湖北磁创电子科技有限公司

产品承认书

CUSTOMER：

CUSTOMER P/N ：

PPT P/N: **PM6C-2004F**

DESCRIPTION： **1000 BASE-T TRANSFORMER MODULES**

ATTACHMENT：

■ SPECIFICATION

■ SAMPLE Q'TY OF SAMPLES _____ PCS

RoHS COMPLIANT

湖北磁创电子科技有限公司		APPROVAL SIGNATURE (客户承认签章)
发行 ISSUED		
检查 CHECKED BY		
审核 APPROVAL		
日期 DATE: 年 月 日		日期 DATE:

PPT

湖北磁创电子科技有限公司

Hubei Magnetic Electron Technology Co.,Ltd

TEL:(86)755-88367400 FAX: (86)755-29625890 Email: sales@pptchina.cn

PLEASE REPLY THIS SHEET TO US AFTER SIGNATURE(请签字后回传本页)

1. FEATURES:

1.1 Compliant with IEEE 802.3u and ANSI X3.263 standards including 350 uH OCL with 8 mA DC Bias .

1.2 Symmentrical TX and RX channels for Auto MDI/MDIX capability.

1.3 RoHS-6 peak reflow temperature rating 245℃

1.4 Operating temperature rang is 0℃-70℃.

1.5 Storage temperature rang is -40℃～+85℃.

1.6 Designed To Meet IEEE 802.30 Requirement.

1.7 Remark:Contact PPT For Further Requirements.

2.ELECTRICAL SPECIFICATIONS @25℃

