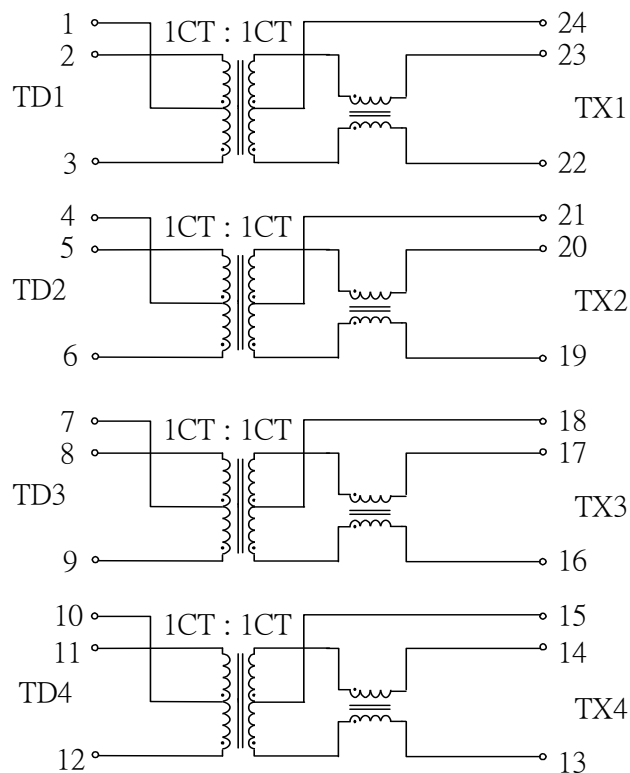


SAMPLE TEST DATA

A. ELECTRICAL SPECIFICATIONS @25°C

Inductance OCL:	350uH Min @ 100KHz	0.2V 8mA DC BIAS
Leakage Inductance:	0.50uH Max @ 100KHz	0.2V
Interwinding Capacitance:	25PF TYP @ 100KHz	0.2V
Turn Ratio:	1CT:1CT±5%	
Polarity:	2-23,5-20 ,8-17,11-14	In-Phase
Return Loss	0.5-30 MHz	- 18dB Min
	40.0MHz	- 14.4 dB Min
	50.0MHz	- 13.1 dB Min
	60-80MHz	- 12.0 dB Min
Cross Talk:	0.50-60MHz	- 40dB Min
	60-100MHz	-35dB Min
Common Mode Rejection:	0.5-100MHz	- 20dB Min
Isolation HI-POT:	1500VAC	1mA 1S
Product Type:	Green Product & Halogen Free Products	
Operating Temperature:	0°C TO 70°C	

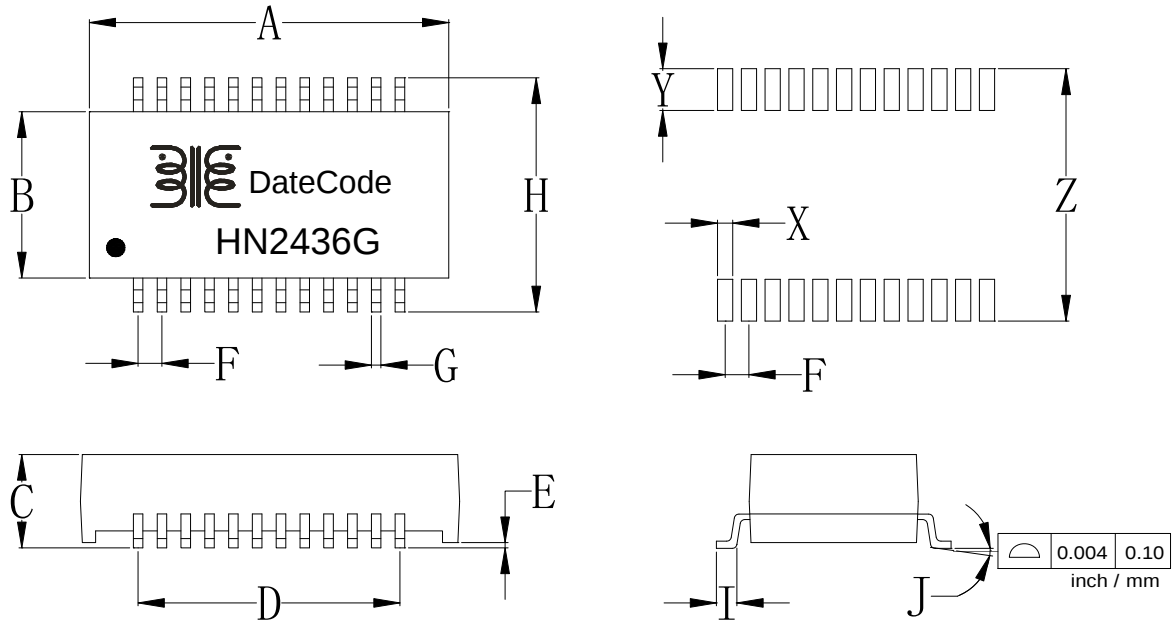
B. SCHEMATIC:



Mingtek Technology Corp.

