SPECIFICATION FOR APPROVAL

产品承认书

CUSTOMER：

CUSTOMER P/N ：

PPT P/N: **PSG-4885E**

DESCRIPTION： **100/1000 BASE-T POE++ TRANSFORMER**

ATTACHMENT：

■ SPECIFICATION

■ SAMPLE Q'TY OF SAMPLES _____ PCS

RoHS COMPLIANT

深圳市磁创新科技有限公司		**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

深圳市磁创新科技有限公司

Shenzhen Magnetic 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 with802.3at and including 350 uH OCL with 25 mA DC Bias .

1.2 The part is POE++ enable with 900mA DC current .

1.3 RoHS-6 peak reflow temperature rating 245℃

1.4 Operating temperature rang is-40℃ TO +85℃.

1.5 Storage temperature rang is -25℃～+125℃.

1.6 Remark:Contact PPT For Further Requirements.

2.ELECTRICAL SPECIFICATIONS @25℃

2.1 OCL : 350 uH Min. @100KHz, 100mV with 25 mA DC Bias

2.2 Turn ratio: 1CT:1CT±5%@ 100 KHz, 100mV

2.3 Primary DCR : 0.9 Ω Max

2.4 L.K. : 0.5uH Max. @100KHz,0.1V

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

2.6 Insertion Loss : -1.0dBMax. @1-100MHz

2.7 Return Loss : -18.0dB Min @1-30 MHz
-16.0dB Min @30-60 MHz
-12.0dB Min @60-80 MHz
-10.0dB Min @80-100 MHz

2.8 Crosstalk : -30.0dB Min @1-100MHz

2.9 CMRR : -30.0dB Min. @1-100MHz

RoHS COMPLIANT

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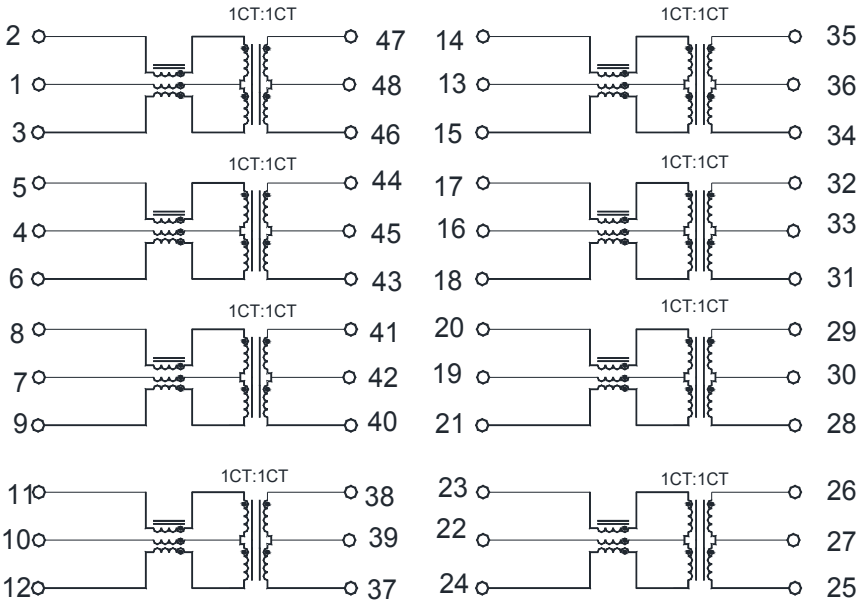
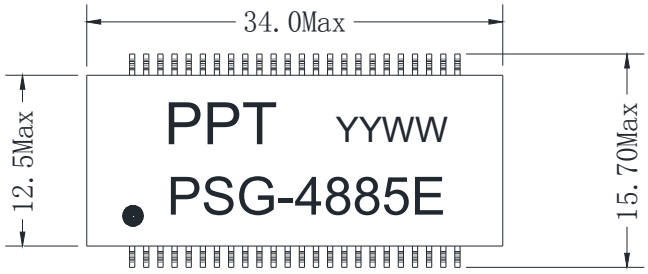
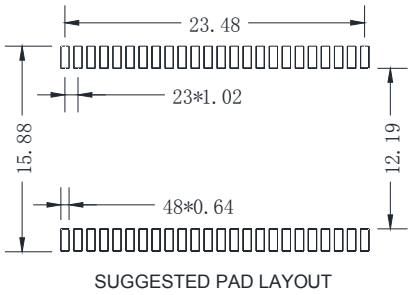
			PART NO. :PSG-4885E

