

APPROVAL SHEET (RoHS)

CUSTOMER : _____
CUSTOMER'S PART NO. : _____
DESCRIPTION : RF ANTENNA ASSEMBLY
PART NO. : EDA-1410-6G0R2-A3
DATE : _____
AUTHORIZED BY : *Alvin Chen*

	FULLY APPROVED	PARTIALLY APPROVED	REJECTED
SIGN			
SUGGESTION			

美磊科技股份有限公司

MAG. LAYERS SCIENTIFIC-TECHNICS CO., LTD

No.270, Nanfeng Rd., Pingzhen Dist., Taoyuan City 324, Taiwan (R.O.C.)

TEL: +886-3-4159111 FAX: +886-3-4192255

<http://www.maglayers.com.tw>

E-mail : info@maglayers.com.tw



MAG.LAYERS

Contents

Item	Description	Page
1.	Antenna Specification	4
2.	Mechanical Specification	5
3.	Test Report	6~12
4.	Cable UL	13
5.	Connector UL	14~16
6.	Housing UL	17~18

Antenna Specification

ELECTRICAL PROPERTIES

1.1	Frequency Range.....	2400-2500MHz/5150-5850MHz 5875-6275MHz/6300-6700MHz 6725-7125MHz
1.2	Impedance.....	50 Ohm Nominal
1.3	VSWR.....	≤ 2
1.4	Radiation.....	Omni-directional
1.5	Gain(peak).....	2400-2500MHz/5.65dBi 5150-5850MHz/5.94dBi 5875-6275MHz/6.42dBi 6300-6700MHz/6.87dBi 6725-7125MHz/5.42dBi
1.6	Polarization.....	Linear Vertical
1.7	Admitted Power.....	1W

PHYSICAL PROPERTIES

2.1	Antenna Cover.....	ABS
2.2	Antenna Base.....	PC+PBT
2.3	Color.....	White
2.4	Cable.....	RG178
2.5	Connector.....	RP SMA PLUG
2.6	Operating Temp.....	-20°C ~ +65°C
2.7	Storage Temp.....	-30°C ~ +75°C



Mechanical Specification

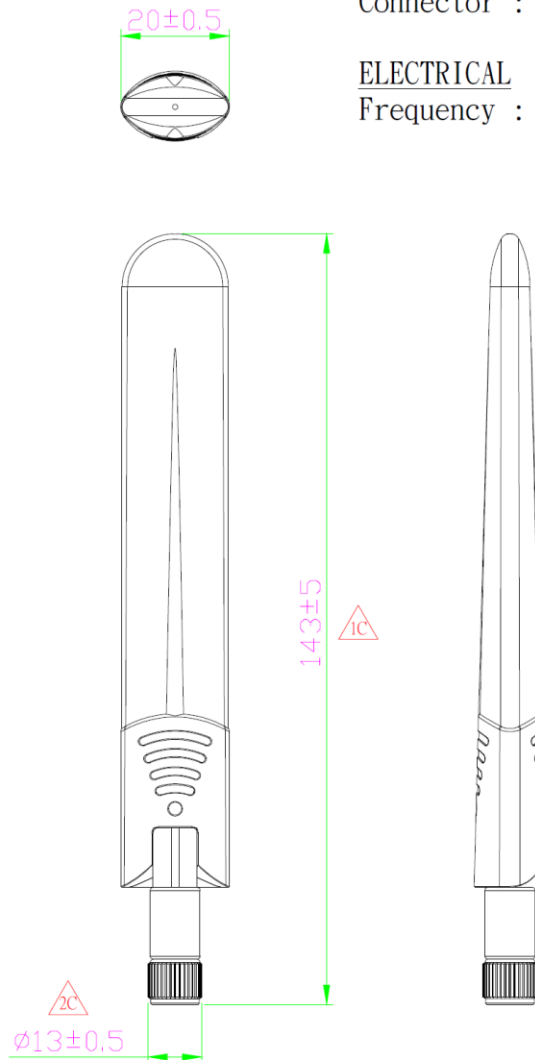
RoHS COMPLIANT

MECHANICAL

Antenna Cover : ABS
 Antenna Base : PC+PBT
 Color : White
 Coaxial Cable : RG178
 Connector : RP SMA PLUG (公頭母針)

ELECTRICAL

Frequency : 2400-2500MHz/5150-5850MHz
 5875-6275MHz/6300-6700MHz
 6725-7125MHz



△ New Release		06/03/21	Sheng
LTR	DESCRIPTION	DATE	REQ. BY
設計 DR.	Sheng	核准 APPD.	Alvin
	2021/06/03		2021/06/03
版本說明		REVISION NOTE	
MAGLAYERS			

