承　　認　　書

APPROVAL SHEET

CUSTOMER：環隆電氣股份有限公司

DESCRIPTION：2.4G&5.8G 2dBi 標準天線

SOCAA P/N：AS123-F

DATE：01-29-08”

WEIGHT：18.3g/1PCS

經理 Manager	品保 QC	工程師 Engineer

CUSTOMER P/N：

Customer Approval：

矽原精密電子股份有限公司　　統一編號：12616070

SOCAA CORP.,LTD. (Solution Of Connector & Antenna Corp. Ltd.)

台灣台南縣永康市中正三街 486 巷 50 號

No.50 Lane 486,Jhongjheng 3rd st.,Yongkang City, Tainan County, Taiwan. R.O.C

TEL：886-6-2427963~4　　FAX：886-6-2427857

E-Mail：Linda-socaa@umail.hinet.net ; Jenney-socaa@umail.hinet.net

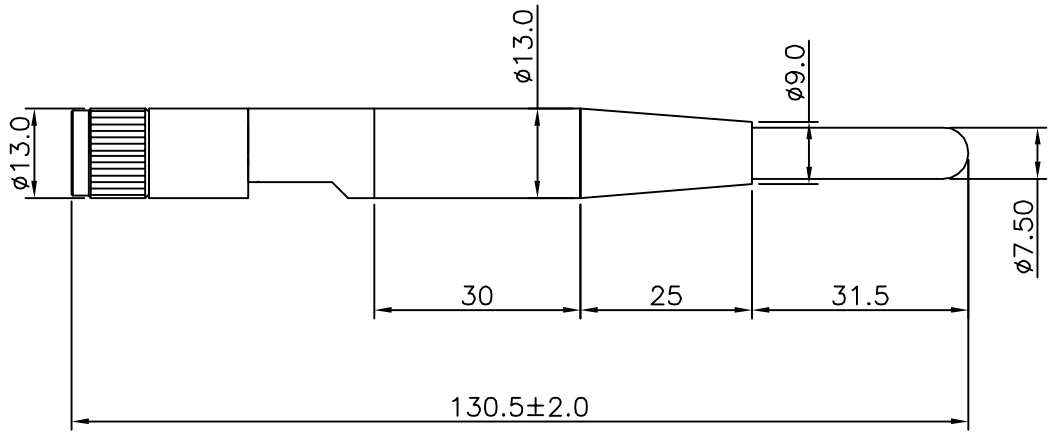
網站：http://www.socaa.com.tw

承認書編號：

REVISION		
ISS	ZONE	DESCRIPTION

Freq:2.4～2.5GHz & 4.9~5.825GHz
Gain:2dBi
SWR<=2
Pattern:Omni

結構特性:1.外套與基座拆彎20次內不可有粉末現象
2.天線外套側向推力需達 1.5KG MIN.
3.外套與基座水平拉力須達 14KG MIN.



NO.	DESCRIPTION	MATERIAL	FINISH	Q'TY	DRAWN NO.
7	RG178U(56mm) CABLE			1	CT-0082
6	HEAT TUBING			1	H-0051
5	COPPER COVER	BRASS	NICKEL	1	M-0356
4	COPPER COVER	BRASS	NICKEL	1	M-0355
3	R19-60-15-178U-50Ω	T.G.N/塑膠		1	R19-0171
2	BASE FOR CONNECTOR	PBT+30%纖	NONE	1	I-0104
1	COVER+RESOLVER	ABS	NONE	1	I-0103

TOLERANCES
DIMENSIONS ARE IN MILLIMETER
UNLESS OTHERWISE SPECIFIED
.X ±0.2
.XX ±0.1
.XXX ±0.05
ANGLES ±5°

SCALE 1/1 | ISSUE A-0

TITLE: 2.4G & 5.8G 2dBi標準天線

PART NO.: AS123-F

DRAWN NO.

FILE PATH:

SOCAA CORP.,LTD.
(Solution Of Connector & Antenna)

APPROVED DATE

CHECKED DATE

DRAWN DATE

矽 原 精 密 電 子 股 份 有 限 公 司

SOCAA-Solution Of Connector & Antenna

	SMA SPECIFICATIONS	製表日期	96 年 08 月 27 日
		版　　次	A-0
		製 表 者	馬正成

Electrical Properties

1.Impedance……50 Ohms

2.Frequency Range……0~6 Ghz

3.V.S.W.R……1.5 MAX.

4.Working Voltage……≦250 Vrms

5.Dielectric Withstanding Voltage……≦750 Vrms

6.Insulation Resistance……≧2000 Megohms

7.Contact Resistance……Center contact：3.0 Milliohms Max.

Outer contact ：2.5 Milliohms Max.

