

승 인 원

품 명 : Dielectric Chip Antenna
Part No. : AMAN542012KM02
모 델 명 : DB830

G-PLUS	입 안	심 사	결 정

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	 개별 이현정		
	07. 1. 29	07. 1. 29	07. 1. 29

2007. 01. 29

주식회사 아 모 텍

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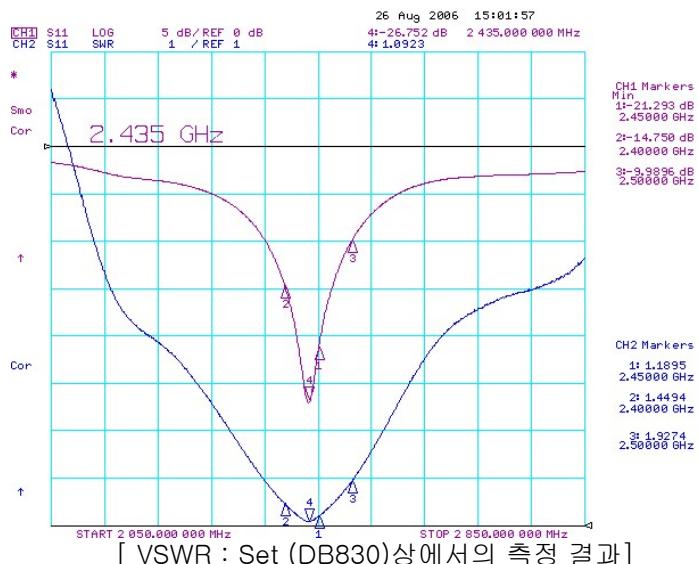
1. 제/개정 이력

날짜	제목	내용	페이지
07.01.29		승인원 신규제정	

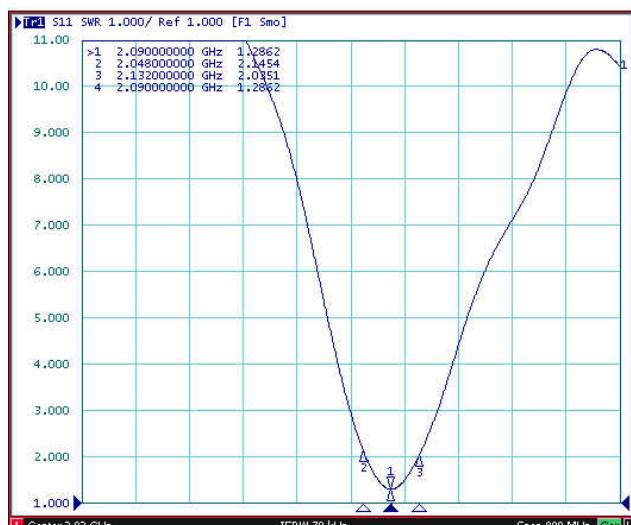
2. 제품 규격

2.1 전기적 특성

구분	항목	규격			비고
1	정재파비 1	최대 3.0:1 @2400~2500 MHz			Set 상에서 측정
2	정재파비 2	최대 4.0:1 @ 2090±42 MHz			수동 Jig 상에서 측정
3	방사이득	Avg.	H	Min -4dBi	Reference board 상에서 bluetooth 대역으로 매칭 후 측정
			E1	Min -4dBi	
			E2	Min -4dBi	
4	방사패턴	Omni-directional			
5	임피던스	공칭 50 Ω			



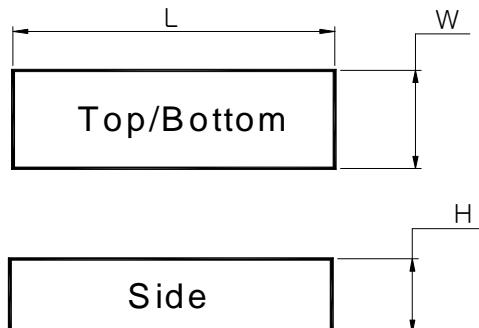
[VSWR : Set (DB830)상에서의 측정 결과]



[VSWR : 수동 Jig 상에서의 측정 결과]

2.2 기계적 특성

Dielectric Body



L(가로)	5.4
W(세로)	2.0
H(높이)	1.2

- Unit : [mm]
- General Tolerance : ± 0.15 [mm]

[외형 및 치수]

2.3 Part No. 및 Lot No. 표기법

Model : AMAN 542012 KM 02
 (1) (2) (3) (4)

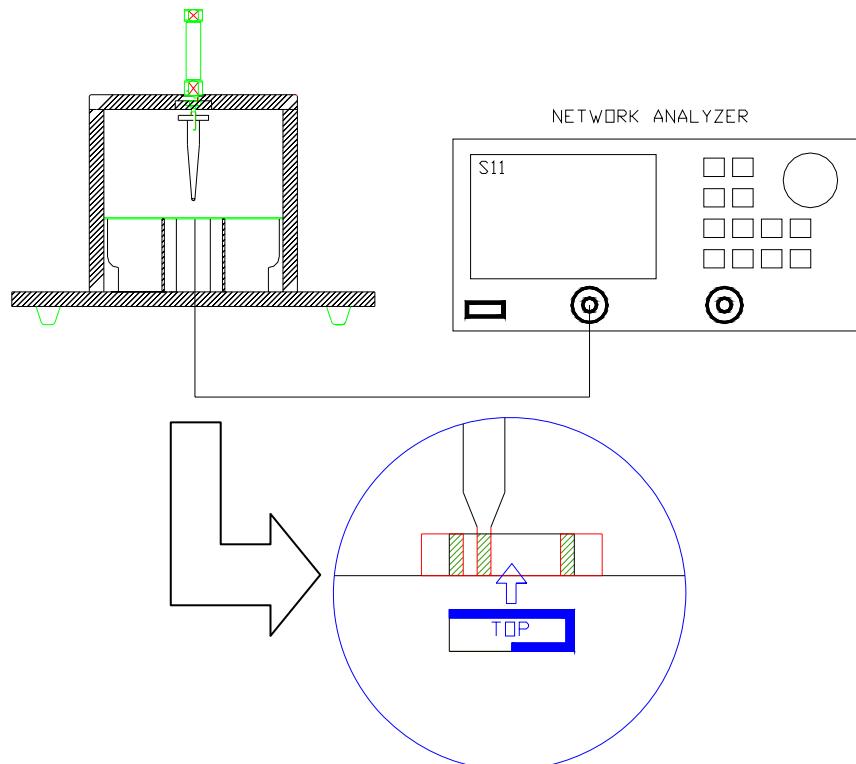
- (1) : AMOTECH ANTENNA
- (2) : 칩 크기(가로 X 세로 X 높이)
- (3) : 업체명, 예) G-PLUS(구 KBT Mobile) - KM
- (4) : 모델 번호(예 : 02:DB830)