※凡標記 △ 記號者, 為品管檢驗之尺寸

容許公差	TOLERANCE
.XXX	±0.20
.XX	±0.35
.X	±0.50
X	±1.00
ANG	±5

品名
 ARTICLE
EDA-1410-6G0R2-A3

單位 UNIT	比例 SCALE	張數 SHEET	版本 REV.
mm	****	1	A

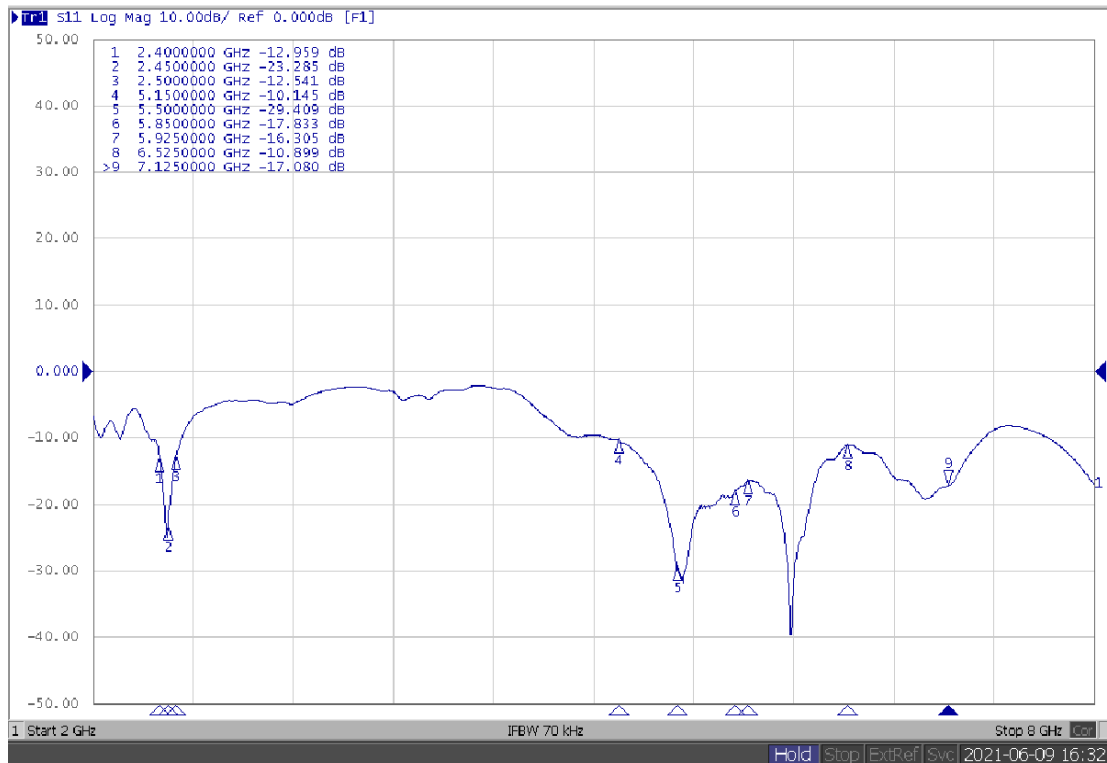
Test Report

ELECTRICAL CHARACTERISTICS