8.Insertion Loss……0.2 dB

Environmental Ratings

1.Operating Temperature……-65℃~+165℃

2.Thermal Shock……MIL-STD-202，Method 107，Condition B

3.Corrosion……MIL-STD-202，Method 101，Condition B

4.Shock……MIL-STD-202，Method 213，Condition I

5.Vibration……MIL-STD-202，Method 204，Condition D

6.Moisture Resistance……MIL-STD-202，Method 106

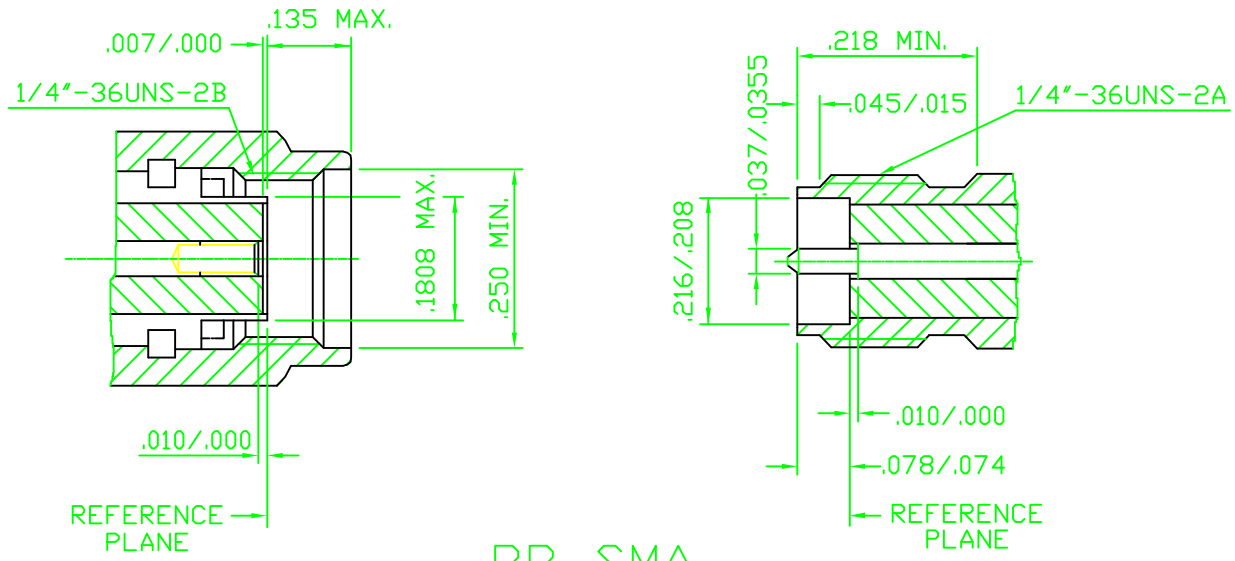
Material Specifications

1. Body……Brass Per JIS C3604，Gold Plated

2. Contact……Brass Per JIS C3604，Gold Plated

3. Insulator……PTFE Per ASTM D 1710