Lot :

XX XX X X XX
 (1) (2) (3) (4) (5)

- (1) : 소체 성형년도
- (2) : 소체 성형월
- (3) : 유전율 예) 1 : 9.5, 2 : 20.5
- (4) : 소체 SIZE 예) A : 542012, B : 542015, C : 903012, D : 903015, E : 903040,
 F : 903045, G : 402027, H : 542020, I : 601815, J : 601818,
 K : 802012, L : 802015, M : 144050, N : 144060, O : 163040,
 P : 806040
- (5) : TYPE 별 소체의 월 생산번호

3. 시험방법



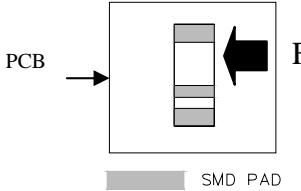
3.1 S11 parameter

- 제품규격 참조

3.2 측정방법

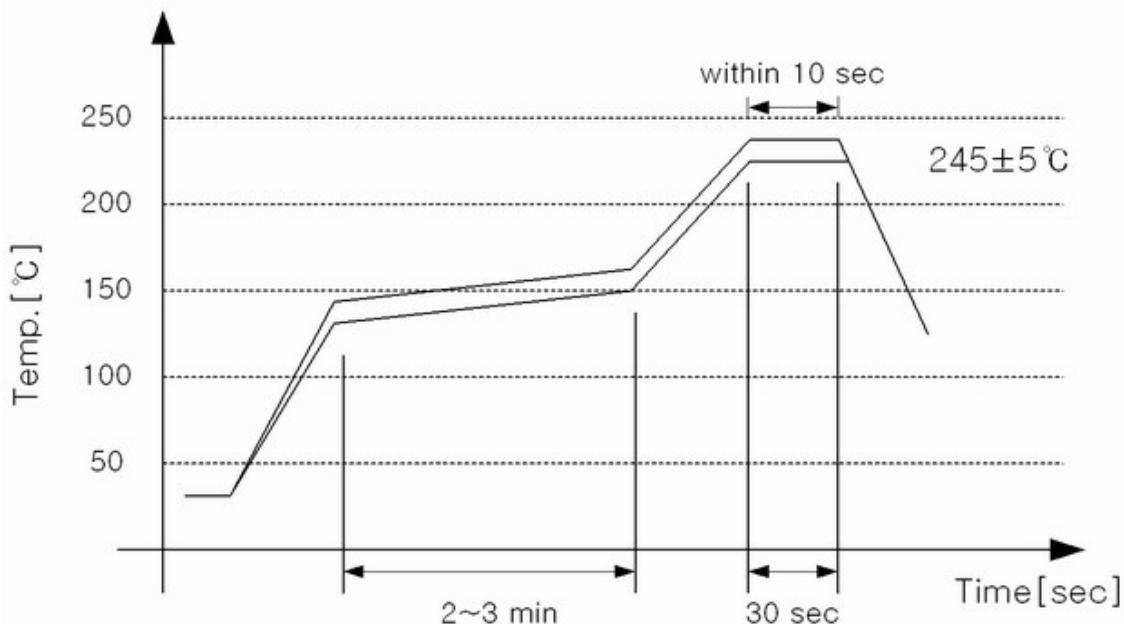
- A) RF Cable 까지 Calibration 을 한다.
 - Center frequency: 제품규격 참조
 - Span : 800MHz
 - Number of point : 801
- B) RF Cable 과 측정지그의 SMA adapter 를 연결한다.
- C) Format 을 VSWR(SWR)로 설정한다.
- D) MARKER1, MARKER2, MARKER3 을 설정하여 VSWR 값을 확인한다.
MARKER1,2,3 의 VSWR 값이 제품규격을 만족하여야 한다