SAMPLE TEST DATA

C. Mechanical:



DIM	MILLIMETERS (mm)		INCHES(inch)	
	MIN	MAX	MIN	MAX
A	14.60	15.60	0.575	0.614
B	6.60	7.60	0.260	0.299
C	4.5(max)		0.165(max)	
D	11.00(typical)		0.433(typical)	
E	0.15	0.45	0.006	0.018
F	1.00(typical)		0.039(typical)	
G	0.40(typical)		0.016(typical)	
H	9.50	10.50	0.374	0.413
I	0.75	1.25	0.030	0.049
J	0°	8°	0°	8°
X	0.64(typical)		0.025(typical)	
Y	1.78(typical)		0.070(typical)	
Z	10.77(typical)		0.424(typical)	

SAMPLE TEST DATA

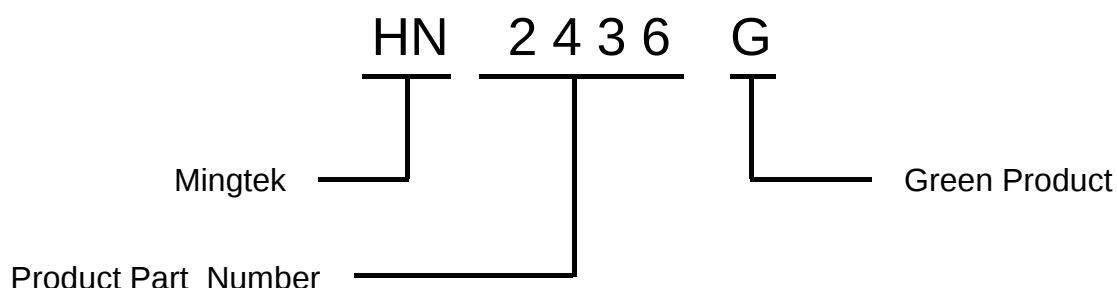
D. HAZARDOUS TEST REPORT:

Test Item(s)	Unit	Method	MDL	Result
Chromium VI(Cr+6)	ppm	As per US EPA 7196A and US EPA 3060A	<100	<100
Cadmium(Cd)	ppm	ICP-AES after as per EN1122, method B:2001 or other acid digestion	2	N.D
Mercury(Hg)	ppm	ICP-AES after as per US EPA 3052 or other acid digestion	2	N.D
Lead(Pb)	ppm	ICP-AES after as per US EPA 3050B or other acid digestion	<1000	<1000
PBBs(Polybrominated biphenyls)(CAS NO:67774-32-7)	%	With reference to 83/264/EEC.Analysis Was Performed by GC/MS/ECD or HPLC/DAD/MS	0.0005	N.D
PBBEs(PBDEs) (Polybrominated biphenyl ethers)	%	With reference to 83/264/EEC.Analysis Was Performed by GC/MS/ECD or HPLC/DAD/MS	0.0005	N.D

NOTE:

- (1) N.D = Not detected(<MDL)
- (2) ppm = mg/kg
- (3) MDL = Method Detection Limit

E. PART NUMBER LEGEND:



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SAMPLE TEST DATA

SPEC \ NO	1	2	3	4	5
L:(AT 100KHz 0.2V 8mA)					
350uH Min					
2-3	653	641	667	646	602
5-6	668	668	658	654	649
8-9	633	659	673	655	670
11-12	652	676	662	653	681
LK:(AT 100KHz 0.2V)					
0.5uH Max					
2-3(23-22short)	0.22	0.25	0.23	0.24	0.23
5-6(20-19 short)	0.24	0.21	0.22	0.25	0.22
8-9(17-16 short)	0.23	0.23	0.25	0.21	0.24
11-12(14-13 short)	0.22	0.24	0.23	0.21	0.21
CWW:(AT 100KHz 0.2V)					
25PF TYP					
2-3 TO 23-22	19.1	21.3	19.2	22.3	18.1
5-6 TO 20-19	21.7	19.9	19.1	18.4	18.8
8-9 TO 17-16	21.9	23.6	22.0	21.1	17.8
11-12 TO 14-13	21.7	20.6	22.4	17.1	19.5
Turns Ratio:					
(2-3):(23-22)=1CT:1±5%	OK	OK	OK	OK	OK
(5-6):(20-19)=1CT:1±5%	OK	OK	OK	OK	OK
(8-9):(17-16)=1CT:1±5%	OK	OK	OK	OK	OK
(11-12):(14-13)=1CT:1±5%	OK	OK	OK	OK	OK

MAIN TEST EQUIPMENT

- ☐ TOPWARD TPT-500 WITHSTANDING VOLTAGE TESTER
- ☒ HEWLETT PACKARD 4277A LCZ METER
- ☒ CHEN HWA 3250 AUTOMATIC TRANSFORMER TEST SYSTEM
- ☒ CHEN HWA 502A LOW-OHM METER
- ☐ RF NETWORK ANALYZERS 8712ET

Mingtek Technology Corp.