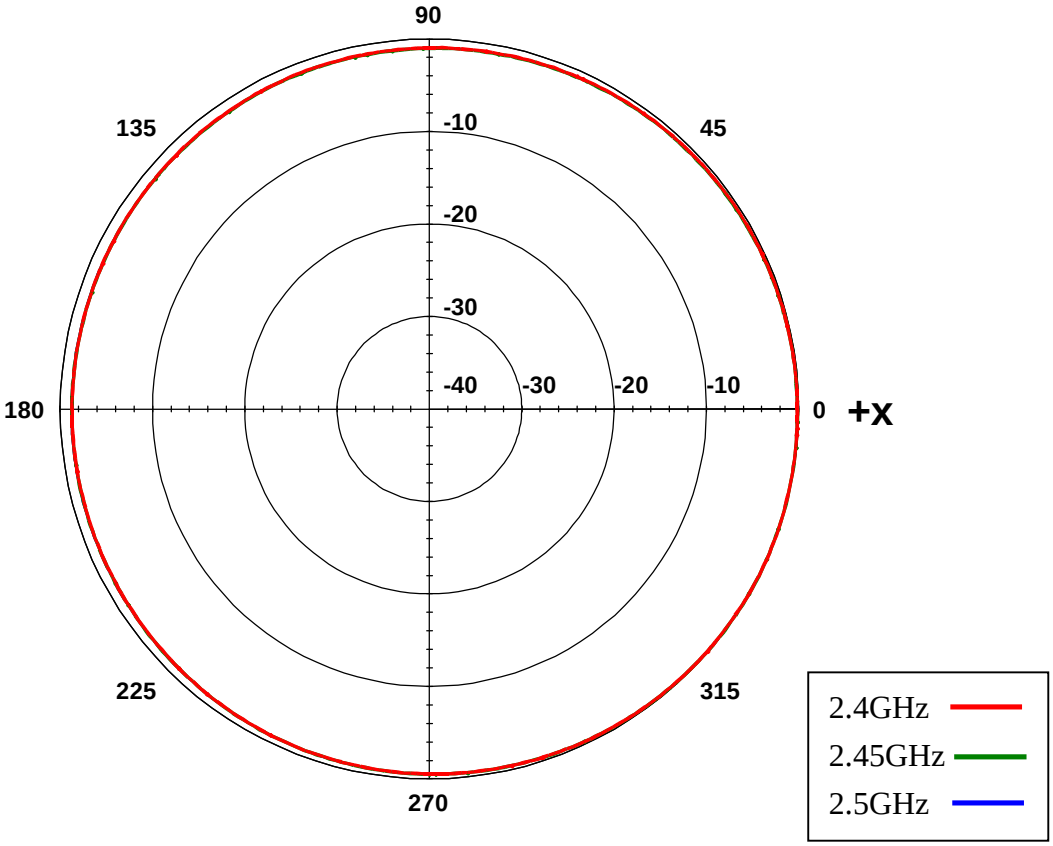
REVISION		
ISS	ZONE	DESCRIPTION



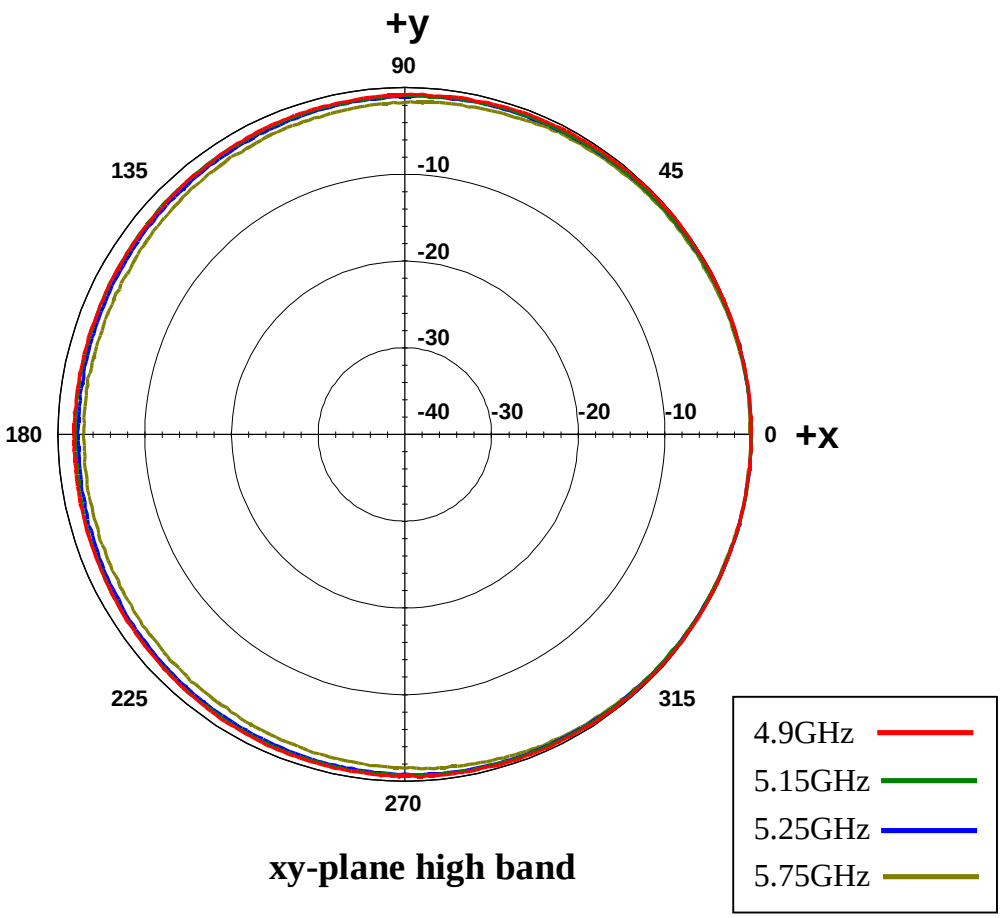
RP SMA

TOLERANCES				TITLE	SOCAA CORP.,LTD.
DIMENSIONS ARE IN MILLIMETER				SMA REVERSE INTERFACE	(Solution Of Connector & Antenna)
UNLESS OTHERWISE SPECIFIED				PART NO.	APPROVED DATE
.X	±0.2				
.XX	±0.1			DRAWN NO.	CHECKED DATE
.XXX	±0.05				
ANGLES	±5°				DRAWN DATE
SCALE	3/1	ISSUE	A-0	FILE PATH:	

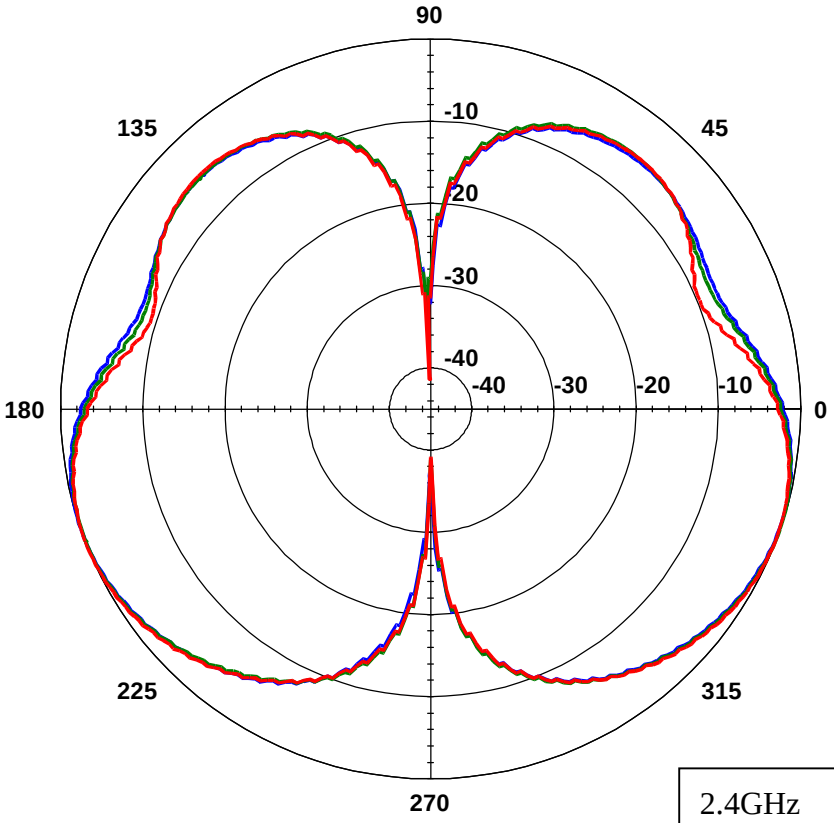
NO.	DESCRIPTION	MATERIAL	Q'TY	DRAWN NO.