4. 신뢰성 시험조건

구분	항목	테스트 조건	요구 사항
1	Drop Test	1. Phone 시료에 장착 2. 1.5mm 높이, 6 개면 3. Steel Surface (1000*1000*20mm) 4. 각 5 회 낙하	1. 외관 손상 없음 2. VSWR 특성 만족 -Pattern 과 소체에 Crack 이 없을 것
2	Vibration Test	1. 5~55~5 Hz, 1 Octave/min, Amp.=1.5mm, acceleration = 2g, Crossover Freq.=18 Hz	1. 외관 손상 없음 2. VSWR 특성 만족 -Pattern 과 소체에 Crack 이 없을 것
3	Humidity	1. 60°C, 95%RH, 48Hr	1. 외관 손상 없음 2. VSWR 특성 만족 -Pattern 과 소체에 Crack 이 없을 것
4	Temperature Cycle	1. -40°C(2Hr) → 2Hr → +80°C (2Hr)→2Hr → -40°C, 50%RH 2. Cycle : 10 3. 1 Cycle = 8Hr	1. 외관 손상 없음 2. VSWR 특성 만족 -Pattern 과 소체에 Crack 이 없을 것
5	Thermal Shock	1. +80°C(30min)→1~2mim → -40°C (30min) 2. cycle 횟수 : 10 회	1. 외관 손상 없음 2. VSWR 특성 만족 -Pattern 과 소체에 Crack 이 없을 것
6	Corrosion	1. +35°C, Sodium(5%), 48Hr	1. 외관 손상 없음 2. VSWR 특성 만족 -Pattern 과 소체에 Crack 이 없을 것
7	Storage Temperature	1. -40°C(48Hr) → 95%RH, 80°C(48Hr)	1. 외관 손상 없음 2. VSWR 특성 만족 -Pattern 과 소체에 Crack 이 없을 것
8	고온 보존	1. +85°C, 96Hr	1. 외관 손상 없음 2. VSWR 특성 만족 -Pattern 과 소체에 Crack 이 없을 것
9	저온 보존	1. -40°C, 96Hr	1. 외관 손상 없음 2. VSWR 특성 만족 -Pattern 과 소체에 Crack 이 없을 것
10	고착 강도 (Adhesion strength)	1. SMT 되어 있는 시료에 힘 F를 주어 PCB에서 떨어 질 때까지 힘 F를 증가 	1. 옆으로 미는 힘 F에 의한 기계적 손상 없음 2. 힘의 세기 F > 5 kgf
11	Reflow (최대 내열성)	• +260°C, 10sec ※ 단품 상태로 시험	1. 외관 손상 없음 2. VSWR 특성 만족 -Pattern 과 소체에 Crack 이 없을 것

5. 납땜조건 (권고사항)

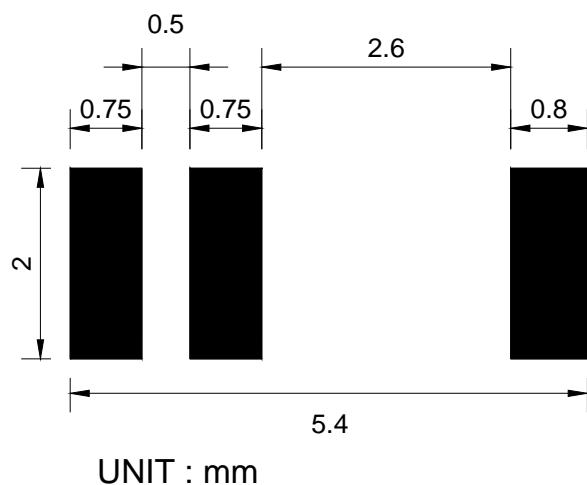
5.1 납땜온도조건 (Pb-free 조건)



안테나의 특성 저하를 막기 위해 다음과 같은 납땜 조건을 지켜야 한다.

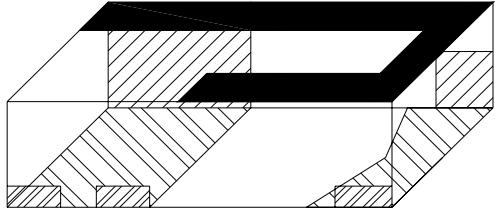
- Reflow soldering 조건으로 납땜을 진행하여야 하며, Flow soldering 을 하여서는 안 된다.
- 비활성 Flux 를 사용하여야 한다.(최대 Cl 함량 0.2% 미만)
- Reflow cycle 횟수는 3 회 이내로 해야 한다.