SAMPLE TEST DATA

SPEC \ NO	1	2	3	4	5
HI-POT:					
AT:1500VAC 1mA 1S					
2-3 TO 23-22	OK	OK	OK	OK	OK
5-6 TO 20-19	OK	OK	OK	OK	OK
8-9 TO 17-16	OK	OK	OK	OK	OK
11-12 TO 14-13	OK	OK	OK	OK	OK
Insertion Loss:					
-1.1dB Max(1-100MHz)					
TX1(2-3):					
30MHz	0.28	0.22	0.23	0.25	0.24
40MHz	0.30	0.26	0.25	0.30	0.31
50MHz	0.39	0.29	0.30	0.39	0.35
60MHz	0.47	0.35	0.36	0.48	0.42
80MHz	0.54	0.50	0.45	0.54	0.48
100MHz	0.59	0.56	0.58	0.61	0.57
TX2(5-6):					
30MHz	0.26	0.23	0.22	0.28	0.26
40MHz	0.30	0.27	0.28	0.30	0.34
50MHz	0.35	0.32	0.34	0.36	0.39
60MHz	0.41	0.38	0.40	0.41	0.45
80MHz	0.45	0.37	0.38	0.52	0.51
100MHz	0.46	0.48	0.57	0.58	0.53
TX3(8-9):					
30MHz	0.25	0.24	0.24	0.27	0.27
40MHz	0.28	0.23	0.25	0.24	0.23
50MHz	0.31	0.36	0.31	0.33	0.30
60MHz	0.36	0.41	0.34	0.41	0.42
80MHz	0.48	0.40	0.47	0.50	0.45
100MHz	0.58	0.53	0.50	0.56	0.57
MAIN TEST EQUIPMENT					
☒ TOPWARD TPT-500 WITHSTANDING VOLTAGE TESTER ☐ HEWLETT PACKARD 4277A LCZ METER ☐ CHEN HWA 3250 AUTOMATIC TRANSFORMER TEST SYSTEM ☐ CHEN HWA 502A LOW-OHM METER ☒ RF NETWORK ANALYZERS 8712ET					

Mingtek Technology Corp.

SAMPLE TEST DATA

SPEC \ NO	1	2	3	4	5
TX4(11-12):					
30MHz	0.23	0.27	0.23	0.25	0.29
40MHz	0.30	0.27	0.35	0.29	0.30
50MHz	0.35	0.33	0.40	0.35	0.27
60MHz	0.44	0.41	0.45	0.35	0.45
80MHz	0.41	0.45	0.52	0.46	0.50
100MHz	0.52	0.71	0.67	0.58	0.56
Return Loss:					
-18dB Min(0.5-30MHz)					
-14.4dB Min(40MHz)					
-13.1dB Min(50MHz)					
-12dB Min(60-80MHz)					
TX1(2-3):					
30MHz	25.8	28.7	28.0	32.1	26.8
40MHz	22.5	24.5	23.1	26.8	26.1
50MHz	20.5	21.5	21.8	22.6	20.5
60MHz	19.5	20.6	22.6	22.0	21.3
80MHz	21.7	17.6	19.6	18.2	18.6
TX2(5-6):					
30MHz	30.2	26.5	28.5	28.4	29.8
40MHz	26.4	25.1	23.5	24.0	26.4
50MHz	24.3	20.5	21.4	22.6	22.8
60MHz	23.1	23.1	20.3	19.8	23.1
80MHz	24.4	21.0	18.3	19.1	20.3
TX3(8-9):					
30MHz	28.2	27.7	26.8	27.6	28.6
40MHz	24.5	25.9	23.4	25.8	26.1
50MHz	22.3	22.6	21.8	20.9	22.3
60MHz	21.2	21.4	20.5	20.3	22.5
80MHz	19.4	20.3	18.8	20.3	21.4
MAIN TEST EQUIPMENT					
☐ TOPWARD TPT-500 WITHSTANDING VOLTAGE TESTER					
☐ HEWLETT PACKARD 4277A LCZ METER					
☐ CHEN HWA 3250 AUTOMATIC TRANSFORMER TEST SYSTEM					
☒ RF NETWORK ANALYZERS 8712ET					

Mingtek Technology Corp.