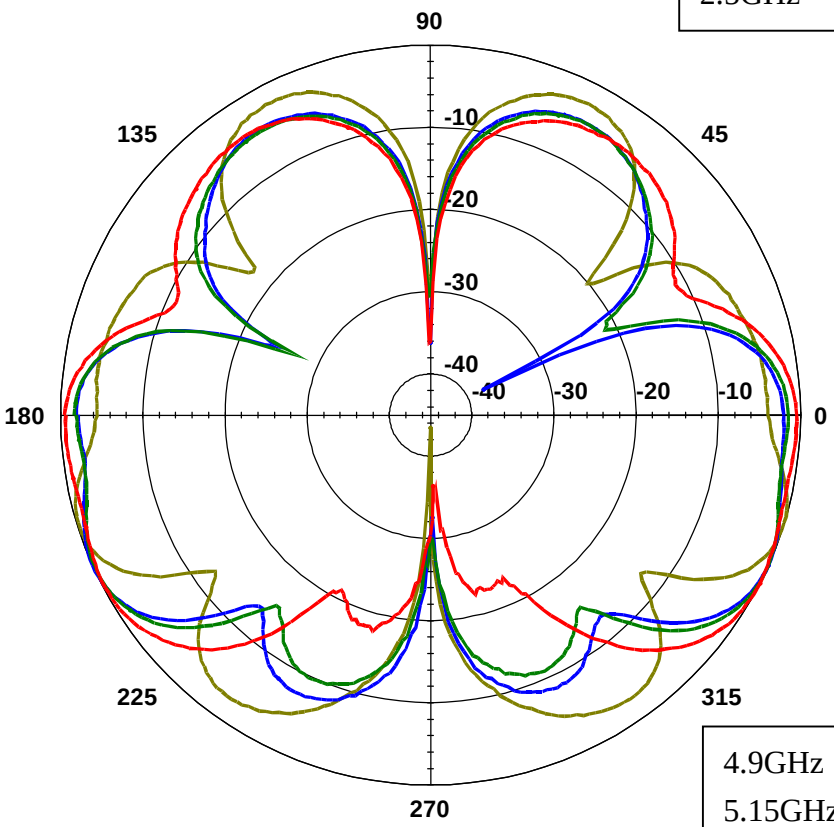
xy-plane low band



xy-plane high band



xz-plane low band



xz-plane high band

矽原精密電子股份有限公司

SOCAA CORP.,LTD. (Soulution Of Connector & Antenna)

Sample Approval Sheet

Item/Part No：AS123-F		Quantity：3 PCS
Drawing No：	Material：	Date：01-24-08”

Dimension Inspection			
Dimension in m/m		RD Measure Result（Max~Min）	QA Measure Result（Max~Min）
A	130.5±2.0	130.5-131.0	130.5-130.5
B	±		
C	±		
D	±		
E	±		
F	±		
G	±		
H	±		
I	±		
J	±		
K	±		

Surface Inspection		
Forming	OK	OK
Electroplate	OK	OK
Body	OK	OK

Function Inspection		
Mating	OK	OK
PCB Board Test	N/A	N/A
Push Test	N/A	N/A
Open/Short Test	OK	OK
Shell Turn Test	OK	OK
Torque Test	OK	OK

Addition Measure Witness	Result
☐ ☐ ☐	☑ Qualified ☐ Unqualified

Quality Department：MANDY Research Department：CHAD F-QP-FD-013-01A

TESTING FOR SALT WATER MIST

TESTING DTAE: 01/27/08”		TESTING TIME：４８HOUR
COMPANY:SOCAA CORP.,LTD.	TEST MATERIAL：BRASS	PLATED:AU”
COMMODITY:AS123-F		CHARACTER：
TESTING CONDITION:		AIR COMPRESS: FIRST COMPRESSION 2. SLIGHT COMPRESSION 1.
SATURATION TEMPRATURE: 47 ˚C		TESTING TEMPERATURE: 35 ˚C

CONSENQUENCE	ACCORDING TO C.N.S GRADE，DETERMINIMG 9.8 GRADE AND ITS CORRODED SURFACE IS UNDER 0.02 PERCENT。

REMARKS		MAKER
		CHAD

THE MATERIAL CERTIFICATE OF BRASS

Customer	SOCAA CORP.,LTD. (Solution Of Connector & Antenna)		
Material	Free cutting brass		
Stability-class: JIS H 3250 C3604 BD			
CHEMICAL COMPOSITION %			
Taster	X-RAY ANALYSIS		
Measurement	VACUUM X RAY SPECTROGRAPH		
ELEMENT	STANDARD VALUE	ACTUAL VALUE	REMARK
Cu	57.0-61.0%	58.43 %	
Pb	1.8-3.7 %	3.36 %	
Fe	<0.5 %	--------	
Sn+Fe	<1.2 %	0.71 %	
Zn	REMAINDER	REMAINDER	
Other			
MECHANICAL & PHYSICAL PROPERTIES			
Tensile strength : 360 N/mm^2			
Heated*material Hardness or stability, HB or HV : (90)			
REMARK: ASTM Standard: CA 360 Free cutting brass.			

THE MATERIAL CERTIFICATES OF TEFLON

Customer	SOCAA CORP.,LTD. (Solution Of Connector & Antenna)	
Material	TEFLON	
Physical Properties		%
Physical Properties	Density g/cm³	2.14-2.2
	Water absorption %	>0.01
Mechanical Properties	Tensile strength kg/cm²	140-350
	Flexural strength kg/cm²	16.4
	Rockwell hardness	D55
	lzod impact strength kg cm/cm with notch	2.5~2.7
	Taper wears mg/1000 Times	
	Friction coefficients	0.1-0.04
Heat Properties	Coefficient of linear thermal expansion × 10 /℃	7.0-10.0
	Thermal conductivity kcal/m. Hr.℃	6.0
	Heal distortion temperatures ℃	
	Heat resistance ℃	260-278
Electrical Properties	Dielectric breakdown strengths KV/mm	43-50
	Coefficient of volume resistance Ω-cm	10^3
REMARK:		

Harbour INDUSTRIES

High Performance Wire & Cable

4744 Shelburne Road
Shelburne, VT 05482

Ph. 802-985-3311
Fax 802-985-9534
www.harbourind.com

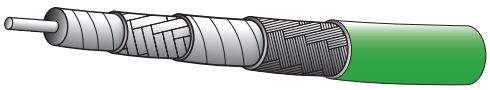
Harbour Industries' headquarters are located in Shelburne, Vermont with state-of-the-art manufacturing facilities in Vermont and Farnham, Quebec, Canada. Additional sales and stocking locations are in California and Florida in the United States, Europe and Asia including Harbour Korea and Harbour China.