5.2 PCB 패턴설계조건



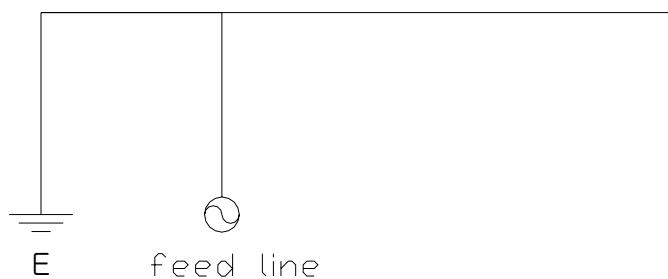
6. 구조 및 재질

6.1 재료사양



1	소체(Bulk)	산화마그네슘계 세라믹스
2 전 극	TOP	Ag
	BOTTOM (일체형)	
	SIDE1	
	SIDE2	

6.2 등가회로



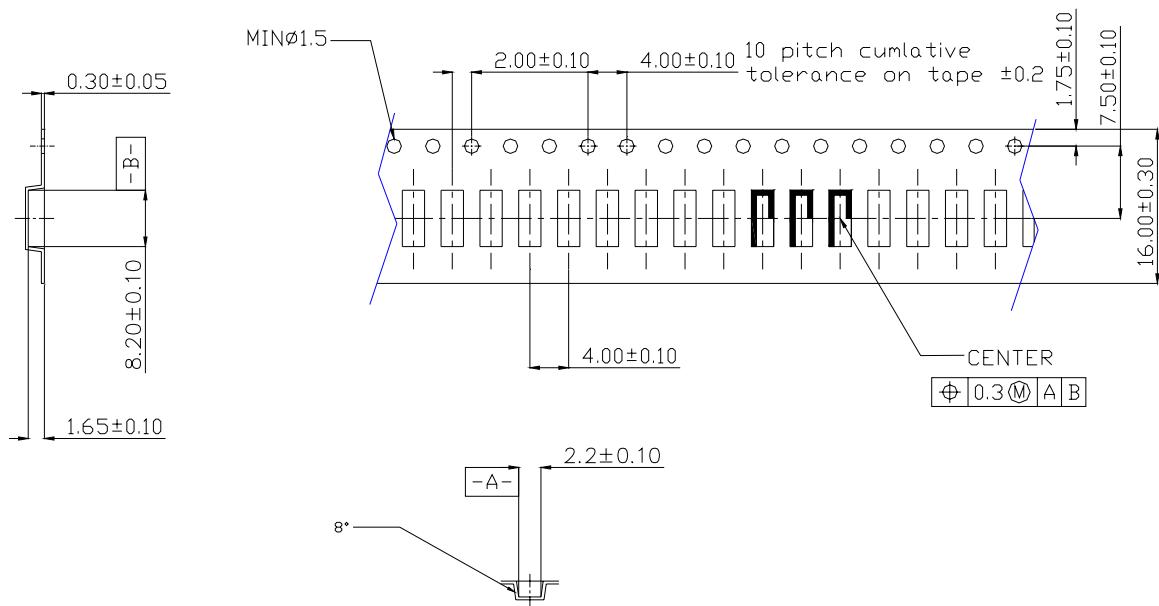
7. 주의사항

- 보관환경은 $-5\sim40^{\circ}\text{C}$, 상대습도 70%의 대기에서 보관되어야 함. (MSL Level 1)
- Dielectric Chip Antenna는 고온고습에서 사용하거나 또는 황이나 염산가스에 노출될 경우 전극 납땜성의 저하를 일으킬 수 있다.
- Dielectric Chip Antenna 자체 무게에 의한 세라믹의 crack을 막기 위해 기계적 충격(낙하 등)을 피해야 한다.
- Dielectric chip Antenna는 6 개월 이내에 사용되어져야 하며 6 개월이 경과한 칩은 사용하기 전에 반드시 납땜성을 확인하여야 한다.
- SMT 전/후 대기 중에 방치된 제품 외부패턴(Ag)의 변색은 자연적인 현상이며 제품의 기능 혹은 특성상에 영향을 미치지 아니하므로 정상품으로 간주한다.

8. 포장 사양

8.1 Carrier tape 사양

8.1.1 크기

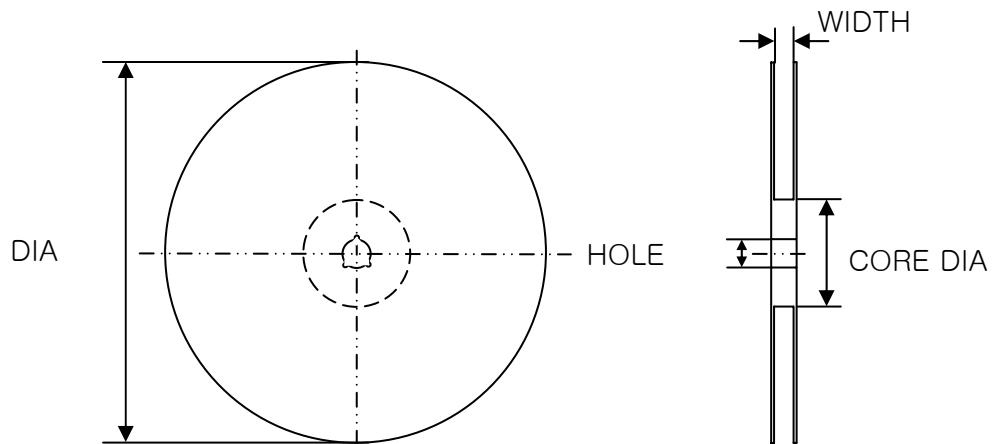


8.1.2 재질 및 표면저항

- 1)Carrier tape : $10^6\Omega \sim 10^{11}\Omega$, 제전용
- 2)Cover tape : $10^6 \sim 10^{11}\Omega$, 제전용
- 3)Reel : $10^6\Omega \sim 10^{11}\Omega$, 제전용