SAMPLE TEST DATA

SPEC \ NO	1	2	3	4	5
TX4(11-12):					
30MHz	30.2	28.6	27.9	28.8	27.9
40MHz	27.4	23.5	24.0	26.7	25.5
50MHz	25.6	24.1	23.1	24.7	24.0
60MHz	24.1	23.0	22.1	22.9	22.6
80MHz	23.2	21.5	20.6	21.8	20.6
Cross Talk:					
-40dB Min (0.5-60MHz)					
-35dB Min (60-100MHz)					
TX1 TO TX2:					
30MHz	56.5	57.5	59.5	60.2	57.6
60MHz	55.2	55.1	52.3	55.6	52.1
80MHz	48.5	48.6	46.7	50.2	49.1
100MHz	44.5	46.2	45.8	47.6	47.6
TX2 TO TX3:					
30MHz	61.3	60.2	58.9	57.9	59.3
60MHz	55.6	54.9	55.6	54.6	55.8
80MHz	49.8	51.8	52.1	49.8	48.7
100MHz	45.8	47.6	48.6	45.6	43.5
TX3 TO TX4:					
30MHz	63.5	62.5	59.9	58.3	57.5
60MHz	57.9	57.8	54.6	52.8	53.4
80MHz	54.6	53.6	52.2	49.8	48.9
100MHz	49.1	48.5	47.6	46.8	45.8

MAIN TEST EQUIPMENT

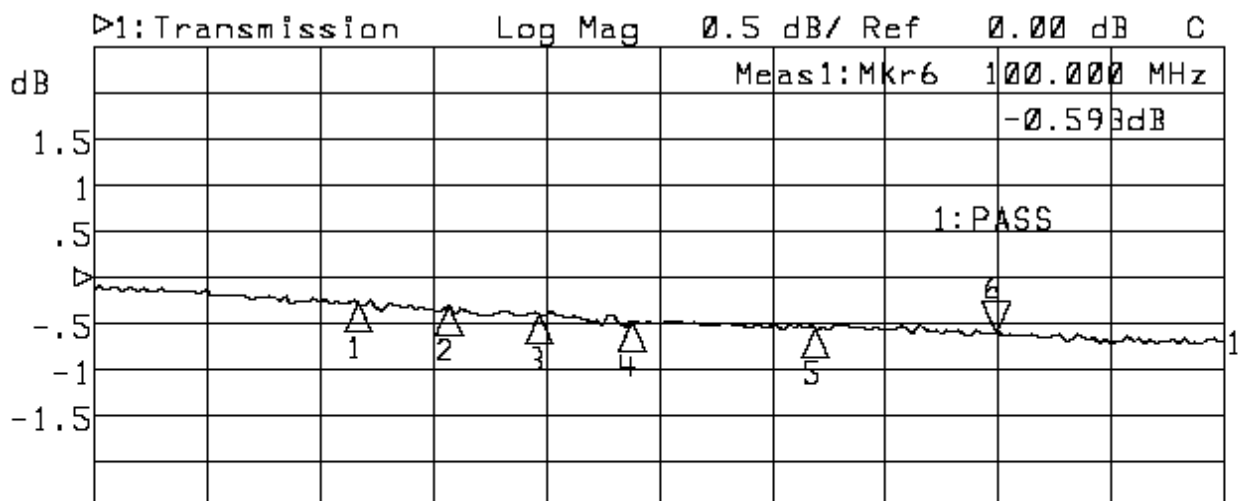
- ☐ TOPWARD TPT-500 WITHSTANDING VOLTAGE TESTER
- ☐ HEWLETT PACKARD 4277A LCZ METER
- ☐ CHEN HWA 3250 AUTOMATIC TRANSFORMER TEST SYSTEM
- ☐ CHEN HWA 502A LOW-OHM METER
- ☒ RF NETWORK ANALYZERS 8712ET

SAMPLE TEST DATA

P/N:HN2436G

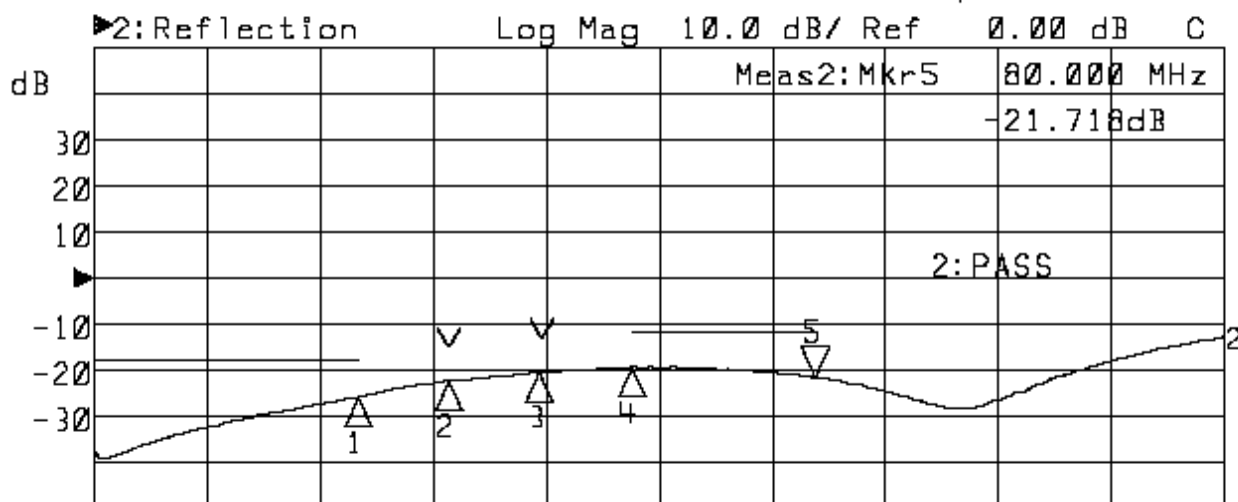
NO:01

Insertion Loss and Return Loss (TX1)