Harbour Industries, the leading manufacturer of High Performance Wire and Cable sells to many different commercial, military and industrial markets around the world since 1965. ***Please see our full catalog offering at www.harbourind.com***.

MIL-C-17 COAX

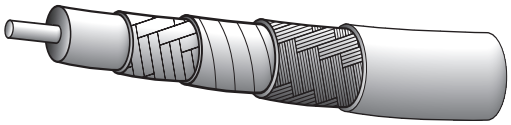
- QPL Approved For More Than 20 Different Cables
- Used For Both Military And Commercial Applications
- Tight Tolerances And VSWR Swept For High Performance
- UL Approval On Request

LL LOW LOSS COAX



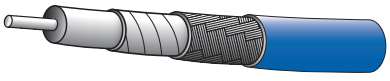
- Special Expanded PTFE Tape Dielectrics
- Low Attenuation At Higher Operating Frequencies
- Special Composite Shields With High Shielding Levels
- Phase Stable Over Temperature And Flexure

SB STRIP BRAID COAX



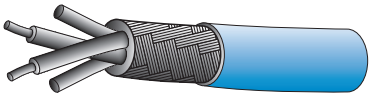
- Lower Attenuation At Higher Frequencies
- Standard Connectors Can Be Used
- Same Composite Shielding As LL Coax
- Phase Stable Over Temperature And Flexure

SS SPIRAL STRIP COAX



- Greater Shielding Effectiveness Than Mil-C-17
- Flexible Alternative To Semi-rigid Coax
- Spiral Silver Plated Strip And Braid Shield For Low Attenuation

HIGH SPEED TWISTED PAIR AND TWINAX



- Special Designs For The Commercial And Military Aerospace Markets
- Controlled Impedance Designs

SPECIAL CABLE CONFIGURATIONS

- HS – High Strength
- TRX - Triaxial
- CN – Communication Networks

Harbour
INDUSTRIES
High Performance Wire & Cable

4744 Shelburne Road
Shelburne, VT 05482

PH: 802-985-3311
FAX: 802-985-9534

HARBOUR INDUSTRIES

Coax Cable Selection Guide - Commonly Used Constructions

CABLE	CENTER CONDUCTOR	DIALECTRIC DIAMETER	DIAMETER OVER OUTER SPC BRAID	OVERALL DIAMETER	WEIGHT (LBS/MFT)	IMPEDANCE (OHMS)	CUTOFF FREQ (GHz)	ATTENUATION (DB/100 FT) @ 1GHz TYP / MAX	@ 2.4GHz TYP / MAX	@ 18GHz TYP / MAX
LL120	.0285" SPC	.080"	.108"	.120"	17	50	64.0	14.6 / 18.0	21.0 / 25.0	61.5 / 74.0
LL142	.051" SPC	.145"	.174"	.195"	44	50	32.9	8.2 / 10.0	11.3 / 14.0	36.0 / 40.0
LL235	.057" SPC	.160"	.191"	.235"	48	50	23.0	7.4 / 8.0	10.6 / 11.4	34.1 / 37.0
LL393-2	.068" 7/.023" SPC	.185"	.220"	.270"	70	50	24.0	6.7 / 7.3	9.6 / 10.6	31.1 / 36.0
LL335	.089" SPC	.250"	.284"	.335"	124	50	18.0	4.8 / 5.5	6.8 / 7.8	22.0 / 26.0
LL450	.133" 7/.048" SPC	.360"	.394"	.450"	180	50	12.8	3.5 / 3.7	5.1 / 5.6	-----
SB316	.020" 7/.0067" SCCS	.060"	.088"	.098"	12	50	57.0	25.8 / 29.0	39.7 / 44.7	126.0 / 150.0
SB400	.0385" 19/.008" SCCS	.116"	.152"	.195"	47	50	29.0	12.7 / 13.8	20.4 / 22.1	64.0 / 70.0
SB142	.037" SCCS	.1175"	.152"	.195"	40	50	34.2	11.2 / 13.0	18.4 / 20.3	58.0 / 64.0
SS401	.0659"	.209"	.250"	.275"	93	50	20.0	7.2 / 7.5	12.5 / 13.5	40.0 / 48.0
SS402	.037" SCCS	.117"	.141"	.163"	32	50	34.0	11.2 / 13.0	18.0 / 20.0	58.0 / 64.0
SS405	.0201" SCCS	.064"	.086"	.104"	14	50	63.0	21.7 / 30.0	33.0 / 35.0	95.0 / 110.0
SS75086	.0113" SCCS	.064"	.086"	.100"	14	75	72.0	22.0 / 24.0	34.0 / 37.0	98.0 / 115.0
M17/60-RG142	.037" SCCS	.116"	.161"	.195"	43	50	33.0	13.4 / 19.2	21.3 / 30.4	62.9 TYP
M17/93-RG178	.0120" 7/.004" SCCS	.033"	.051"	.071"	6	50	111.0	44.2 / 52.0	61.9 / 83.3	210.0 TYP
M17/94-RG179	.0120" 7/.004" SCCS	.063"	.081"	.100"	11	75	67.0	26.7 / 30.7	39.7 TYP	NA
M17/95-RG180	.0120" 7/.004" SCCS	.102"	.120"	.141"	20	95	44.0	19.2 / 23.0	29.2 TYP	NA
M17/113-RG316	.0201" 7/.0067" SCCS	.060"	.078"	.098"	12	50	62.0	26.2 / 38.0	41.2 / 55.4	140.0 TYP
M17/128-RG400	.0384" 19/.005" SC	.116"	.161"	.195"	50	50	32.0	14.1 / 18.1	22.6 / 30.2	75.1 TYP
M17/152-00001	.0201" 7/.0067" SCCS	.060"	.096"	.114"	19	50	62.0	29.6 / 40.0	43.1 / 58.3	140.0 TYP
RG 187 A/U	.0120" 7/.004" SCCS	.063"	.081"	.100"	10	75	67.0	26.7 / 30.7	39.7 TYP	NA
RG 188 A/U	.0201" 7/.0067 SCCS	.060"	.078"	.100"	11	50	62.0	26.2 / 38.0	41.2 / 55.4	140.0 TYP
RG 195 A/U	.0120" 7/.004" SCCS	.102"	.120"	.141"	18	95	44.0	19.2 / 23.0	29.2 TYP	NA
RG 196 A/U	.0120" 7/.004" SCCS	.034"	.052"	.067"	6	50	111.0	44.2 / 52.0	41.7 / 56.1	210.0 TYP