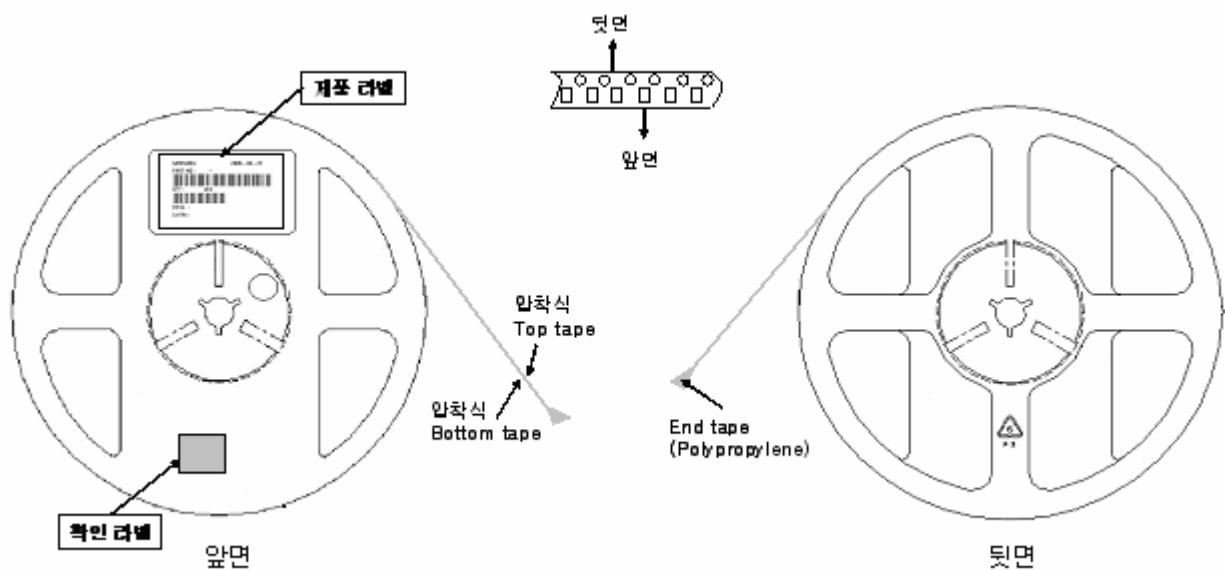
8.2 릴(Reel) 사양

8.2.1 크기



항목	DIA	WIDTH	CORE DIA	HOLE
치수(mm)	180.0 +0,-3	17.0 ± 0.3	60.0 ± 1	13.0 ± 0.5

8.2.2 라벨 부착 및 Winding 방법



8.2.3 재질

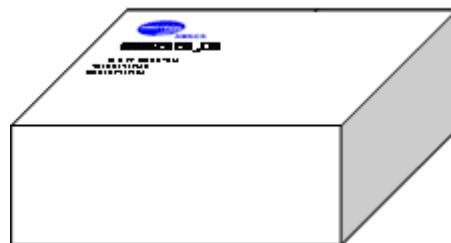
- 1) Plastic reel: GPPS(General Purpose Poly Styrene) resin

8.3 박스 포장 사양

8.3.1 소형 박스

크기: 185(W) x 185(D) x 68 (T) [mm]

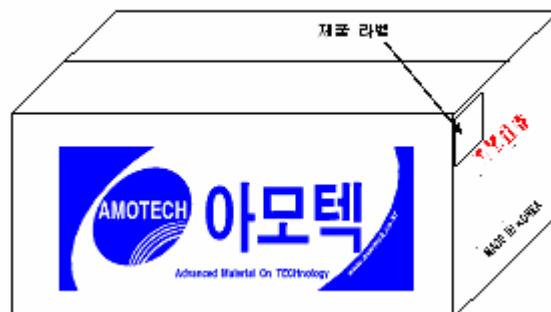
수량: 3reel (2,000ea/reel x 3 reel=6,000ea)



8.3.2 중형 박스

크기: 365(W) x 200(D) x 200 (T) [mm]

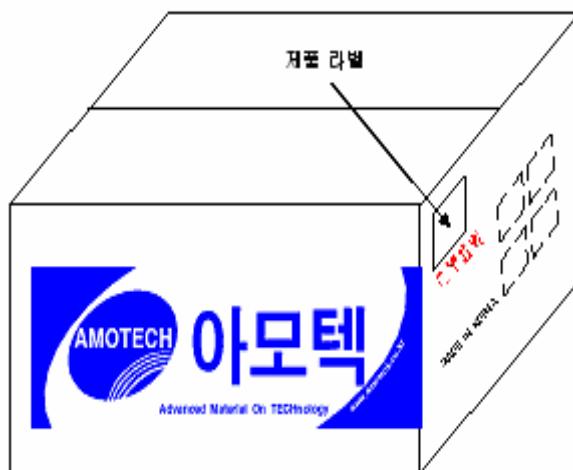
수량: 5 소형 박스 (6,000ea/소형 박스 x 5 소형 박스 = 30,000ea)



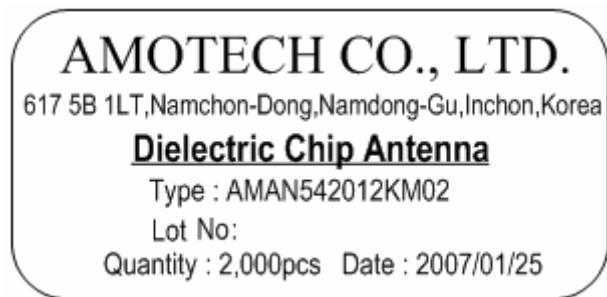
8.3.3 대형 박스

크기: 390(W) x 390(D) x 280 (T) [mm]

수량: 14 소형 박스 (6,000ea/소형 박스 x 14 소형 박스 = 84,000ea)



8.4 포장 라벨 사양



9. 관리공정도

재료	공정도시		공정명	중점 관리 항목		관리방법	치공구 및 사용기기
	준비공정	본공정					
MMT-20(B) Powder	<pre> graph TD A[MMT-20(B) Powder] --> B{1} B --> C((2)) C --> D((3)) D --> E((4)) </pre>		수입검사	- 유전율 : 검사 성적서 대체 - 소결 후 사이즈 확인하여 성형 조건 확정 (중량, 두께)	수입검사성적서 성형테스트쉬트	저울 버니어캘리퍼스	
Ag Paste				- 점도 확인 실시	수입검사성적서	점도계	
캐리어 테잎				- 캐리어 규격에 따라 확인 실시	수입검사성적서	버니어캘리퍼스	
캐리어 커버				- 규격에 준한 제품 확인 실시			
스크린 포장재 소모성 자재							
MMT-20(B) Powder	<pre> graph TD A[MMT-20(B) Powder] --> B{1} B --> C((2)) C --> D((3)) D --> E((4)) </pre>		성형 공정	- 금형 type 확인 (예 : 5420, 9030) - 성형체 중량 확인 - 성형체 두께 확인	Lot 이력 카드	프레스 저울 버니어캘리퍼스	
				- 소결 온도 프로파일 확인	설비체크리스트 Lot 이력 카드	온도 컨트롤러	
	<pre> graph TD A[MMT-20(B) Powder] --> B{1} B --> C((2)) C --> D((3)) D --> E((4)) </pre>		소결 및 적재 공정	- 매저링(measuring) 온도 (월 1회 실시 - 히터 및 조건 수정 때마다 실시)			
				- 제품 표면의 이물질 여부 확인	Lot 이력 카드		