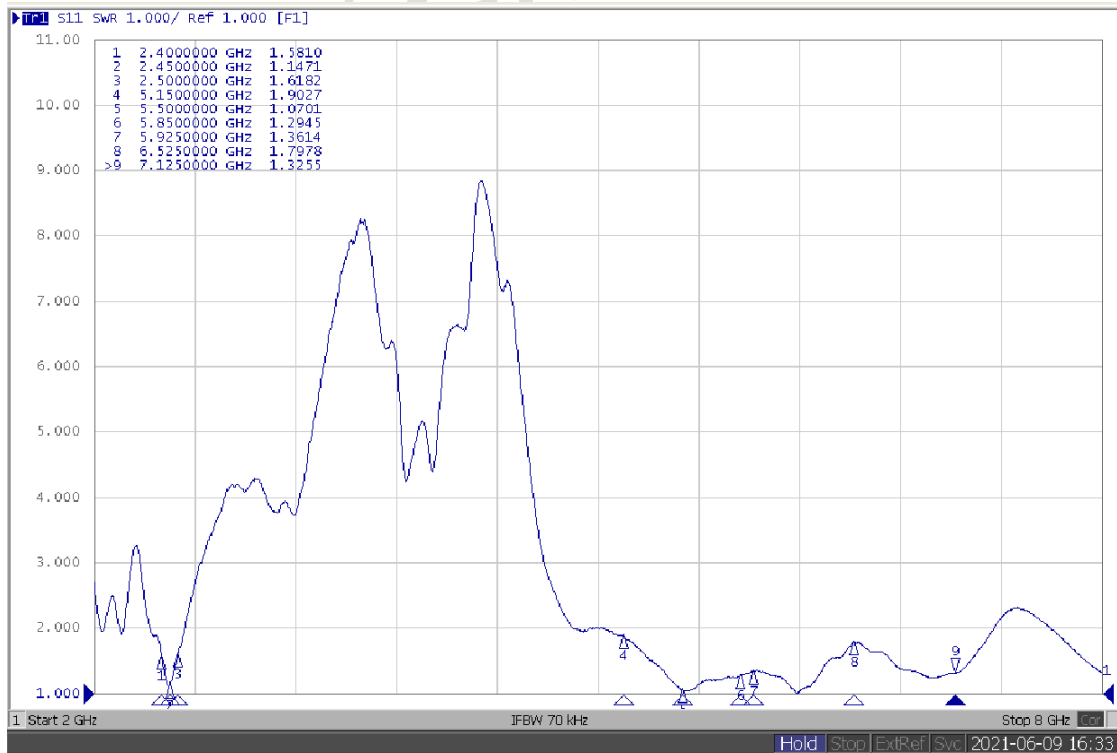
P/NO: EDA-1410-6G0R2-A3

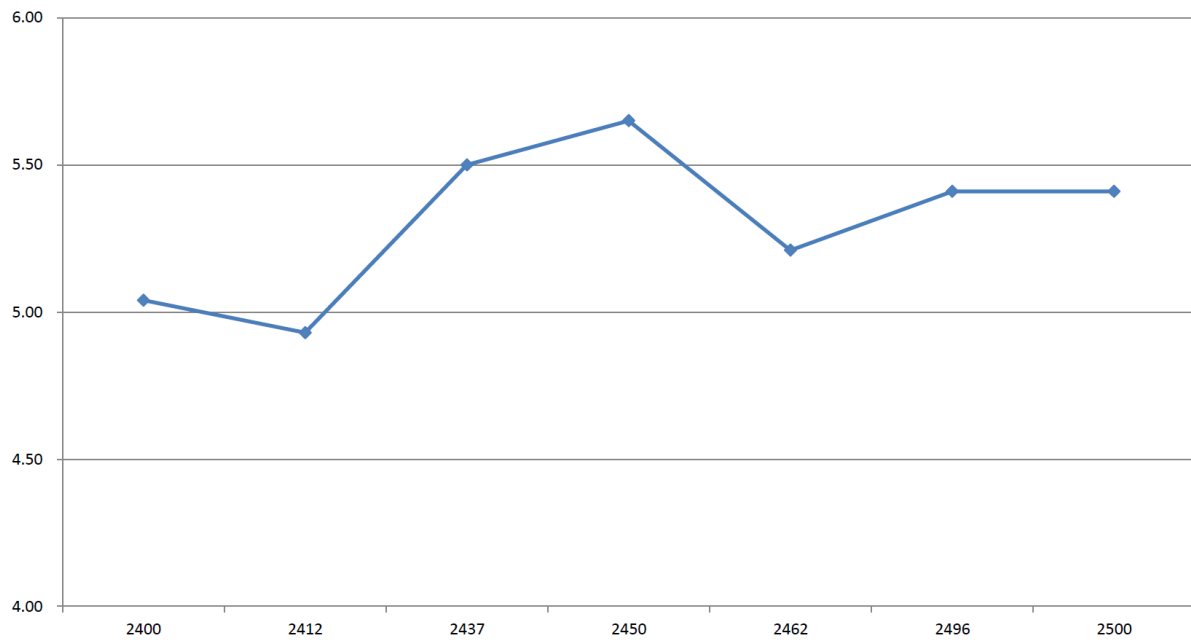
Return Loss

S11

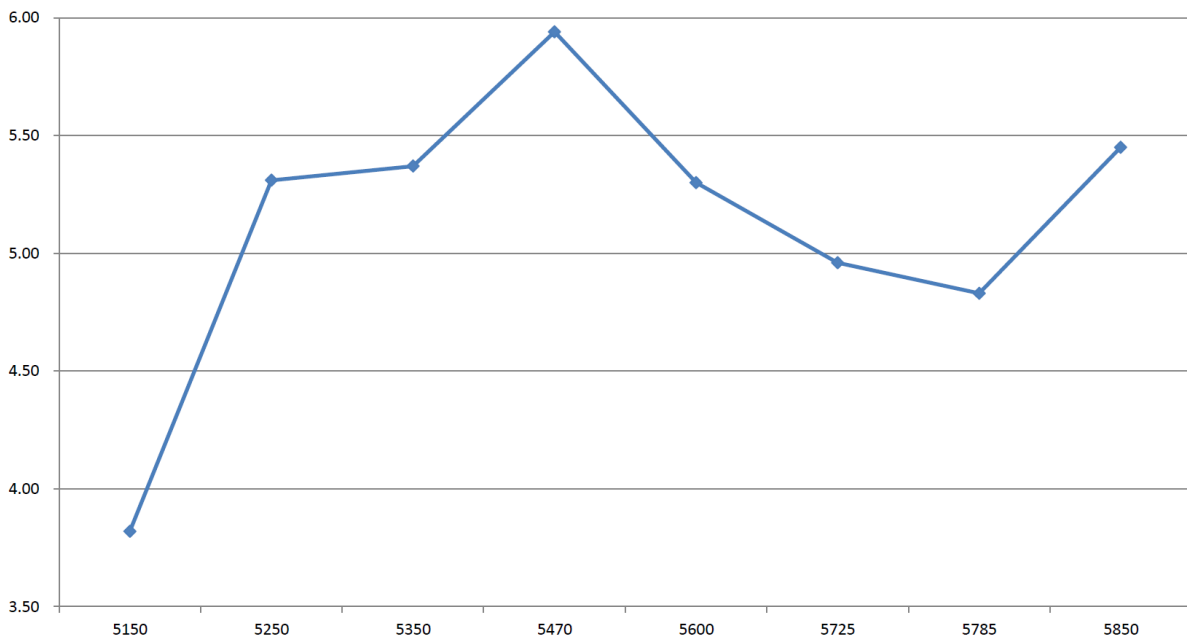


VSWR



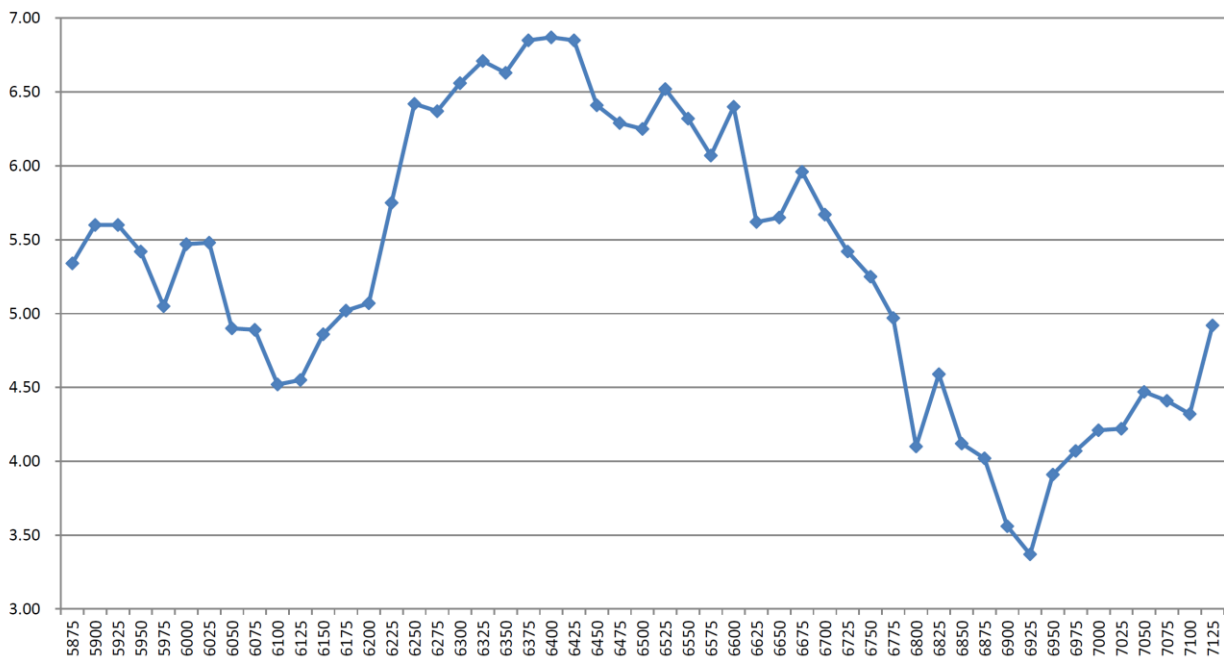


Frequency(MHz)	Peak Gain(dBi)