For a more complete list of cables and additional physical and electrical characteristics, please reference Harbour's Coaxial Cable Catalog online at www.harbourind.com

MIL-C-17 Coaxial Cable

Harbour supplies a complete line of high temperature, high performance QPL approved MIL-C-17 coax cables for military, commercial and industrial applications. The specific M17 constructions referenced are manufactured in accordance with the most recent revision of the MIL-C-17 specification. The MIL-C-17 specification defines complete physical and electrical characteristics for each M17 part number, including dimensional parameters, dielectric materials, shield construction, maximum attenuation, and VSWR levels.

VSWR Sweep Testing

When selecting a 50 ohm coaxial cable, constructions with VSWR requirements are recommended. Manufacturing and sweep testing cables with concern for VSWR ensures a quality cable free of spikes over the referenced frequency range. (Note the test frequencies specified in the Electrical characteristics section.)

Precision PTFE Dielectric Coax

All of the PTFE dielectric coax cables listed are high temperature, high performance constructions exhibiting high dielectric strength and low capacitance in proportion to their dielectric constant. All PTFE dielectrics are manufactured with tolerances tighter than the MIL-C-17 specification to ensure uniformity of electrical characteristics, especially impedance, attenuation and VSWR.

High Performance Polyethylene Dielectric Coax

Harbour also manufactures high performance solid polyethylene dielectric coaxial cable. These cables have a high maximum operating voltage up to 7,000 Volts RMS.

Tape Wrapped PTFE Constructions

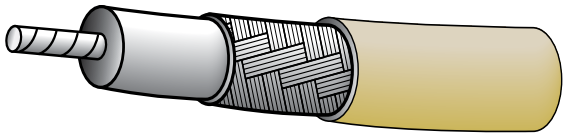
Harbour manufactures PTFE tape wrapped cables to a previous revision of the MIL-C-17 specification. These constructions can withstand operating temperatures up to 250° C versus 200° C for FEP jacketed cables. PTFE tape wrapped cables are generally more flexible than their FEP jacketed counterparts.

UL Approvals

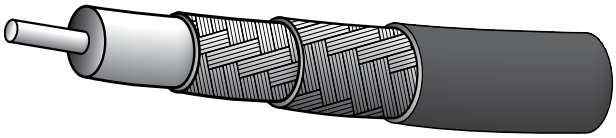
All of Harbour's M17 part numbers with PTFE dielectrics and FEP jackets may be ordered with UL 1971 (150° C, 125 Volt) listing.

M17 Number	Center Conductor (inches)	PTFE Dielectric O. D. (inches)	Shield	Jacket	Overall Diameter (inches)	Minimum Bend Radius (inches)	Operating Temp (°c)	Weight (l b s / MFT)	Comments
M17/60-RG142	.037 SCCS	.116	SPC (2)	FEP	.195	1.0	-55 +200	43.0	
M17/93-RG178	.120 (7/.004)SCCS	.033	SPC	FEP	.071	0.4	-55 +200	6.3	
M17/94-RG179	.120 (7/.004)SCCS	.063	SPC	FEP	.100	0.4	-55 +200	10.8	
M17/95-RG180	.120 (7/.004)SCCS	.102	SPC	FEP	.141	0.7	-55 +200	19.8	
M17/111-RG303	.037 SCCS	.006	SPC	FEP	.170	0.9	-55 +200	31.0	
M17/112-RG304	.059 SCCS	.185	SPC (2)	FEP	.280	1.4	-55 +200	94	
M17/113-RG316	.201 (7/.0067)SCCS	.060	SPC	FEP	.098	0.5	-55 +200	12.2	
M17/127-RG393	.094 (7/.0312) SC	.285	SPC (2)	FEP	.390	2.0	-55 +200	165	
M17/128-RG400	.0384 (19/.008) SC	.116	SPC (2)	FEP	.195	1.0	-55 +200	50	
M17/131-RG403	.120 (7/.004)SCCS	.033	SPC (2)	FEP (2)	.116	0.6	-55 +200	15	Triaxial RG-178
M17/152-00001	.201 (7/.0067)SCCS	.060	SPC (2)	FEP	.114	0.6	-55 +200	18.5	Double Shield RG-316
M17/158-00001	.037 SCCS	.116	SPC (2)	FEP	.195	1.0	-55 +200	56	Unswept RG142
M17/169-00001	.120 (7/.004)SCCS	.033	SPC	FEP	.071	0.4	-55 +200	6.3	Unswept RG178
M17/170-00001	.037 SCCS	.116	SPC	FEP	.170	0.9	-55 +200	39	Unswept RG303
M17/172-00001	.120 (7/.004)SCCS	.060	SPC	FEP	.098	0.5	-55 +200	11.5	Unswept RG316
M17/174-00001	.094 (7/.0312) SC	.285	SPC (2)	FEP	.390	2.0	-55 +200	175	Unswept RG393
M17/175-00001	. 0 3 8 4 (1 9 / . 0 0 8) S C	.116	SPC (2)	FEP	.195	1.0	-55 +200	50	Unswept RG400
M17/176-00002	.0235 (19/.005)SPA(2)	.042	SPA	PFA	.129	0.6	-55 +230	18	Twinax
RG187 A/U	.120 (7/.004)SCCS.	.063	SPC	PTFE	.100	0.5	-55 +250	10	Tape Wrapped Jacket
RG188 A/U	.201 (7/.0067)SCCS	.060	SPC	PTFE	.100	0.5	-55 +250	11	Tape Wrapped Jacket
RG195 A/U	.120 (7/.004)SCCS	.102	SPC	PTFE	.141	0.7	-55 +250	18	Tape Wrapped Jacket
RG196 A/U	.120 (7/.004)SCCS	.034	SPC	PTFE	.067	0.4	-55 +250	6	Tape Wrapped Jacket