Start 1.000 MHz

Stop 125.000 MHz



Start 1.000 MHz

Stop 125.000 MHz

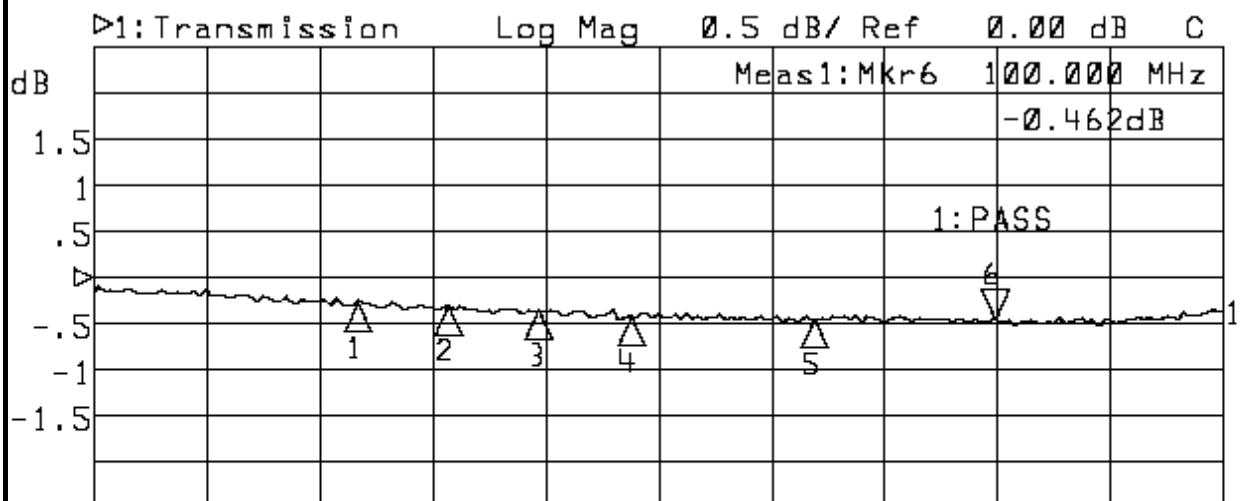
1: Mkr (MHz)	dB	2: Mkr (MHz)	dB
1: 30.0000	-0.282	1: 30.0000	-25.873
2: 40.0000	-0.303	2: 40.0000	-22.515
3: 50.0000	-0.397	3: 50.0000	-20.538
4: 60.0000	-0.474	4: 60.0000	-19.525
5: 80.0000	-0.540	5: 80.0000	-21.718
6: 100.0000	-0.593		

SAMPLE TEST DATA

P/N:HN2436G

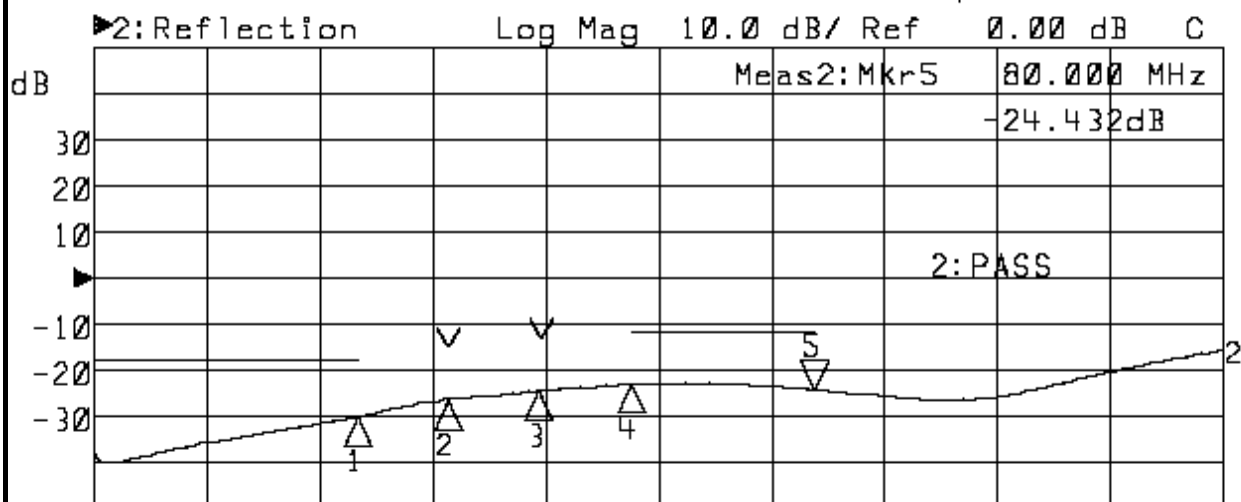
NO:01

Insertion Loss and Return Loss (TX2)