2400	5.04
2412	4.93
2437	5.50
2450	5.65
2462	5.21
2496	5.41
2500	5.41



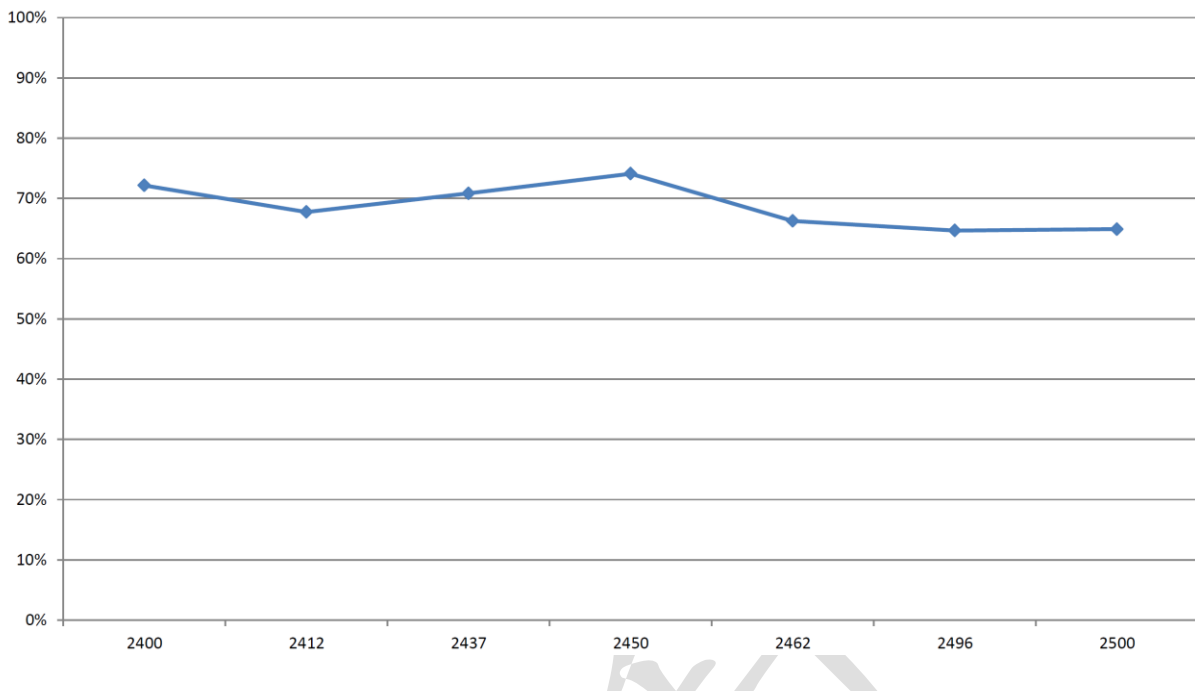
Frequency(MHz)	Peak Gain(dBi)
5150	3.82
5250	5.31
5350	5.37
5470	5.94
5600	5.30
5725	4.96
5785	4.83
5850	5.45