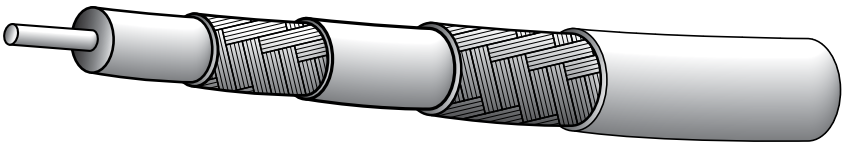
MIL-C-17 Coaxial Cable



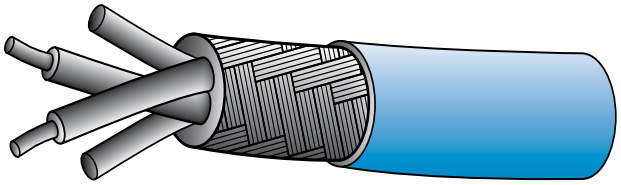
Single Braid



Double Braid



Triaxial



Twinax

"Maximum frequencies" are those as referenced on individual slant sheets of the MIL-C-17 specification. No values are given for unswept constructions as the specification recommends these cables should not be used above 400 MHz. All figures referenced above are nominal unless otherwise specified.

M17 Number	Impedance (ohms)	Capacitance (pF/ft)	Max Voltage	100 MHz Typ / Max	400 MHz Typ / Max	1 GHz Typ / Max	2.4 GHz Typ / Max	5 GHz Typ / Max	10 GHz Typ / Max	Max Frequency (GHz)
M17/60-RG142	50	29.4	1900	4.0 / 5.5	8.1 / 11.7	13.4 / 19.2	21.3 / 30.4	33.3 / 48.7		17.4
M17/93-RG178	50	29.4	1000	13.0 / 16.0	27.2 / 33.0	44.2 / 52.0	61.9 / 83.3			
M17/94-RG179	75	19.4	1200	8.0 / 9.2	15.5 / 21.0	26.7 / 30.7				
M17/95-RG180	95	17.4	1500	5.7 / 6.6	11.7 / 17.4	19.2 / 23.0				
M17/111-RG303	50	29.4	1900	3.5 / 3.9	7.2 / 8.0	13.5 / 15.0				
M17/112-RG304	50	29.4	3000	2.4 / 2.7	5.8 / 6.4	10.0 / 11.1				8.0
M17/113-RG316	50	29.4	1200	7.6 / 11.0	16.0 / 21.0	26.2 / 38.0	41.2 / 55.4			3.0
M17/127-RG393	50	29.4	1500	2.3 / 2.5	4.4 / 5.0	7.7 / 9.2	12.4 / 14.2	21.3 / 26.8	30.1 / 37.9	11.0
M17/128-RG400	50	29.4	1900	4.3 / 4.5	8.6 / 10.5	14.1 / 18.1	22.6 / 30.2	35.6 / 52.1	61.6 / 78.0	12.4
M17/131-RG403	50	29.4	1000		33.3 / 37.0					10.0
M17/152-00001	50	29.4	1200	8.1 / 11.5	17.8 / 24.0	29.6 / 40.0	43.1 / 58.3	100.0 / 110.0	153.0 / 170.0	12.4
M17/158-00001	50	29.4	1900		8.1 / 9.5					
M17/169-00001	50	29.4	1000		27.2 / 29.0					
M17/170-00001	50	29.4	1900		7.7 / 8.6					
M17/172-00001	50	29.4	1200		15.5 / 21.0					
M17/174-00001	50	29.4	2500		4.4 / 5.0					
M17/175-00001	50	29.4	1900		8.6 / 10.5					
M17/176-00002	77	19.0	1000							
RG187 A/U	75	19.4	1200		15.5 / 21.0					
RG188 A/U	50	29.4	1200	7.6 / 11.0	16.0 / 21.0	26.2 / 38.0	41.2 / 55.4			3.0
RG195 A/U	95	17.4	1500		11.7 / 17.4					
RG196 A/U	50	29.4	1000	13.0 / 16.0	27.2 / 33.0	44.2 / 52.0	41.7 / 56.1			3.0