2.1 OCL : 350 uH Min. @ 100 KHz, 100mV with 8 mA DC Bias

2.2 Turn ratio: 1CT:1CT(TX1-TX4)±5%@ 100 KHz, 100mV

2.3 Primary DCR : 1.5 Ω Max

2.4 L.K. : 0.5uHMax 100KHz,0.1V

2.5 Isolation HI-POT: 1500VAC 1mA 2Second

2.6 Insertion Loss : 1~100MHz= -1.0dBMax

2.7 Return Loss : 1-40 MHz : -18.0 dB Min

50 MHz : -16.0 dB Min

60-80 MHz : -12.0 dB Min

100 MHz : -10.0 dB Min

2.8 Cross Talk :30MHz : -45.0 dB Min

60MHz : -40.0dB Min

100MHz : -35.0dB Min

2.9 Differential to Common Mode Rejection :

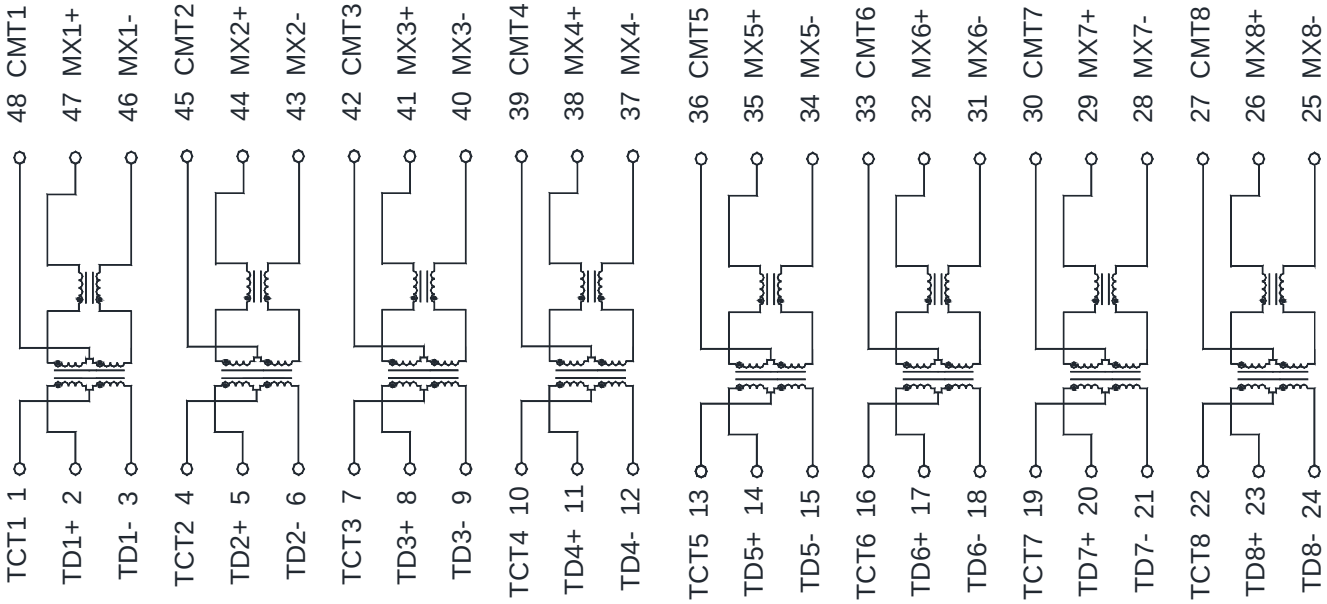
30MHz : -47.0 dB Min

60MHz : -37.0dB Min

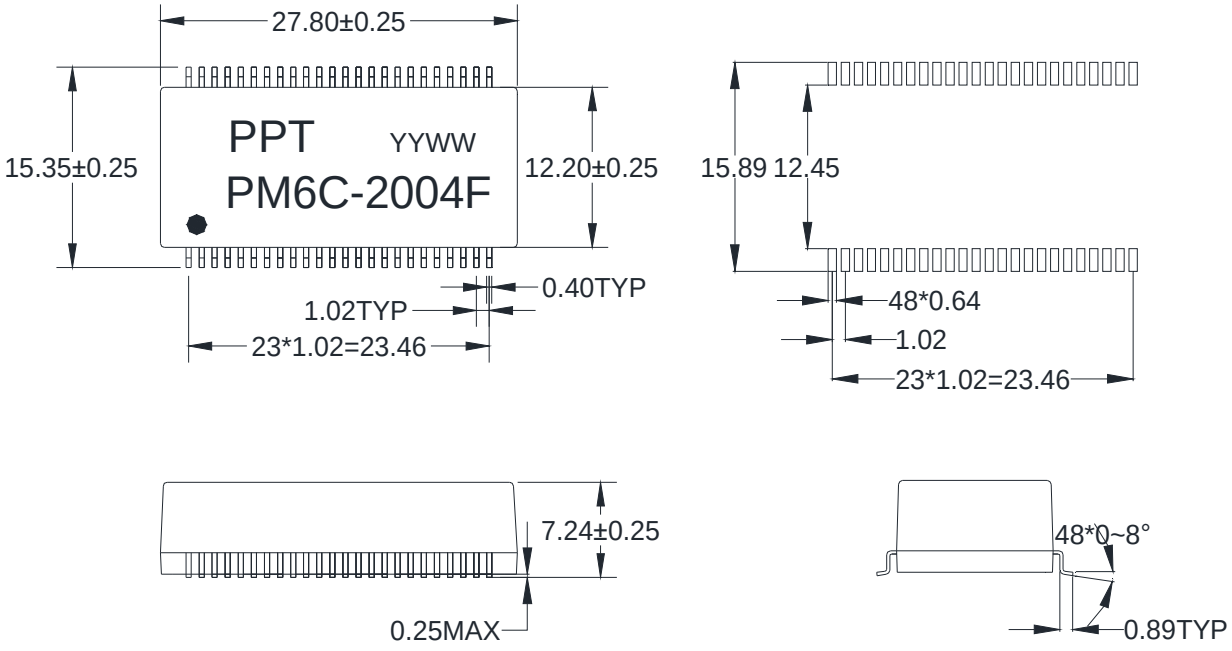
100MHz : -33.0dB Min

RoHS COMPLIANT

3. SCHEMATICS:



4. DIMENSIONS & MARKING:



Dimension : mm

Unless otherwise specified , all tolerance are ± 0.25

RoHS COMPLIANT

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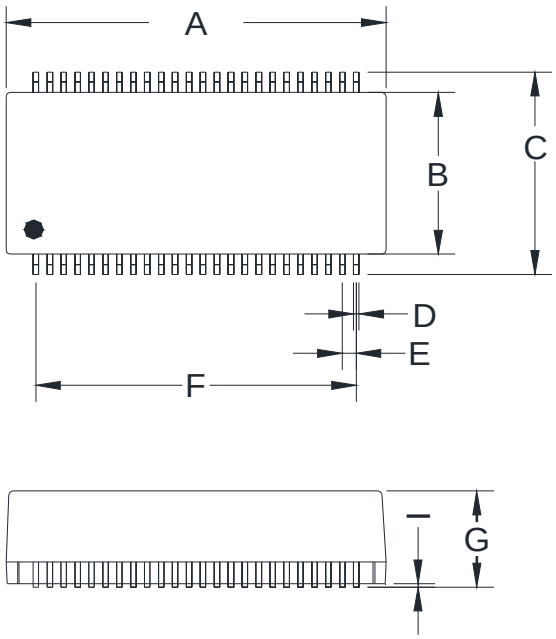
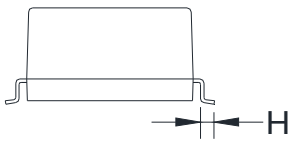
			PART NO. :PM6C-2004F