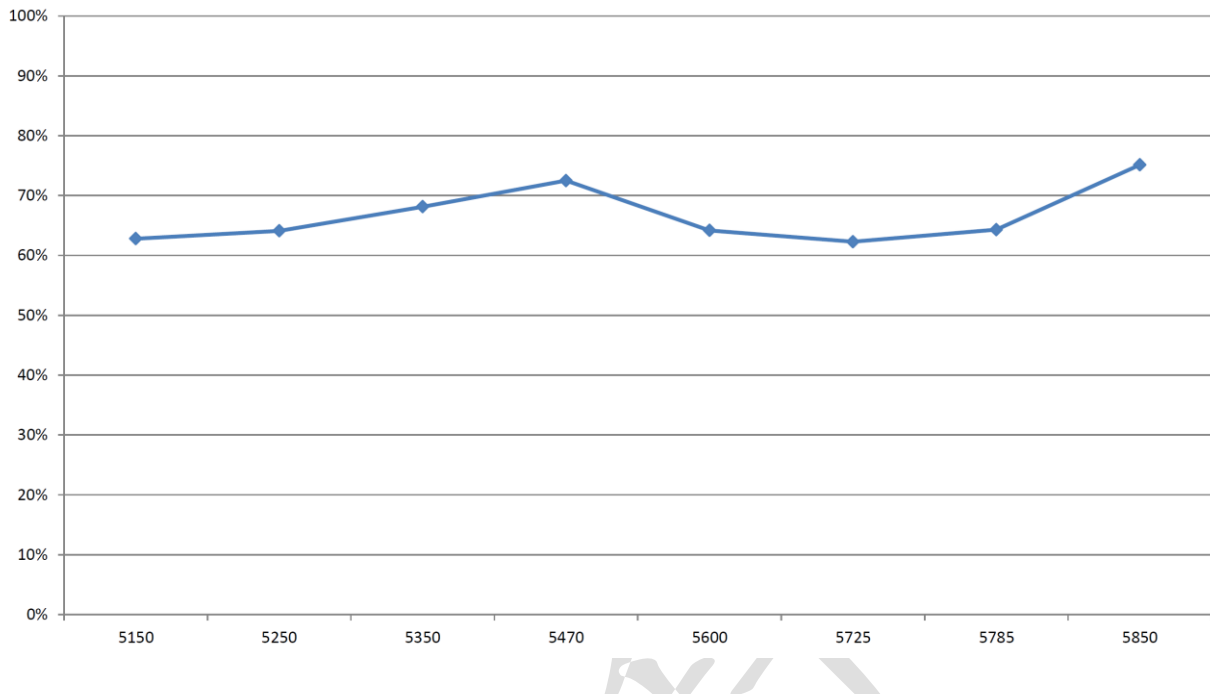
Frequency(MHz)	Peak Gain(dBi)	Frequency(MHz)	Peak Gain(dBi)	Frequency(MHz)	Peak Gain(dBi)
5875	5.34	6300	6.56	6725	5.42
5900	5.60	6325	6.71	6750	5.25
5925	5.60	6350	6.63	6775	4.97
5950	5.42	6375	6.85	6800	4.10
5975	5.05	6400	6.87	6825	4.59
6000	5.47	6425	6.85	6850	4.12
6025	5.48	6450	6.41	6875	4.02
6050	4.90	6475	6.29	6900	3.56
6075	4.89	6500	6.25	6925	3.37
6100	4.52	6525	6.52	6950	3.91
6125	4.55	6550	6.32	6975	4.07
6150	4.86	6575	6.07	7000	4.21
6175	5.02	6600	6.40	7025	4.22
6200	5.07	6625	5.62	7050	4.47
6225	5.75	6650	5.65	7075	4.41
6250	6.42	6675	5.96	7100	4.32
6275	6.37	6700	5.67	7125	4.92