재료	공정도시		공정명	중점 관리 항목	관리방법	차공구 및 사용기기
	준비공정	분공정				
		5	소결체 외관 검사	<ul style="list-style-type: none"> - 소결체의 가로, 세로 사이즈 측정 가로, 세로: $5.4 \times 2.0 \pm 0.15\text{mm}$ - 두께: $1.5 \pm 0.15\text{mm}$ - 표면의 외관상태 (깨짐, Crack이 없음) (칩 크기: $1.0\text{mm} \times 45.2\text{mm}$이하일것) 	Lot 이력 카드 전수 검사	비니어캘리퍼스 육안 확인
Ag Paste		6	BOTTEM 인쇄 및 건조	<ul style="list-style-type: none"> - 스펀지 압 - 스펀지 속도 - Ag Paste는 사용 전에 5~10 정도 충분히 저어 준다 - 스크린 텐션 - 스냅업(Snap off) - 건조온도 - 건조시간 	설비 체크 리스트 Lot 이력 카드	장비 셋팅 값 스페츌러 텐션게이지 디이얼게이지 온도 컨트롤러
Ag Paste		7	TOP 인쇄 및 건조	<ul style="list-style-type: none"> - 스펀지 압 - 스펀지 속도 - Ag Paste는 사용 전에 5~10 정도 충분히 저어 준다 - 스크린 텐션 - 스냅업(Snap off) - 건조온도 - 건조시간 	설비 체크 리스트 Lot 이력 카드	장비 셋팅 값 스페츌러 텐션게이지 디이얼게이지 온도 컨트롤러
Ag Paste		8	SIDE1 인쇄 및 건조	<ul style="list-style-type: none"> - 스펀지 압 - 스펀지 속도 - Ag Paste는 사용 전에 5~10 정도 충분히 저어 준다 - 스크린 텐션 - 스냅업(Snap off) - 건조온도 - 건조시간 	설비 체크 리스트 Lot 이력 카드	장비 셋팅 값 스페츌러 텐션게이지 디이얼게이지 온도 컨트롤러

재 료	공정도시		공정명	중점 관리 항목	관리방법	치공구 및 사용기기
	준비공정	본공정				
Ag Paste			SIDE2 인쇄 및 건조	- 스퀴지 압 - 스퀴지 속도	설비체크리스트	장비 셋팅 값
				- Ag Paste 는 사용 전에 5~10 정도 충분히 저어 준다 - 스크린 텐션 - 스냅업(Snap off) - 건조온도 - 건조시간	Iot 이력 카드 설비체크리스트	스페츌러 텐션게이지 다이얼게이지 온도 컨트롤러
				- 소부 온도 프로파일 확인	설비체크리스트 Iot 이력 카드	온도 컨트롤러
캐리어 테잎 캐리어 커버 릴			외관 검사	- 전극의 긁힘, 깨짐 등을 육안 검사를 실시	Iot 이력 카드	
				- 측정 완료 후 양품 수율 확인	Iot 이력 카드	네트워크 아날라이저
제품 라벨 포장 박스 박스테잎			포장	- 포장 기준에 적합하게 포장 하는지 확인 - 고객 요구 사항에 맞는 라벨 부착 확인	Iot 이력 카드	
				- 출하검사규격에 맞게 확인	출하 성적서	

10. 유해물질성적서

10.1 제품 성분분석



Test Report No. F690501/LF-CTSGP06-03060

Date: February 16, 2006

Page 1 of 2

To: AMOTECH CO., LTD.
5BL-1L, 617
Namchon-dong
Namdong-gu,
INCHEON 405-100
Korea

The following merchandise was submitted and identified by the client as :

Commodity : Dielectric Chip Antenna
SGS File No. : GP06-03060
Received Date : February 09, 2006
Test Performing Date : February 10, 2006
Test Performed : SGS Testing Korea tested the sample(s) selected by applicant with following results
Test Results : For further details, please refer to following page(s)

SGS Testing Korea Co. Ltd.

Brendan Lee
Patrick An
Monet Jeong
Jinee Song
/Testing Person

Jeff Jang / Technical Mgr
Jason Han / Lab Director

The above certificate is the accredited test items by Korea Laboratory Accreditation Schmee (KOLAS), which signed the ILAC-MRA.

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Dielectric Chip Antenna

**Test Report No. F690501/LF-CTSGP06-03060**

Date: February 16, 2006

Page 2 of 2

Sample No. : GP06-03060.001

Sample Description : Dielectric Chip Antenna

Style/Item No. : Dielectric Chip Antenna

Heavy Metals

Test Items	Unit	Test Method	MDL	Results
Cadmium(Cd)	mg/kg	US EPA 3050B(1996), US EPA 6010B(1996)	0.5	N.D.
Lead (Pb)	mg/kg	US EPA 3050B(1996), US EPA 6010B(1996)	5	N.D.
Mercury (Hg)	mg/kg	US EPA 3052(1996), US EPA 6010B(1996)	2	N.D.
Hexavalent Chromium (Cr VI)	mg/kg	US EPA 3060A(1996), US EPA 7196A(1992)	1	N.D.

Picture of Sample as Received:

*** End ***

- NOTE: (1) N.D. = Not detected.(<MDL)
(2) ppm = mg/kg
(3) MDL = Method Detection Limit
(4) Estimated expanded uncertainty U with a coverage factor k =2,
corresponding to a level of confidence of about 95%

The above certificate is the accredited test items by Korea Laboratory Accreditation Schmee (KOLAS), which signed the ILAC-MRA.