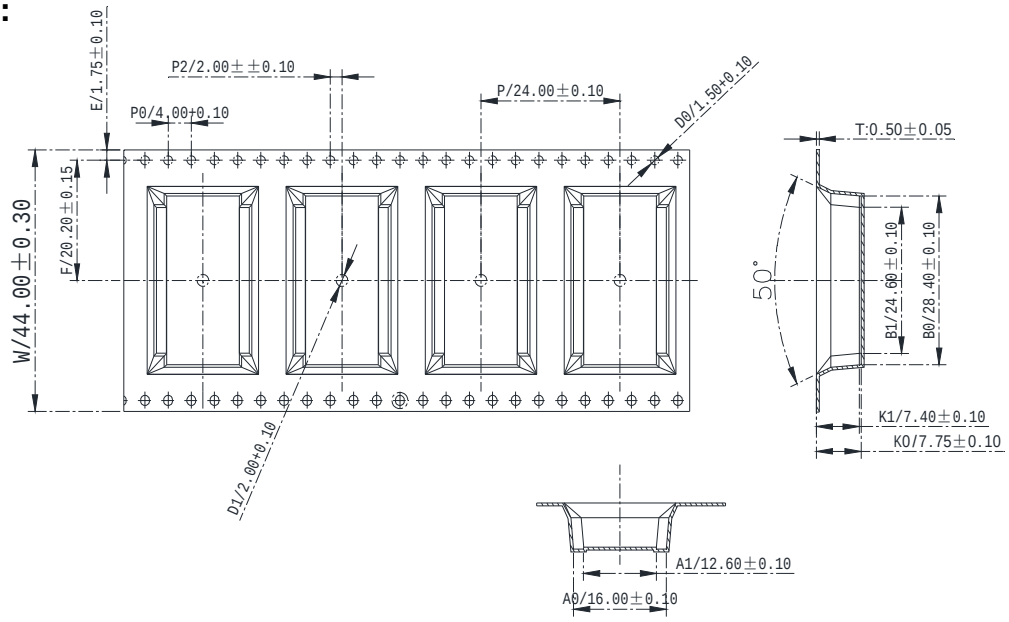
磁创新成品PM6C-2004F外观尺寸测量数据

内容 / 项目	SPEC	1	2	3	4	5	判定	单位
A	27.80±0.25	27.93	27.94	27.93	27.96	27.93	OK	mm
B	12.20±0.25	12.10	12.09	12.10	12.11	12.10	OK	
C	15.35±0.25	15.43	15.46	15.43	15.44	15.45	OK	
D	0.40TYP	0.39	0.38	0.39	0.40	0.39	OK	
E	1.02TYP	1.00	1.01	1.02	1.01	1.00	OK	
F	23.46TYP	23.45	23.43	23.45	23.46	23.46	OK	
G	7.24±0.25	7.35	7.33	7.37	7.34	7.35	OK	
H	0.89TYP	0.88	0.87	0.86	0.88	0.90	OK	
I	0.25MAX	0.20	0.21	0.23	0.22	0.23	OK	

RoHS COMPLIANT

DRAWN BY:	CHECKED BY:	APPROVED BY:	CUSTOMER:
			PART NO. :PM6C-2004F

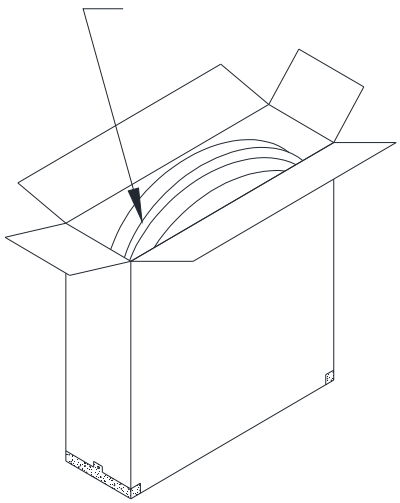
5. Package :