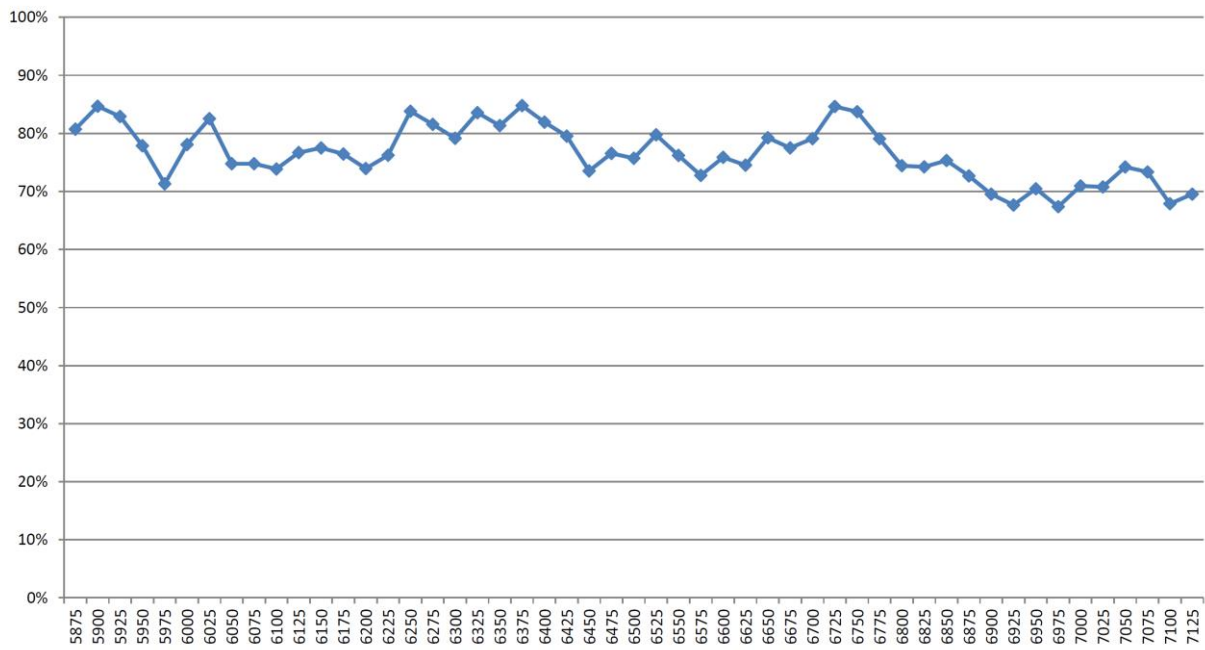
Frequency(MHz)	Efficiency
2400	72%
2412	68%
2437	71%
2450	74%
2462	66%
2496	65%
2500	65%





Frequency(MHz)	Efficiency
5150	63%
5250	64%
5350	68%
5470	73%
5600	64%
5725	62%
5785	64%
5850	75%





Frequency(MHz)	Efficiency	Frequency(MHz)	Efficiency	Frequency(MHz)	Efficiency
5875	81%	6300	79%	6725	85%
5900	85%	6325	84%	6750	84%
5925	83%	6350	81%	6775	79%
5950	78%	6375	85%	6800	74%
5975	71%	6400	82%	6825	74%
6000	78%	6425	80%	6850	75%
6025	83%	6450	74%	6875	73%
6050	75%	6475	77%	6900	70%
6075	75%	6500	76%	6925	68%
6100	74%	6525	80%	6950	70%
6125	77%	6550	76%	6975	67%
6150	78%	6575	73%	7000	71%
6175	76%	6600	76%	7025	71%
6200	74%	6625	75%	7050	74%
6225	76%	6650	79%	7075	73%
6250	84%	6675	78%	7100	68%
6275	82%	6700	79%	7125	70%



Cable UL



UL Product iQ

UL'S NEXT GENERATION CERTIFICATIONS SEARCH
The same trusted data in a modern search engine.

NOW AVAILABLE

[▶ LEARN MORE](#)

AVLV2.E318898 Appliance Wiring Material - Component

[Page Bottom](#)

Appliance Wiring Material - Component

[See General Information for Appliance Wiring Material - Component](#)

SHENYU COMMUNICATION TECHNOLOGY INC
275 E Waihuan Rd
Jiangyin, Jiangsu 214400 CHINA

E318898

Table of Recognized Styles							
Single-conductor, thermoplastic insulation.							
1226	1333	1591	1723	1857	1886	10011	10362
1227	1354	1592	1726	1858	1887	10064	10518
1330	1371	1708	1727	1859	1901	10072	11149
1331	1538	1709	1766	1860	1927	10111	11180
1332	1577	1710	1847	1882	10005	10248	
Multiple-conductor, thermoplastic insulation.							
21533							

Style(s) 11149 can be assigned the IEC 60332-2 flammability rating

Marking: Company name, voltage rating, temperature rating, conductor size, conductor material if other than copper, and use.

[Last Updated](#) on 2018-05-23

[Questions?](#)

[Print this page](#)

[Terms of Use](#)

[Page Top](#)

© 2018 UL LLC

The appearance of a company's name or product in this database does not in itself assure that products so identified have been manufactured under UL's Follow-Up Service. Only those products bearing the UL Mark should be considered to be Certified and covered under UL's Follow-Up Service. Always look for the Mark on the product.