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Dielectric Chip Antenna

10.2 유전체 원료(powder)



Test Report No. F690501/LF-CTS/GP06-09443

Date: April 20, 2006

Page 1 of 2

To: AMOTECH CO., LTD.
5BL-1L, 617
Namchon-dong
Namdong-gu,
INCHEON 405-100
Korea

The following merchandise was submitted and identified by the client as :

Commodity : Dielectric Ceramic Powder
SGS File No. : GP06-09443
Received Date : April 13, 2006
Test Performing Date : April 14, 2006
Test Performed : SGS Testing Korea tested the sample(s) selected by applicant with following results
Test Results : For further details, please refer to following page(s)

SGS Testing Korea Co. Ltd.

Brendan Lee
Patrick An
Monet Jeong
Jinhee Song
/Testing Person

Jeff Jang / Technical Mgr

Jason Han / Lab Director

The above certificate is the accredited test items by Korea Laboratory Accreditation Scheme (KOLAS), which signed the ILAC-MRA.

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Dielectric Chip Antenna

**Test Report No.** F690501/LF-CTS/GP06-09443

Date: April 20, 2006

Page 2 of 2

Sample No. : GP06-09443.001**Sample Description** : Dielectric Ceramic Powder**Style/Item No.** : MNIT-20M(B)**Heavy Metals:**

Test Item	Unit	Test Method	MDL	Results
Cadmium(Cd)	mg/kg	US EPA 3050B(1998), US EPA 6010B(1996), ICP	0.5	N.D.
Lead (Pb)	mg/kg	US EPA 3050B(1998), US EPA 6010B(1996), ICP	5	N.D.
Mercury (Hg)	mg/kg	US EPA 3052(1998), US EPA 6010B(1996), ICP	2	N.D.
Hexamavalent Chromium (Cr VI)	mg/kg	US EPA 3060A(1998), US EPA 7106A(1992), UV	1	N.D.

Picture of Sample as Received:

*** End ***

- NOTE:**
- (1) N.D. = Not detected (<MDL)
 - (2) ppm = mg/kg
 - (3) MDL = Method Detection Limit
 - (4) Estimated expanded uncertainty U with a coverage factor k=2, corresponding to a level of confidence of about 95%

The above certificate is the accredited Test Report by Korea Laboratory Accreditation Scheme (KOLAS), which signed the ILAC-MRA.

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Dielectric Chip Antenna

10.3 Ag paste



Test Report No. F690501/LF-CTSGP06-0257

Date: January 11, 2006

Page 1 of 2

To: MICRO M CO., LTD.
Rm#503, B-dong, Bundangtechnopark
Yatap-dong
Bundang-gu
KYUNGKI-DO
Korea

The following merchandise was submitted and identified by the client as:

Commodity : PCC11837
SGS File No. : GP06-0257
Received Date : January 04, 2006
Test Performing Date : January 05, 2006
Test Performed : SGS Testing Korea tested the sample(s) selected by applicant with following results
Test Results : For further details, please refer to following page(s)
Buyer(s) : SAMSUNG

SGS Testing Korea Co. Ltd.

Brendan Lee
Patrick An
Monet Jeong
Jinhee Song
/Testing Person

Jeff Jang / Technical Mgr

Jason Han / Lab Director

The above certificate is the accredited test items by Korea Laboratory Accreditation Schmee (KOLAS), which signed the ILAC-MRA.

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Dielectric Chip Antenna



Test Report No. F690501/LF-CTSGP06-0257

Date: January 11, 2006

Page 2 of 2

Sample No. : GP06-0257.001

Sample Description : PCC11837

Style/Item No. : N/A

Comments : Material is silver paste.

Heavy Metals

Test Items	Unit	Test Method	MDL	Results
Cadmium(Cd)	mg/kg	US EPA 3050B(1996), US EPA 6010B(1996)	0.5	N.D.
Lead (Pb)	mg/kg	US EPA 3050B(1996), US EPA 6010B(1996)	5	12.0
Mercury (Hg)	mg/kg	US EPA 3052(1996), US EPA 6010B(1996)	2	N.D.
Hexavalent Chromium (Cr VI)	mg/kg	US EPA 3050A(1996), US EPA 7196A(1992)	1	N.D.

Picture of Sample as Received:



*** End ***

- NOTE: (1) N.D. = Not detected.(<MDL)
 (2) ppm = mg/kg
 (3) MDL = Method Detection Limit
 (4) Estimated expanded uncertainty U with a coverage factor = 2, k corresponding to a level of confidence of about 95%

The above certificate is the accredited test items by Korea Laboratory Accreditation Schmee (KOLAB), which signed the ILAC-MRA.

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Dielectric Chip Antenna

10.5 캐리어 테일



Test Report No. F890501/LF-CTSGP06-10291

Date: April 27, 2006

Page 1 of 3

To: CHEMTECH SOLUTION CO., LTD
#540-13, Goryem-ri
Chungbuk-myun
Pyungtak-city
GYEONGGI-DO
KOREA

The following merchandise was submitted and identified by the client as :

Commodity : CTS Anti-Static Clear sheet
SGS File No. : GP06-10291
Received Date : April 20, 2006
Test Performing Date : April 21, 2006
Test Performed : SGS Testing Korea tested the sample(s) selected by applicant with following results
Test Results : For further details, please refer to following page(s)

SGS Testing Korea Co. Ltd.