Start 1.000 MHz

Stop 125.000 MHz



Start 1.000 MHz

Stop 125.000 MHz

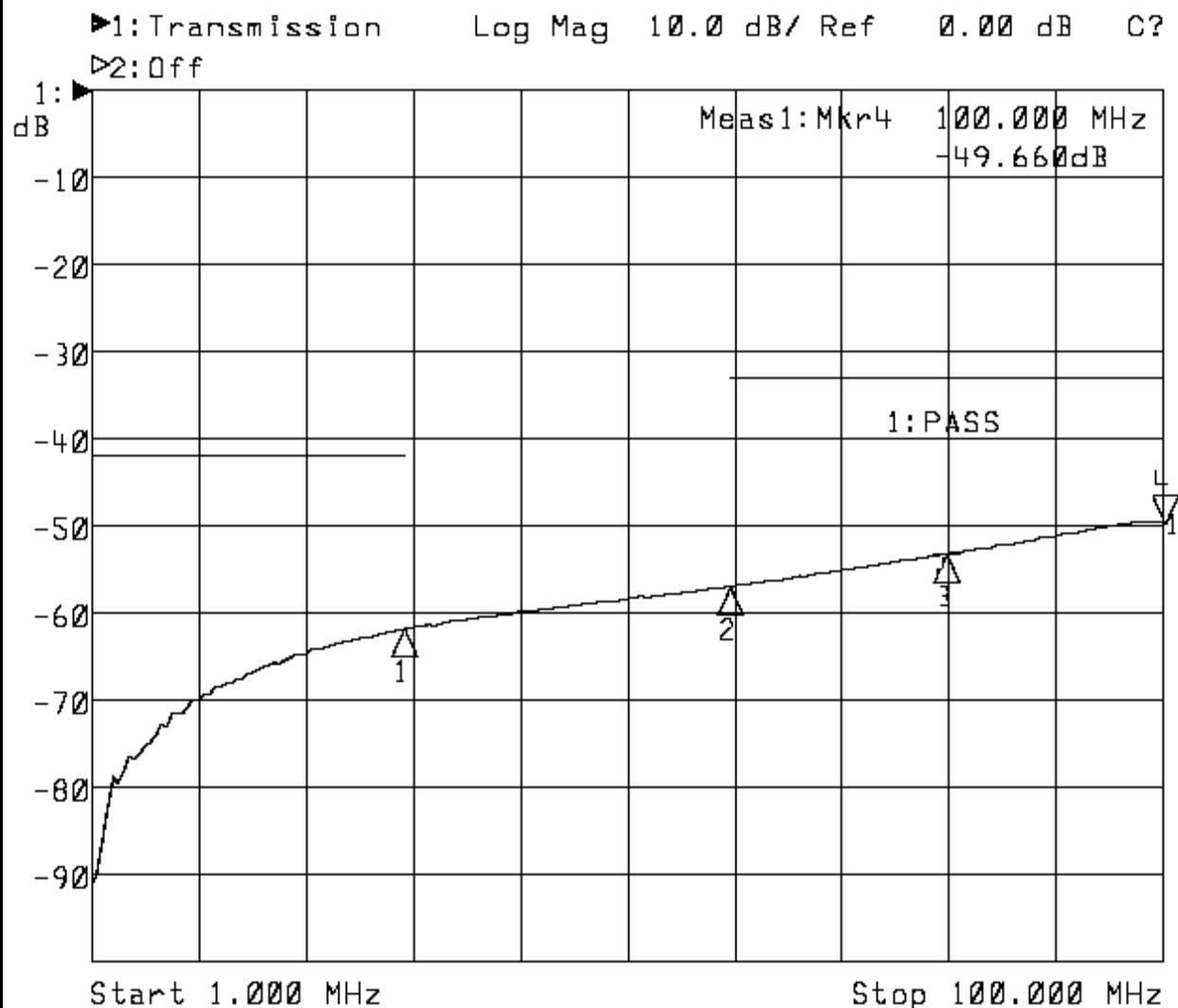
1: Mkr (MHz)	dB	2: Mkr (MHz)	dB
1: 30.0000	-0.264	1: 30.0000	-30.214
2: 40.0000	-0.306	2: 40.0000	-26.456
3: 50.0000	-0.357	3: 50.0000	-24.349
4: 60.0000	-0.419	4: 60.0000	-23.160
5: 80.0000	-0.453	5: 80.0000	-24.432
6: 100.0000	-0.462		

SAMPLE TEST DATA

P/N:HN2436G

NO:01

Cross Talk(TX1 TO TX2):



1: Mkr (MHz)	dB	2: Mkr (MHz)	dB
1: 30.0000	-61.863		
2: 60.0000	-56.962		
3: 80.0000	-53.256		
4: 100.0000	-49.660		