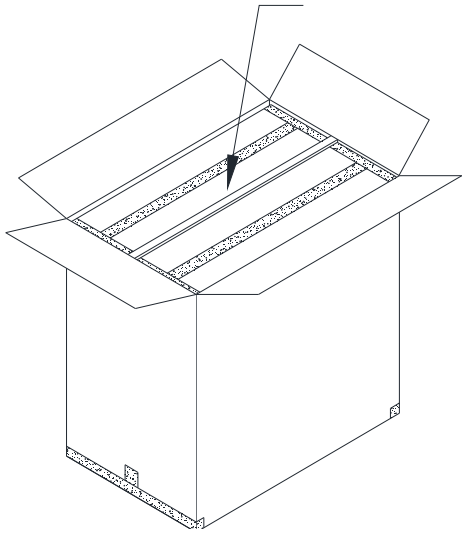
Units:mm Tolerances:±0.10

REEL MECHANICAL DIMENSION

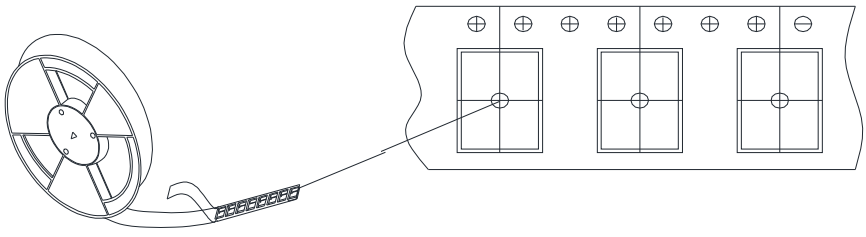
每内箱装2卷产品



每外箱装2内箱(共4卷产品)



EXPORT CARTON:370(L)*270(W)*370(H)



ONE ROLL:350

FOUR ROLL BOX CARTON:1400

RoHS COMPLIANT

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			PART NO: PM6C-2004F
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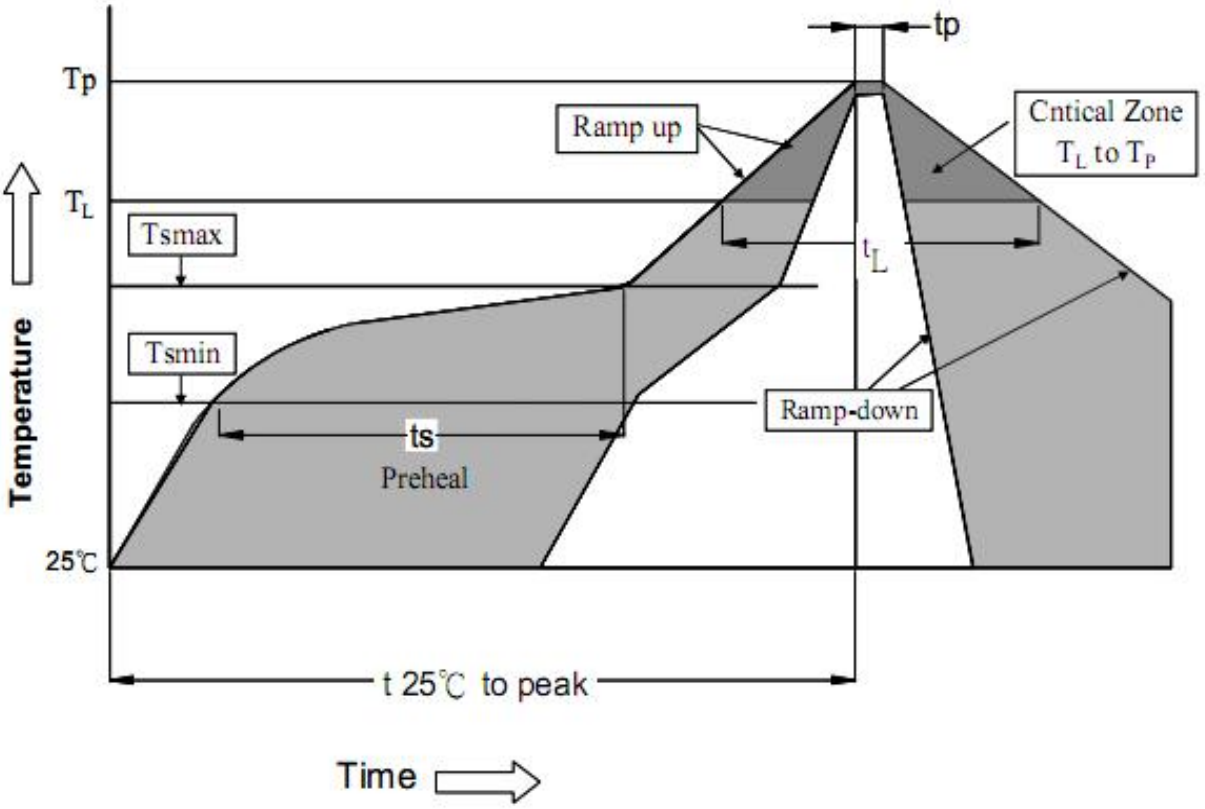
6. Recommended Reflow Soldering Curve:



TL = 217℃
Tp = 245℃

ts=60-180s	Ts max=200℃	Ts min=150℃
tL=60-150s	tp=20-40s	T25℃ to peak=8min

Ramp up rate=3℃/s max
Ramp down rate=6℃/s
*ROHS Compliant

DRAWN BY:	CHECKED BY:	APPROVED BY:	CUSTOMER:
			PART NO. :PM6C-2004F

PM6C-2004F TEST DATA PAGE: 7 OF 11

TEST ITEM	OCL								LK								DCR								HI-POT
	350uH Min.100KHz,0.1V 8mA DC								100KHz,0.1V 0.5uHMax								Primary 1.5Ω Max.								1500VAC 1mA 2S
	2-3	5-6	8-9	11-12	14-15	17-18	20-21	23-24	47-46	44-43	41-40	38-37	35-34	32-31	29-28	26-25	2-3	5-6	8-9	11-12	14-15	17-18	20-21	23-24	Pri. TO Sec.
1	639.68	606.61	659.91	697.93	635.24	654.23	651.45	624.15	0.21	0.17	0.21	0.24	0.25	0.22	0.23	0.25	0.738	0.795	0.719	0.825	0.756	0.764	0.825	0.816	PASS
2	599.9	691.44	645.35	706.92	642.15	625.35	641.52	648.35	0.22	0.22	0.22	0.23	0.22	0.23	0.24	0.24	0.784	0.778	0.785	0.809	0.788	0.809	0.814	0.825	PASS
3	675.99	642.01	638.75	617.43	625.12	621.02	636.25	658.47	0.19	0.24	0.21	0.19	0.18	0.2	0.26	0.2	0.726	0.708	0.797	0.793	0.815	0.793	0.789	0.745	PASS
4	632.34	683.33	688.81	635.58	652.14	635.12	615.45	635.24	0.22	0.16	0.16	0.25	0.2	0.24	0.25	0.18	0.797	0.774	0.78	0.799	0.823	0.745	0.764	0.784	PASS
5	701.02	638.14	657.15	643.37	621.45	635.45	637.85	643.91	0.23	0.24	0.17	0.19	0.18	0.22	0.24	0.19	0.761	0.789	0.734	0.878	0.794	0.856	0.854	0.8443	PASS
AVERAGE	650	652	658	660	635	634	637	642	0.21	0.21	0.19	0.22	0.21	0.22	0.24	0.21	0.76	0.77	0.76	0.82	0.80	0.79	0.81	0.80	**N/A**
CPK	2.5	2.9	5.3	2.6	7.6	7.4	7.3	7.5	6.29	2.55	3.78	3.30	3.30	6.25	7.48	3.08	8.23	6.96	7.16	6.62	8.95	5.49	6.70	5.96	**N/A**
MIN	600	607	639	617	621	621	615	624	0.19	0.16	0.16	0.19	0.18	0.20	0.23	0.18	0.73	0.71	0.72	0.79	0.76	0.75	0.76	0.75	**N/A**
MAX	701	691	689	707	652	654	651	658	0.23	0.24	0.22	0.25	0.25	0.24	0.26	0.25	0.80	0.80	0.80	0.88	0.82	0.86	0.85	0.84	**N/A**
MAX-MIN	101	85	50	89	31	33	36	34	0.04	0.08	0.06	0.06	0.07	0.04	0.03	0.07	0.07	0.09	0.08	0.09	0.07	0.11	0.09	0.10	**N/A**