Brendan Lee
Monet Jeong
Jully Oh
Jerry Jung
(Testing Person)

Jeff Jang / Technical Mgr
Jason Han / Lab Director

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Dielectric Chip Antenna



Sample No. : GP05-10291.001
Sample Description : CTB Anti-Static Clear sheet
Style/Item No. : N/A
Comments : Material is MBS

Heavy Metals

Test Item	Unit	Test Method	MDL	Results
Cadmium(Cd)	mg/kg	EN 1122(2001), US EPA 6010B(1996), ICP	0.5	N.D.
Lead (Pb)	mg/kg	US EPA 3050B(1998), US EPA 6010B(1996), ICP	5	N.D.
Mercury (Hg)	mg/kg	US EPA 3052(1998), US EPA 6010B(1996), ICP	2	N.D.
Hexamethyl Chromium (Cr VI)	mg/kg	US EPA 3060A(1998), US EPA T1964(1992), UV	1	N.D.

Flame Retardants-PBBs/PBDEs

Test Item	Unit	Test Method	MDL	Results
Mono(bromodiphenyl)	mg/kg	US EPA 3540C, GC/MS	5	N.D.
Dibromodiphenyl	mg/kg	US EPA 3540C, GC/MS	5	N.D.
Tribromodiphenyl	mg/kg	US EPA 3540C, GC/MS	5	N.D.
Tetrabromodiphenyl	mg/kg	US EPA 3540C, GC/MS	5	N.D.
Heptabromodiphenyl	mg/kg	US EPA 3540C, GC/MS	5	N.D.
Hexabromodiphenyl	mg/kg	US EPA 3540C, GC/MS	5	N.D.
Pentabromodiphenyl	mg/kg	US EPA 3540C, GC/MS	5	N.D.
Octabromodiphenyl	mg/kg	US EPA 3540C, GC/MS	5	N.D.
Nonabromodiphenyl	mg/kg	US EPA 3540C, GC/MS	5	N.D.
Decabromodiphenyl	mg/kg	US EPA 3540C, GC/MS	5	N.D.
Mono(bromodiphenyl)ether	mg/kg	US EPA 3540C, GC/MS	5	N.D.
Dibromodiphenyl ether	mg/kg	US EPA 3540C, GC/MS	5	N.D.
Tribromodiphenyl ether	mg/kg	US EPA 3540C, GC/MS	5	N.D.
Tetrabromodiphenyl ether	mg/kg	US EPA 3540C, GC/MS	5	N.D.
Heptabromodiphenyl ether	mg/kg	US EPA 3540C, GC/MS	5	N.D.
Hexabromodiphenyl ether	mg/kg	US EPA 3540C, GC/MS	5	N.D.
Pentabromodiphenyl ether	mg/kg	US EPA 3540C, GC/MS	5	N.D.
Octabromodiphenyl ether	mg/kg	US EPA 3540C, GC/MS	5	N.D.
Nonabromodiphenyl ether	mg/kg	US EPA 3540C, GC/MS	5	N.D.
Decabromodiphenyl ether	mg/kg	US EPA 3540C, GC/MS	5	N.D.

NOTE: (1) N.D. = Not detected (<MDL)

(2) ppm = mg/kg

(3) MDL = Method Detection Limit

(4) - = No regulation

(5) ** = Qualitative analysis (No Unit)

(6) Negative = Undetectable / Positive = Detectable

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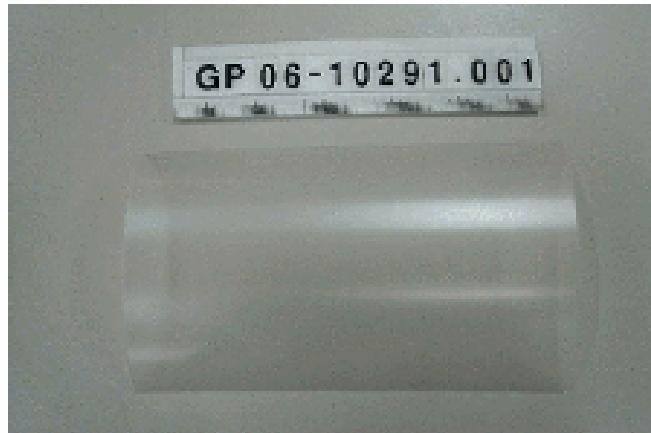


Test Report No. F690601/LF-CTSGP06-10291

Date: April 27, 2006

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Picture of Sample as Received:



*** End ***

NOTE: (1) N.D. = Not detected (<MDL)
(2) ppm = mg/kg
(3) MDL = Method Detection Limit
(4) - = No regulation
(5) " = Qualitative analysis (No Unit)
(6) Negative = Undetectable / Positive = Detectable

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Dielectric Chip Antenna

10.6 캐리어 커버



Test Report No. F690501/LF-CTS080091 **Date:** March 7, 2006 **Page 1 of 3**

To: SMT
349-4 Gochun-Dong
Euiwang-City
Kyunggi-Do
Korea

The following merchandise was submitted and identified by the client as :-

Commodity : Covertape
SGS File No. : G-48/2006-0614/1
Received Date : February 27, 2006
Test Performing Date : February 28, 2006
Test Performed : This Test was performed by SGS Taiwan Limited.
Test Result(s) : For further details, please refer to following page(s).

SGS Taiwan Ltd
/Testing Person

Jeff Jang / Technical Mgr

SGS Testing Korea Co., Ltd.



Jason Han / Director

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SGS Testing Korea Co., Ltd
111, Yeongil-dong, 355-5, Hopyeong-gu, Anyang-si, Gyeonggi-do, Korea 431-800
T +82 31 468 0001 F +82 31 468 029 www.krgpa.co.kr www.krgpa.com/greentestlab
100-2, Hwasun-ro, Dongan-eup, 359-1, Iksan-si, Jeollabuk-do, Korea 569-800 T +82 31 739 0009-10 F +82 31 739 0011

LAB 100

Member of SGS Group (Excentra Generation by SGS Worldwide)



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Dielectric Chip Antenna