變壓器的絕緣體與耐壓值測試表

Transformers of insulation and voltage resistance test

項目 Project	內容 Content	規格值 Metric values	實測值 Measuring value
1.	外觀 Appearance	Specifications	、
2.	導體 徑 mm Bare Wire Dia	+ 0.008-0.008	0.09
3.	完成 外徑 mm Overall Dia	0.117-0.136	0.125
4.	針 孔 (常 態) Pin Hole (Normal State)	03 MAX	0
5.	針 孔 (捲 繞 , 伸 長 5 %) Pin Hole (Elongated)	No cracking	In line with
6.	絕 緣 破 壞 電 壓 V Dielectric Strength AC	3500 MIN	14000
7.	伸 長 率 % Elongation	15 MIN	44
8.	導 體 電 阻 20℃ Ω / km Conductor Resistance	2959.000 MAX	2721.000
9.	直 焊 性 (400 ℃) sec Solderability	2.0 MAX	0.7
10.	耐 軟 性 (200 ℃) 以上 Thermoplastic Flow	No Short circuit	In line with
11.	耐 熱 衝 擊 (150 ℃) Heat Shock	No cracking	In line with
12.	密 著 性 Adtience	No cracking	In line with
13.	耐 溶 性 Resistance to Solvent	No cracking	In line with
14.	接 著 力 g Bonding Strength Test	-----	-----
15.	溶 解 性 % Solution Test	-----	-----

*針腳.腳面之上錫功能測試

1. 上錫條件

錫材：Sn99.3/0.7 銅

助焊劑：R Type Flux

錫爐溫度：245 ± 5℃

上錫時間：5 秒

2. 在每批產品中隨機抽取5只做上錫功能測試

3. 用顯微鏡檢查每只產品的任一針腳必須有 95 % 以上的面積上錫良好

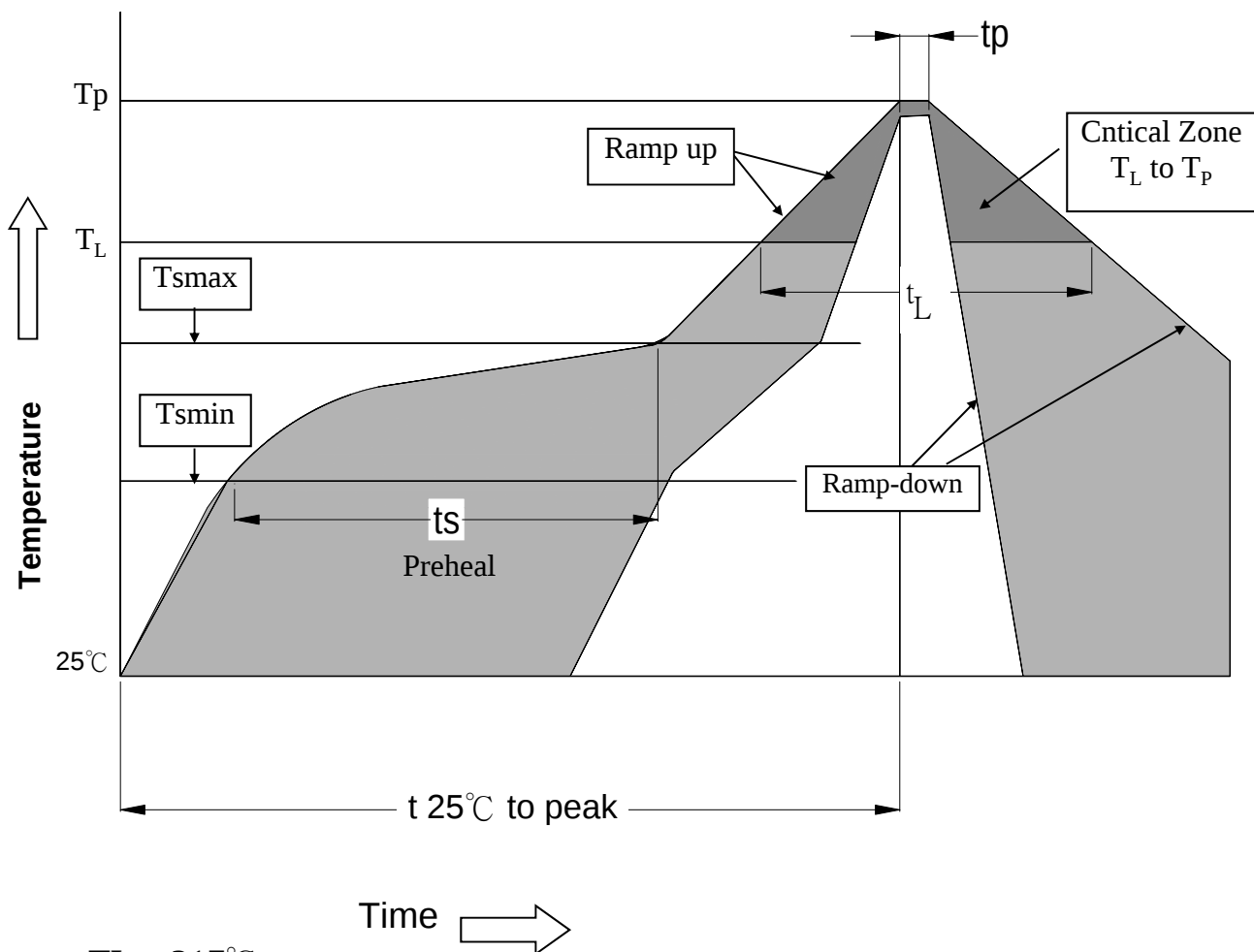
4. 每個經上錫測試後的產品都要測試通過後才能出貨



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SAMPLE TEST DATA

Recommended Reflow Soldering Curve:



$T_L = 217^{\circ}\text{C}$

$T_p = 245 \pm 5^{\circ}\text{C}$

$t_s = 60 \sim 90\text{s}$

$t_{s \text{ max}} = 190^{\circ}\text{C}$

$t_{s \text{ min}} = 110^{\circ}\text{C}$

$t_L = 60 \sim 90\text{s}$

$t_p = 10\text{s max}$

$T_{25^{\circ}\text{C to peak}} = 6\text{min max}$

Ramp up rate = 3°C/s max

Ramp down rate = 6°C/s max

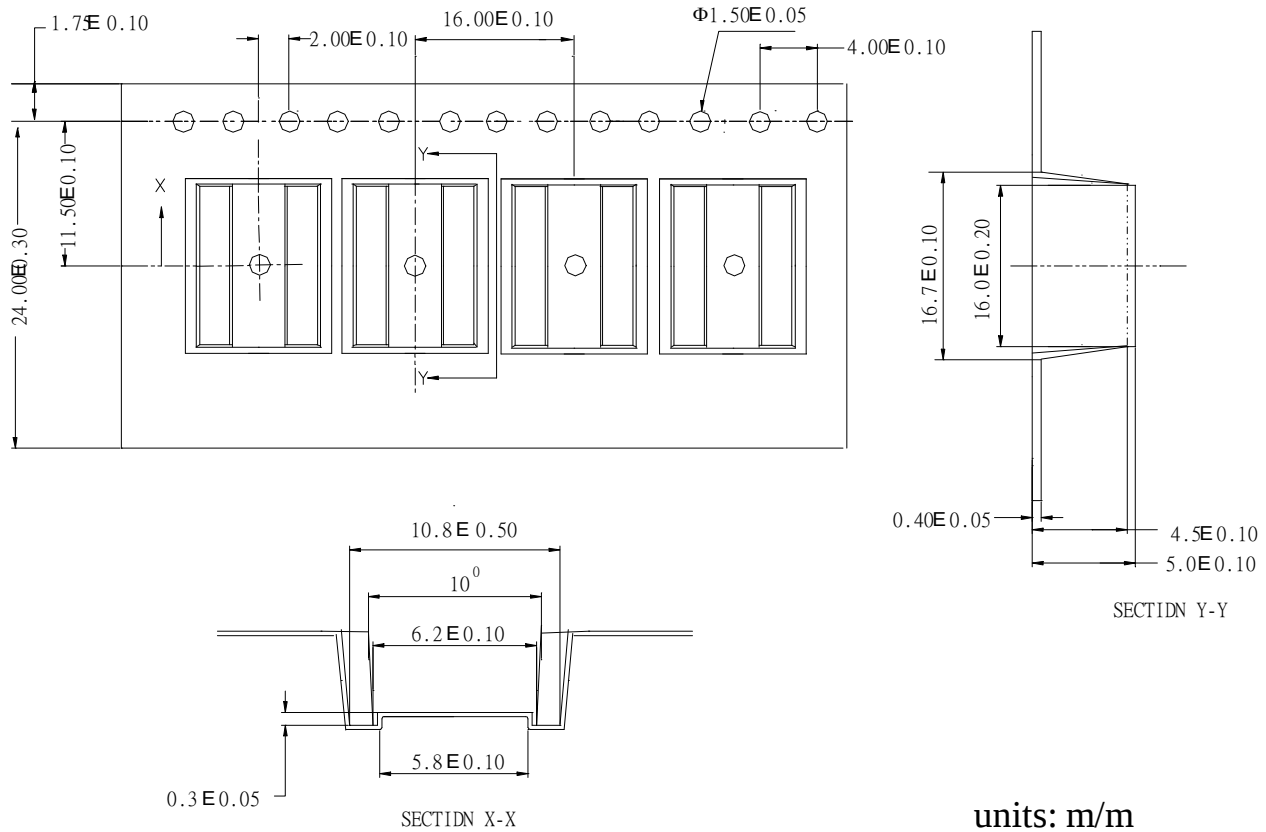
*ROHS Compliant

*Solder wire SAC 305 Sn 96.5/Ag 3.0/Cu 0.5

SAMPLE TEST DATA

1. PACKAGE AND APPEARANCE REQUIREMENTS :

1.1 REEL PACKAGE:



units: m/m

850PCS/REEL
7BOX/CARTON
5950PCS/CARTON

MSL:

1. Grade: 2

2. Floor life: Unlimited