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REV.: B

PM6C-2004F TEST DATA PAGE: 8 OF 11

TEST ITEM	T/R 50KHz,1V				Insertion Loss								Return Loss											
	1CT:1CT±5%				TX1	RX1	RX2	TX2	TX3	RX3	RX4	TX4	TX1				RX1				RX2			
					1-100MHz								1-40MHz	50MHz	60-80MHz	100MHz	1-40MHz	50MHz	60-80MHz	100MHz	1-40MHz	50MHz	60-80MHz	100MHz
	TX1	RX1	RX2	TX2	-1.0dB Max								-18.0dB Min.	-16.0dB Min.	-12.0dB Min.	-10.0dB Min.	-18.0dB Min.	-16.0dB Min.	-12.0dB Min.	-10.0dB Min.	-18.0dB Min.	-16.0dB Min.	-12.0dB Min.	-10.0dB Min.
1	PASS	PASS	PASS	PASS	-0.68	-0.66	-0.74	-0.71	-0.69	-0.67	-0.71	-0.72	-30.52	-23.12	-19.66	-16.54	-33.57	-25.24	-19.32	-15.35	-35.37	-24.57	-19.14	-33.58
2	PASS	PASS	PASS	PASS	-0.75	-0.68	-0.68	-0.68	-0.74	-0.68	-0.69	-0.68	-31.24	-22.81	-18.56	-15.36	-31.27	-23.28	-18.92	-14.36	-36.54	-22.68	-18.62	-32.01
3	PASS	PASS	PASS	PASS	-0.66	-0.61	-0.72	-0.75	-0.65	-0.65	-0.72	-0.75	-31.57	-23.85	-20.03	-14.25	-31.60	-23.78	-20.97	-15.98	-33.27	-21.60	-17.57	-30.99
4	PASS	PASS	PASS	PASS	-0.62	-0.68	-0.62	-0.61	-0.61	-0.62	-0.65	-0.61	-29.61	-22.65	-19.17	-14.69	-33.58	-24.28	-21.06	-13.54	-31.60	-23.26	-19.15	-32.58
5	PASS	PASS	PASS	PASS	-0.65	-0.74	-0.68	-0.62	-0.60	-0.73	-0.68	-0.62	-33.57	-25.92	-19.33	-15.68	-31.01	-22.26	-19.50	-14.76	-30.99	-21.44	-18.92	-34.54
AVERAGE	N/A	N/A	N/A	N/A	-0.67	-0.67	-0.69	-0.67	-0.66	-0.67	-0.69	-0.68	-31.30	-23.67	-19.35	-15.30	-32.21	-23.77	-19.95	-14.80	-33.55	-22.71	-18.68	-32.74
CPK	N/A	N/A	N/A	N/A	2.25	2.33	2.26	1.83	1.96	2.71	3.77	1.77	3.01	1.91	4.44	1.99	3.74	2.33	2.67	1.72	2.18	1.74	3.39	5.51
MIN	N/A	N/A	N/A	N/A	-0.75	-0.74	-0.74	-0.75	-0.74	-0.73	-0.72	-0.75	-33.57	-25.92	-20.03	-16.54	-33.58	-25.24	-21.06	-15.98	-36.54	-24.57	-19.15	-34.54
MAX	N/A	N/A	N/A	N/A	-0.62	-0.61	-0.62	-0.61	-0.60	-0.62	-0.65	-0.61	-29.61	-22.65	-18.56	-14.25	-31.01	-22.26	-18.92	-13.54	-30.99	-21.44	-17.57	-30.99
MAX-MIN	N/A	N/A	N/A	N/A	0.13	0.13	0.12	0.14	0.14	0.11	0.07	0.14	3.96	3.27	1.47	2.29	2.57	2.98	2.14	2.44	5.55	3.13	1.58	3.55