UL permits the reproduction of the material contained in the Online Certification Directory subject to the following conditions: 1. The Guide Information, Assemblies, Constructions, Designs, Systems, and/or Certifications (files) must be presented in their entirety and in a non-misleading manner, without any manipulation of the data (or drawings). 2. The statement "Reprinted from the Online Certifications Directory with permission from UL" must appear adjacent to the extracted material. In addition, the reprinted material must include a copyright notice in the following format: "© 2018 UL LLC".

Connector UL

QMFZ.E252343 - Plastics - Component

页码, 12



ONLINE CERTIFICATIONS DIRECTORY

QMFZ.E252343 Plastics - Component

Additional information regarding this certification can be found in UL's iQ Family of Databases (iq.ul.com).

NEW -- for additional information concerning the individual material, click on the material designation.

[Page Bottom](#)

Plastics - Component

[See General Information for Plastics - Component](#)

DAIKIN FLUORO CHEMICALS (CHINA) CO LTD
CHANGSHU INTERNATIONAL
CHEMICAL INDUSTRIAL PARK
HAIYU TOWN
CHANGSHU, JIANGSU 215522 CHINA

E252343

Material Dsg	Color	Min. Thk mm	Flame Class	H		R T I			H	D
				W	A	Elec	Mech	V	4	C
				I	I	Imp	Str	R	5	I
Polytetrafluoroethylene (PTFE), furnished as pellets.										
M-139	NC	0.81	V-0	-	-	180	180	180		
		1.40-1.54	V-0	-	-	180	180	180		
Polytetrafluoroethylene (PTFE), furnished as powder.										
F-201	NC	0.81	V-0	-	-	180	180	180		
		1.6	V-0	-	-	180	180	180		
M-18	NC	0.81	V-0	-	-	180	180	180		
		1.6	V-0	-	-	180	180	180		
M-18F	NC	0.81	V-0	-	-	180	180	180		
		1.6	V-0	-	-	180	180	180		
Polytetrafluoroethylene (PTFE).										
F-104	NC	0.81-1.8	V-0	-	-	180	180	180		
F-108	NC	0.81-1.8	V-0	-	-	180	180	180		
F-208	NC	0.81-1.8	V-0	-	-	180	180	180		
F-303	NC	0.81-1.8	V-0	-	-	180	180	180		

Marking: Company name and material designation on container, wrapper or finished part.

Last Updated on 2008-08-30

[Questions?](#)

[Print this page](#)

[Notice of Disclaimer](#)

[Page Top](#)

Copyright ©2011 Underwriters Laboratories Inc.®

The appearance of a company's name or product in this database does not in itself assure that products so identified have been manufactured under UL's Follow-Up Service. Only those products bearing the UL Mark should be considered to be Listed and covered under UL's Follow-Up Service. Always look for the Mark on the product.



MAG.LAYERS

UL permits the reproduction of the material contained in the Online Certification Directory subject to the following conditions: 1. The Guide Information, Designs and/or Listings (files) must be presented in their entirety and in a non-misleading manner, without any manipulation of the data (or drawings). 2. The statement "Reprinted from the Online Certifications Directory with permission from Underwriters Laboratories Inc." must appear adjacent to the extracted material. In addition, the reprinted material must include a copyright notice in the following format: "Copyright © 2011 Underwriters Laboratories Inc.®"

An independent organization working for a safer world with integrity, precision and knowledge.



智名科安



iq.ul.com

Component - Plastics [guide info]

E173318

FORMOSA PLASTICS CORP

HSIN KANG POM PLANT, 3 CHUNG YANG INDUSTRIAL PARK, HSIN KANG HSIANG, CHIA-YI 616 TW

FM025, FM090, FM090LV, FM090LMD, FM090UV, FM270

Acetal Polyoxymethylene (POM), furnished as pellets

Color	Min Thk (mm)	Flame Class	HWI	HAI	RTI Elec	RTI Imp	RTI Str
ALL	0.8	HB	5	0	110	90	90
	3.0	HB	3	0	110	90	100

Comparative Tracking Index (CTI): 0

Inclined Plane Tracking (IPT): -

Dielectric Strength (kV/mm): -

Volume Resistivity (10^X ohm-cm): -

High-Voltage Arc Tracking Rate (HVTR): 0

High Volt, Low Current Arc Resis (D495): 5

Dimensional Stability (%): -

ANSI/UL 94 small-scale test data does not pertain to building materials, furnishings and related contents. ANSI/UL 94 small-scale test data is intended solely for determining the flammability of plastic materials used in the components and parts of end-product devices and appliances, where the acceptability of the combination is determined by UL.

