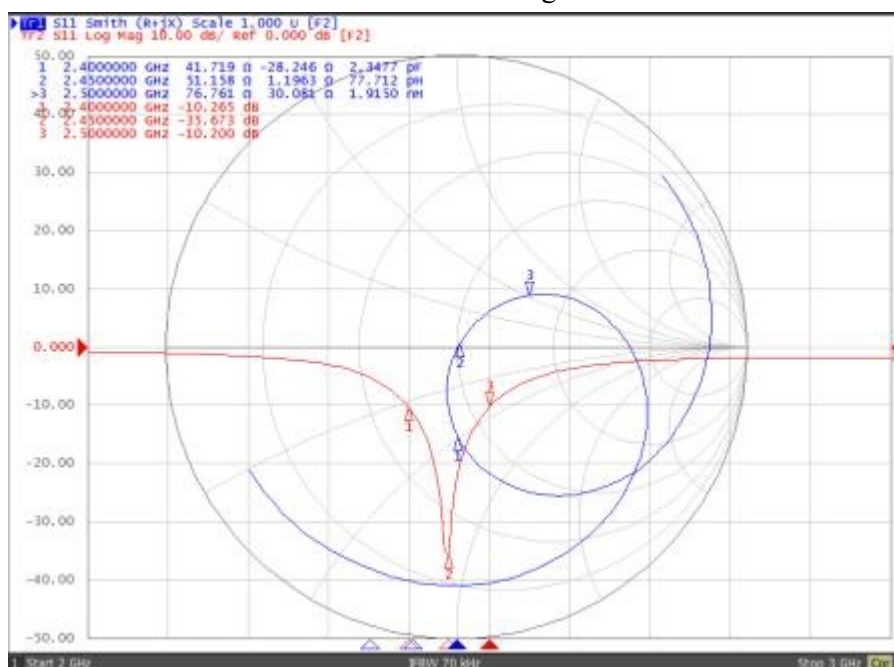
Operating Temperature Range : -40 to +85C

Storage Temperature Range : -40 to +85C

No.	Item	Specifications
1	After Matching	2450 MHz
2	After Matching	100 MHz (2400~2500MHz)
3	Antenna Gain	0 dBi
4	V.S.W.R (in BW)	≤2.0
5	RF Output	6.35dBm
6	Azimuth Beam width	Omni- directional
7	Impedance	50 Ω
8	Power Capacity	2 W max.

6 Characteristic curve

After Matching



Shenzhen Microgate Technology Co., LTD.

Microgate Smart Park, Technology Road, Zhukeng Community, Longtian Street, Pingshan District, Shenzhen

Tel : 0755-28085000

Fax: 0755-28085605

Postcode : 518118

7 Test Result

1、Gain and Efficiency

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	22%	-6.507324098	-1.43
2410	24%	-6.180729106	-1.10
2420	25%	-6.021037789	-0.94
2430	26%	-5.822718679	-0.74
2440	27%	-5.744007963	-0.66
2450	28%	-5.563936273	-0.48
2460	28%	-5.535501946	-0.46
2470	29%	-5.325253836	-0.25
2480	30%	-5.227284656	-0.15
2490	31%	-5.088349074	-0.01
2500	31%	-5.084538431	0.00

② 2D Pattern Plots

2400Mhz

2450Mhz

2500Mhz