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REV.: B

PM6C-2004F TEST DATA PAGE: 9 OF 11

TEST ITEM	Return Loss																				Cross talk		
	TX2				TX3				RX3				RX4				TX4				TX1&RX1		
	1-40MHz	50MHz	60-80MHz	100MHz	1-40MHz	50MHz	60-80MHz	100MHz	1-40MHz	50MHz	60-80MHz	100MHz	1-40MHz	50MHz	60-80MHz	100MHz	1-40MHz	50MHz	60-80MHz	100MHz	30MHz	60MHz	100MHz
	-18.0dB Min.	-16.0dB Min.	-12.0dB Min.	-10.0dB Min.	-18.0dB Min.	-16.0dB Min.	-12.0dB Min.	-10.0dB Min.	-18.0dB Min.	-16.0dB Min.	-12.0dB Min.	-10.0dB Min.	-18.0dB Min.	-16.0dB Min.	-12.0dB Min.	-10.0dB Min.	-18.0dB Min.	-16.0dB Min.	-12.0dB Min.	-10.0dB Min.	-45.0dB Min.	-40.0dB Min.	-35.0dB Min.
1	-31.26	-23.12	-19.66	-13.54	-30.14	-22.36	-18.56	-14.35	-33.80	-26.14	-18.36	-13.58	-35.37	-24.57	-18.35	-13.69	-32.06	-25.36	-20.02	-13.25	-49.25	-44.25	-39.54
2	-30.45	-22.81	-18.56	-14.56	-32.36	-22.81	-18.69	-15.83	-32.68	-23.31	-17.36	-14.36	-34.60	-23.01	-16.71	-14.52	-30.25	-21.65	-19.65	-14.02	-48.25	-44.71	-40.26
3	-32.36	-23.85	-20.03	-15.36	-31.65	-22.42	-19.56	-14.92	-30.02	-20.96	-19.36	-15.02	-32.56	-20.31	-18.36	-15.02	-31.58	-21.30	-18.23	-15.36	-48.36	-46.12	-39.25
4	-30.86	-22.65	-19.17	-15.02	-29.65	-21.63	-19.37	-15.23	-33.07	-24.68	-22.36	-14.93	-33.02	-24.36	-20.58	-14.96	-33.25	-23.60	-18.02	-14.99	-47.99	-45.30	-39.52
5	-33.57	-25.92	-19.98	-14.98	-35.00	-24.68	-17.64	-14.98	-31.01	-22.26	-19.50	-14.97	-30.99	-21.44	-18.92	-14.99	-34.54	-23.98	-19.03	-15.36	-48.21	-44.14	-39.99
MEAN	-31.70	-23.67	-19.48	-14.25	-31.76	-22.78	-18.76	-14.25	-32.12	-23.47	-19.39	-14.57	-33.31	-22.74	-18.58	-14.64	-32.34	-23.18	-18.99	-14.60	-48.41	-44.90	-38.14
CPK	3.61	1.91	4.03	2.01	2.17	1.97	2.97	2.65	3.45	1.89	1.67	2.48	3.34	1.94	2.06	2.73	3.33	2.20	3.45	1.65	2.33	2.00	2.58
MIN	-33.57	-25.92	-20.03	-15.36	-35.00	-24.68	-19.56	-15.83	-33.80	-26.14	-22.36	-15.02	-35.37	-24.57	-20.58	-15.02	-34.54	-25.36	-20.02	-15.36	-49.25	-46.12	-40.26
MAX	-30.45	-22.65	-18.56	-13.54	-29.65	-21.63	-17.64	-14.35	-30.02	-20.96	-17.36	-13.58	-30.99	-20.31	-16.71	-13.69	-30.25	-21.30	-18.02	-13.25	-47.99	-44.14	-39.25
MAX-MIN	3.12	3.27	1.47	1.82	5.35	3.05	1.92	1.48	3.78	5.18	5.00	1.44	4.38	4.26	3.87	1.33	4.29	4.06	2.00	2.11	1.26	1.98	1.01

PREPARED BY:	CHECKED BY:	APPROVED BY:

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TEST ITEM	Cross talk																		DCMR		
	RX1&RX2			RX2&TX2			TX2&TX3			TX3&RX3			RX3&RX4			RX4&TX4			TX1		
	30MHz	60MHz	100MHz	30MHz	60MHz	100MHz	30MHz	60MHz	100MHz	30MHz	60MHz	100MHz	30MHz	60MHz	100MHz	30MHz	60MHz	100MHz	30MHz	60MHz	100MHz
	-45.0dB Min.	-40.0dB Min.	-35.0dB Min.	-45.0dB Min.	-40.0dB Min.	-35.0dB Min.	-45.0dB Min.	-40.0dB Min.	-35.0dB Min.	-45.0dB Min.	-40.0dB Min.	-35.0dB Min.	-45.0dB Min.	-40.0dB Min.	-35.0dB Min.	-45.0dB Min.	-40.0dB Min.	-35.0dB Min.	-47.0dB Min.	-37.0dB Min.	-33.0dB Min.
1	-47.68	-42.36	-39.65	-46.98	-43.69	-38.69	-48.34	-43.65	-38.33	-48.32	-42.10	-39.25	-48.36	-42.35	-38.69	-47.68	-42.36	-39.65	-52.66	-40.23	-39.35
2	-47.99	-43.99	-40.02	-47.31	-43.99	-40.02	-47.68	-42.68	-40.02	-47.33	-42.90	-39.29	-47.56	-42.03	-40.60	-47.99	-43.99	-38.26	-53.68	-41.47	-40.35
3	-48.25	-43.58	-39.99	-48.36	-43.52	-39.56	-48.33	-43.58	-39.65	-48.65	-43.19	-38.43	-48.16	-43.58	-38.56	-49.36	-42.60	-39.25	-54.68	-39.58	-39.58
4	-49.02	-43.67	-38.24	-48.99	-43.67	-38.34	-49.22	-42.98	-38.24	-49.02	-43.67	-38.24	-49.34	-43.56	-38.24	-49.02	-43.67	-38.24	-55.98	-40.58	-40.44
5	-48.69	-42.77	-39.13	-48.69	-42.99	-38.44	-48.69	-42.77	-38.20	-48.69	-42.02	-39.13	-48.69	-42.77	-39.13	-48.69	-42.77	-38.99	-54.99	-39.66	-39.37
MEAN	-48.33	-43.27	-39.41	-48.07	-43.57	-39.01	-48.45	-43.13	-38.89	-48.40	-42.78	-38.87	-48.42	-42.86	-39.04	-48.55	-43.08	-38.88	-54.40	-40.30	-39.82
CPK	2.07	1.60	1.97	4.96	7.78	1.80	7.96	5.96	1.48	6.89	3.65	2.61	6.80	3.74	1.45	6.44	3.79	2.09	1.94	1.43	4.25
MIN	-49.02	-43.99	-40.02	-48.99	-43.99	-40.02	-49.22	-43.65	-40.02	-49.02	-43.67	-39.29	-49.34	-43.58	-40.60	-49.36	-43.99	-39.65	-55.98	-41.47	-40.44
MAX	-47.68	-42.36	-38.24	-46.98	-42.99	-38.34	-47.68	-42.68	-38.20	-47.33	-42.02	-38.24	-47.56	-42.03	-38.24	-47.68	-42.36	-38.24	-52.66	-39.58	-39.35
MAX-MIN	1.34	1.63	1.78	2.01	1.00	1.68	1.54	0.97	1.82	1.69	1.65	1.05	1.78	1.55	2.36	1.68	1.63	1.41	3.32	1.89	1.09