Report Date: 1999-01-18

Last Revised: 2016-06-20

© 2016 UL LLC



IEC and ISO Test Methods

Test Name	Test Method	Units	Thk (mm)	Value
Flammability	IEC 60695-11-10	Class (color)	0.8	HB75 (ALL)
			3.0	HB40 (ALL)
Glow-Wire Flammability (GWFI)	IEC 60695-2-12	C	-	-
Glow-Wire Ignition (GWIT)	IEC 60695-2-13	C	-	-
IEC Comparative Tracking Index	IEC 60112	Volts (Max)	-	-
IEC Ball Pressure	IEC 60695-10-2	C	-	-
ISO Heat Deflection (1.80 MPa)	ISO 75-2	C	-	-
ISO Tensile Strength	ISO 527-2	MPa	-	-
ISO Flexural Strength	ISO 178	MPa	-	-
ISO Tensile Impact	ISO 8256	kJ/m ²	-	-
ISO Izod Impact	ISO 180	kJ/m ²	-	-
ISO Charpy Impact	ISO 179-2	kJ/m ²	-	-

Housing UL



Component - Plastics
File Number: E56070

CHI MEI CORPORATION
59-1 SAN CHIA, JEN TE, TAINAN 717 TW



Polylac: PA-757(+)

Acrylonitrile Butadiene Styrene (ABS), pellets

(+) - Optional prefix or suffix; may be used to denote usage of 0-0.5 percent acid scavengers. For PC-110(+). Optional the suffix except L, N, U, V, T, and F. For Grades PC-6015(+), PB-1202(+). Maybe none or replace by one alphabet to indicate the color.

Flammability	Value	Test Method
Flame Rating		
1.50 mm, ALL	HB	UL 94
3.00 mm, ALL	HB	UL 94
3.00 mm, ALL	HB40	IEC 60695-11-10, -20
1.50 mm, ALL	HB75	IEC 60695-11-10, -20
Electrical	Value	Test Method
Hot wire Ignition (HW)		UL 746
1.50 mm	PLC 4	
3.00 mm	PLC 3	
High Amp Arc Ignition (HAI)		UL 746
1.50 mm	PLC 0	
3.00 mm	PLC 0	
Comparative Tracking Index (CTI)	PLC 0	UL 746
High Voltage Arc Tracking Rate (HVTR)	PLC 1	UL 746
Arc Resistance	PLC 7	ASTM D495
Thermal	Value	Test Method
RTI Elec		UL 746
1.50 mm	85.0°C	
3.00 mm	85.0°C	
RTI Imp		UL 746
1.50 mm	80.0°C	
3.00 mm	80.0°C	
RTI St		UL 746
1.50 mm	85.0°C	
3.00 mm	85.0°C	

Notice of Disclaimer

By accessing this Yellow Card data information sheet and the database from which this information was generated (the "Yellow Card"), the user acknowledges and accepts the terms and conditions upon which this Yellow Card is made available. This Yellow Card, the database from which it was generated, and all related materials, support, and services, are made available by UL for use only by permission and "as is", without any representation or warranty of any kind, express or implied, including but not limited to any implied warranties of merchantability, fitness for a particular purpose or that the products identified in this Yellow Card will satisfy the user's requirements. UL cannot and does not warrant that the data contained in this Yellow Card is current, accurate, or complete. The user must independently confirm the conformance of any product to the applicable standards or requirements with the manufacturer of that product. Permission to access this Yellow Card may be withdrawn at any time by UL in its sole discretion. The identification of products and companies on this Yellow Card does not in any way imply endorsement of those products or companies by UL. UL does not assume and expressly disclaims, liability to any person for any loss or damage (including lost profits, lost savings, or any indirect, special, incidental, consequential or punitive damages whether or not UL has been advised of the possibility of such damages) arising out of, or in connection with, the use of this Yellow Card regardless of the cause or causes of such loss or damage.



QMFZ2 Component - Plastics		Wednesday, September 14, 2005						E107536	
SHINKONG SYNTHETIC FIBERS CORP 223 YEN PING RD SEC 3 PIN CHENG TAOYUAN HSIEN 324 TW									
Material Designation: A724									
Product Description: Polybutylene Terephthalate/Polycarbonate (PBT/PC), furnished as pellets.									
Color	Min. Thick. (mm)	Flame Class	HWI	HAI	RTI Elec	RTI Imp	RTI Str	IEC GWIT	IEC GWFI
NC	0.8	HB	4	1	75	75	75	-	-
	1.6	HB	4	1	75	75	75	-	-
	3.2	HB	2	1	75	75	75	-	-
CTI: -	IEC CTI (V): -	HVTR: 2			D495: -			IEC Ball Pressure (°C): -	
Dielectric Strength (kV/mm): 38		Volume Resistivity (10 ¹² ohm-cm): 17					Dimensional Stability(%): -		
ISO Tensile Strength (MPa): -		ISO Flexural Strength (MPa): -					ISO Heat Deflection (°C): -		
ISO Tensile Impact (kJ/m ²): -		ISO Izod Impact (kJ/m ²): -					ISO Charpy Impact (kJ/m ²): -		
Report Date: 4/6/1992		Underwriters Laboratories Inc®							
UL94 small-scale test data does not pertain to building materials, furnishings and related contents. UL 94 small-scale test data is intended solely for determining the flammability of plastic materials used in components and parts of end-product devices and appliances, where the acceptability of the combination is determined by ULI.									