奇美實業股份有限公司

台灣省台南縣仁德鄉三甲村59-1號. 電 話：886-6-266-5000, 傳 真：886-6-266-5555~7

物質安全資料表

V1W

1. 物品及廠商資料

產品名稱	**Polylac** ® PA-707 PA-757 PA-757N PA-717C PA-727 PA-747 PA-709
製造商	奇美實業股份有限公司
地址	台灣省台南縣仁德鄉三甲村 59-1 號
電話.	886-6-2663000 Ext.1361（產品推廣課）
緊急電話.	886-6-2663000 Ext.1361（產品推廣課）
傳真電話.	886-6-2667981

2. 成品辨識資料

單一產品或混合物	單一產品
化學名稱	Acrylonitrile-Butadiene-Styrene Copolymer
含量	＞98％（添加劑≦2％）
化學式	$(C_3H_3N, C_4H_6, C_8H_8)_x$
CAS No.	9003-56-9
危害性不純物	無

3. 危害性分類

健康危害效應	無
環境影響	無
物理性及化學性危害	無
特殊危害	無

4. 急救措施

吸入	若吸入熔融樹脂逸出之氣體，將患者移至通風處，立即送醫。
皮膚接觸	若接觸到塑膠粒或塑膠粉末，以清水沖洗。 若接觸到熔膠，以大量(肥皂)水沖洗患部及衣物，立即送醫。
眼睛接觸	若接觸到塑膠粒或塑膠粉末，以大量清水至少沖洗 15 分鐘。 若有不適，立即送醫。 若接觸到高溫熔融樹脂逸出之氣體，以大量清水至少沖洗 15 分鐘。 若有不適，立即送醫。
吞食	催吐，以清水漱口，若有不適，立即送醫。

5. 消防措施

適用滅火劑	水、泡沫、乾粉
滅火時可能遭遇之特殊危害	無
特殊滅火程序	移除可燃物
消防人員之特殊防護設備	使用供氧式呼吸防護具

6. 洩漏處理方法

個人應注意事項	若塑膠粒或塑膠粉末殘留於地面上，可能會導致人員滑倒。
環境注意事項	為防止鳥類或魚類由排水系統中攝食，須徹底回收
清理方法	回收或廢棄

7. 安全處置與儲存方法

處置	操作處所須嚴禁煙火，做好整理整頓以避免粉塵累積。為防止塵爆，空氣輸送管路、袋濾器及儲槽須加裝靜電消除裝置，並確實接地。袋濾器之濾材採導電性材質。
儲存	存放於陰涼處所，避免直射陽光、雨淋及急遽之溫差。儲存處嚴禁煙火

8. 暴露預防措施

容許濃度(TLV)	未定
通風設備	排除粉塵、煙及氣體時使用
個人防護設備	呼吸防護　清洗成型機時使用防毒面具。
	手部防護　接觸熔膠時使用皮手套。
	眼睛防護　平時使用安全眼鏡，清洗成型機時使用護目鏡

9.物理及化學性質

物質狀態	米白色膠粒
形狀	粒狀
顏色	米白色
氣味	無
閃火點	404 ℃
自燃溫度	466 ℃
爆炸界限	45 g/m^3
最小著火能量	3.6 mJ
最大爆炸壓力	7 × 10^5 Pa
最大壓力上升速度	3.2 × 10^7 Pa/S
比重	1.03~1.10
溶解度	無

10.安定性及反應性

安定性	依一般操作及儲存程序時，安定性佳。
危害性分解物	CO, HCN, AN, SM and NO
燃燒能量	3.53 × 10^7 J/kg (8424 Kcal/kg)

11.毒性資料

刺激性	分解後之塑膠所產生的煙及蒸氣會刺激眼睛.

12.生態資料

為防止被海洋生物或鳥類攝食，嚴禁丟棄至海洋或水域。.

13.廢棄物處理

適當之焚化爐燃燒或掩埋法。不適當之焚化爐可能會產生有毒氣體如 CO, HCN, AN and SM.

14.運送資料

未分類

15.法規資料

無

16.其他資料

無

CHI MEI CORPORATION

59-1 SAN CHIA, JEN TE, TAINAN COUNTY, TAIWAN R.O.C. TEL: 886-6-266-5000, FAX: 886-6-266-5555~7

泛用級 ABS, POLYLAC® PA-757 *V1W*

材料特性

特性(Properties)	測試方法(Test Method)	測試條件(Test Condition)	單位(Unit)	PA-757
引張強度 Tensile Strength	ASTM D638	1/8",6 mm/min	$Kg/cm^2(lb/in^2)$	480(6800)
延伸率 Tensile Elongation	ASTM D638	1/8",6 mm/min	%	20
彎曲強度 Flexural Strength	ASTM D790	1/4",2.8 mm/min	$Kg/cm^2(lb/in^2)$	820(11660)
彎曲彈性率 Flexural Modulus	ASTM D790	1/4",2.8 mm/min	$Kg/cm^2(lb/in^2)$	27000(380000)
IZOD 衝擊強度 Izod Impact Strength	ASTM D256(Notched)	1/4",23℃ 1/8",23℃	Kg-cm/cm(ft-lb/in) Kg-cm/cm(ft-lb/in)	18(3.3) 20(3.7)
流動係數 Melt Flow Index	ASTM D1238	200℃ , 5Kg	g/10min	1.8
硬度 Hardness	ASTM D785	1/2"	R Scale	116
比重 Specific Gravity	ASTM D792	23℃	-	1.05
軟化點 Vicat Softening Temp	ASTM D1525	1/8",50℃/hr	℃(℉)	105(221)
熱變形溫度 H.D.T Annealed(85℃ , 8hr) Unannealed	ASTM D648	1/4",120℃/hr	℃(℉)	99(210) 88(190)
燃燒率 Flammability	UL 94	-	-	1/16"HB

以上數據僅代表一般通用數據，不代表每一產品的規格值

若有任何疑問請洽產品推廣課 06-2665000, 06-2663000