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TEST ITEM	DCMR																				
	RX1			RX2			TX2			TX3			RX3			RX4			TX4		
	30MHz	60MHz	100MHz	30MHz	60MHz	100MHz	30MHz	60MHz	100MHz	30MHz	60MHz	100MHz	30MHz	60MHz	100MHz	30MHz	60MHz	100MHz	30MHz	60MHz	100MHz
	-47.0dB Min.	-37.0dB Min.	-33.0dB Min.	-47.0dB Min.	-37.0dB Min.	-33.0dB Min.	-47.0dB Min.	-37.0dB Min.	-33.0dB Min.	-47.0dB Min.	-37.0dB Min.	-33.0dB Min.	-47.0dB Min.	-37.0dB Min.	-33.0dB Min.	-47.0dB Min.	-37.0dB Min.	-33.0dB Min.	-47.0dB Min.	-37.0dB Min.	-33.0dB Min.
1	-55.68	-42.36	-39.65	-55.36	-40.36	-38.69	-55.36	-43.65	-38.33	-55.39	-42.10	-39.25	-55.32	-41.39	-40.02	-55.98	-45.80	-39.65	-55.00	-45.35	-39.35
2	-56.35	-43.99	-40.02	-54.98	-41.85	-40.02	-56.25	-42.68	-40.02	-54.99	-42.90	-38.02	-55.98	-40.36	-40.60	-55.26	-44.35	-40.02	-55.43	-44.98	-39.82
3	-54.90	-43.58	-39.99	-56.02	-43.52	-38.39	-54.36	-43.58	-39.65	-56.32	-43.19	-40.35	-54.99	-41.30	-38.56	-54.13	-46.35	-39.78	-54.68	-43.99	-39.58
4	-55.23	-43.67	-38.24	-56.25	-42.69	-39.25	-56.02	-42.98	-39.58	-55.32	-44.38	-38.24	-56.30	-39.99	-39.54	-53.99	-43.67	-38.24	-55.98	-44.35	-40.44
5	-56.32	-42.77	-39.13	-55.36	-42.66	-38.44	-55.01	-42.77	-38.20	-54.03	-42.02	-39.13	-54.15	-41.03	-39.13	-55.81	-44.99	-38.99	-56.65	-45.36	-39.37
MEAN	-55.70	-43.27	-39.41	-55.59	-42.22	-38.96	-55.40	-43.13	-39.16	-55.21	-42.92	-39.00	-55.35	-40.81	-39.57	-55.03	-45.03	-39.34	-55.55	-44.81	-39.71
CPK	4.49	3.07	2.87	5.47	1.46	2.90	3.66	4.49	2.47	3.32	2.05	2.16	3.29	2.08	2.78	2.88	2.48	2.93	3.63	4.24	4.98
MIN	-56.35	-43.99	-40.02	-56.25	-43.52	-40.02	-56.25	-43.65	-40.02	-56.32	-44.38	-40.35	-56.30	-41.39	-40.60	-55.98	-46.35	-40.02	-56.65	-45.36	-40.44
MAX	-54.90	-42.36	-38.24	-54.98	-40.36	-38.39	-54.36	-42.68	-38.20	-54.03	-42.02	-38.02	-54.15	-39.99	-38.56	-53.99	-43.67	-38.24	-54.68	-43.99	-39.35
MAX-MIN	1.45	1.63	1.78	1.27	3.16	1.63	1.89	0.97	1.82	2.29	2.36	2.33	2.15	1.40	2.04	1.99	2.68	1.78	1.97	1.37	1.09

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REV.: B