3. SCHEMATICS:

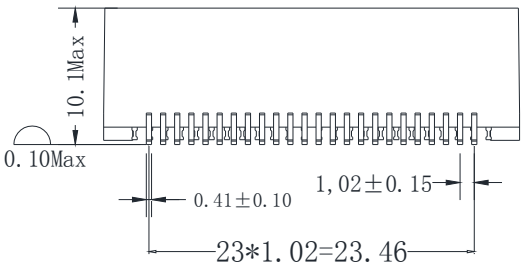


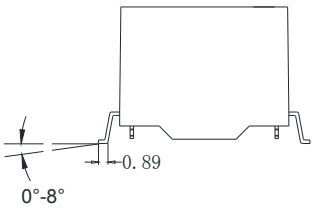
4. DIMENSIONS & MARKING:





SUGGESTED PAD LAYOUT





Dimension : mm

Unless otherwise specified , all tolerance are ± 0.25

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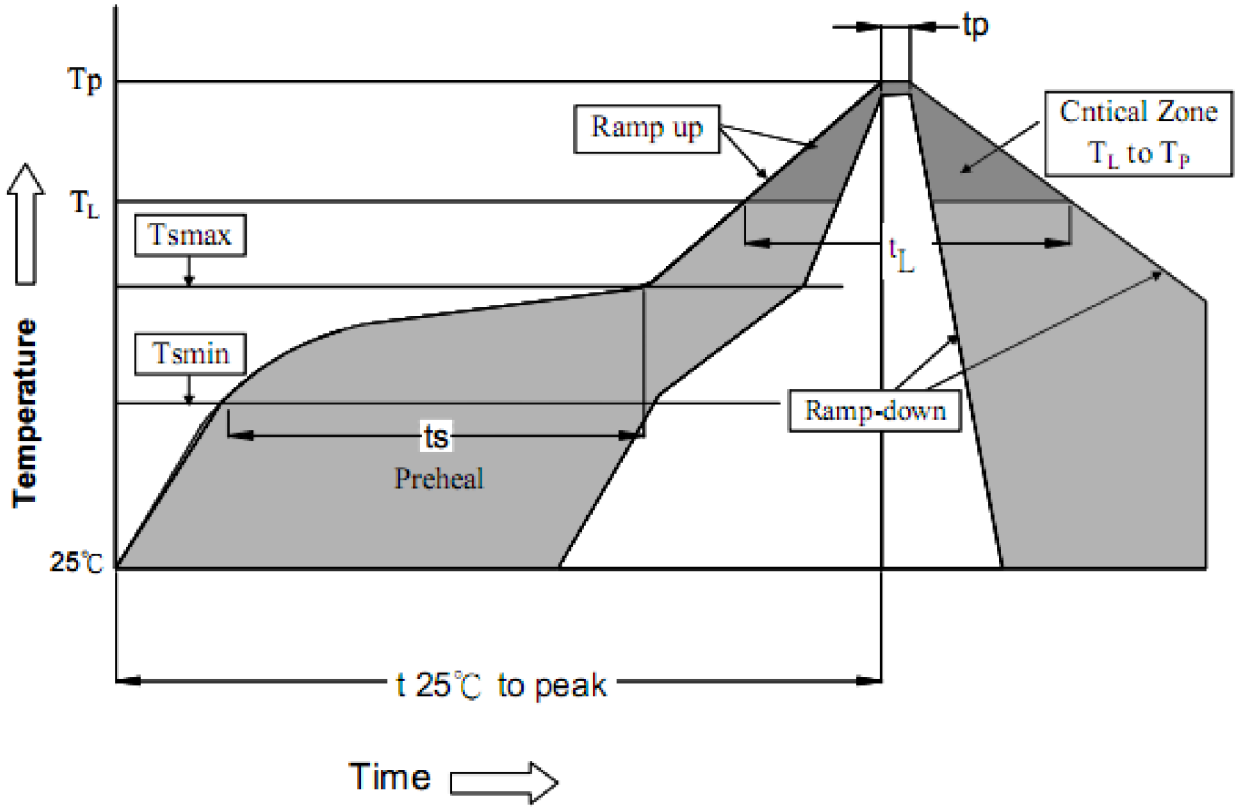
5. Recommended Reflow Soldering Curve:



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. :PSG-4885E

PSG-4885E TEST DATA PAGE: 5 OF 8

TEST ITEM	OCL								LK								DCR								HI-POT
	350uH Min. 100KHz, 0.1V 25mA DC								100KHz,0.1V 0.5uHMax								Primary0.9Ω 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	507	552	591	584	572	541	555	580	0.21	0.24	0.22	0.24	0.25	0.22	0.23	0.25	0.328	0.291	0.309	0.415	0.346	0.354	0.415	0.406	PASS
2	547	573	593	538	543	536	536	576	0.25	0.22	0.23	0.23	0.22	0.23	0.24	0.24	0.374	0.368	0.375	0.399	0.378	0.399	0.404	0.415	PASS
3	501	510	522	576	556	545	546	560	0.19	0.26	0.21	0.19	0.18	0.2	0.26	0.2	0.316	0.346	0.387	0.383	0.405	0.383	0.379	0.335	PASS
4	554	567	569	595	562	569	568	553	0.22	0.16	0.16	0.25	0.21	0.24	0.25	0.18	0.387	0.335	0.37	0.389	0.413	0.335	0.354	0.374	PASS
5	541	593	564	524	569	560	559	569	0.23	0.24	0.17	0.19	0.22	0.22	0.24	0.19	0.351	0.351	0.324	0.468	0.384	0.446	0.444	0.391	PASS
AVERAGE	530	559	568	563	560	550	553	568	0.22	0.22	0.20	0.22	0.22	0.22	0.24	0.21	0.35	0.34	0.35	0.41	0.39	0.38	0.40	0.38	N/A
CPK	2.5	2.2	2.5	2.3	6.1	4.8	5.5	6.5	4.17	2.39	3.23	3.30	3.77	6.25	7.48	3.08	12.80	13.38	11.15	10.62	14.16	8.67	10.67	11.77	N/A
MIN	501	510	522	524	543	536	536	553	0.19	0.16	0.16	0.19	0.18	0.20	0.23	0.18	0.32	0.29	0.31	0.38	0.35	0.34	0.35	0.34	N/A
MAX	554	593	593	595	572	569	568	580	0.25	0.26	0.23	0.25	0.25	0.24	0.26	0.25	0.39	0.37	0.39	0.47	0.41	0.45	0.44	0.42	N/A
MAX-MIN	53	83	71	71	29	33	32	27	0.06	0.10	0.07	0.06	0.07	0.04	0.03	0.07	0.07	0.08	0.08	0.09	0.07	0.11	0.09	0.08	N/A

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PSG-4885E TEST DATA PAGE: 6 OF 8

TEST ITEM	T/R								Insertion Loss								Return Loss							
	1CT:1CT±5%@ 100KHz,0.1V								TX1	RX1	RX2	TX2	TX3	RX3	RX4	TX4	TX1				RX1			
									1-100MHz								1-30MHz	30-60MHz	60-80MHz	80-100MHz	1-30MHz	30-60MHz	60-80MHz	80-100MHz
	TX1	RX1	RX2	TX2	RX3	TX3	RX4	TX4	-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.
1	PASS	PASS	PASS	PASS	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
2	PASS	PASS	PASS	PASS	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
3	PASS	PASS	PASS	PASS	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
4	PASS	PASS	PASS	PASS	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
5	PASS	PASS	PASS	PASS	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
AVERAGE	**N/A**	**N/A**	**N/A**	**N/A**	**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**
CPK	**N/A**	**N/A**	**N/A**	**N/A**	**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
MIN	**N/A**	**N/A**	**N/A**	**N/A**	**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**
MAX	**N/A**	**N/A**	**N/A**	**N/A**	**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**
MAX-MIN	**N/A**	**N/A**	**N/A**	**N/A**	**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

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PPSG-4885E TEST DATA PAGE: 7 OF 8

TEST ITEM	Return Loss																							
	RX2				TX2				TX3				RX3				RX4				TX4			
	1-30MHz	30-60MHz	60-80MHz	80-100MHz	1-30MHz	30-60MHz	60-80MHz	80-100MHz	1-30MHz	30-60MHz	60-80MHz	80-100MHz	1-30MHz	30-60MHz	60-80MHz	80-100MHz	1-30MHz	30-60MHz	60-80MHz	80-100MHz	1-30MHz	30-60MHz	60-80MHz	80-100MHz
	-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.	-18.0dB Min.	-16.0dB Min.	-12.0dB Min.	-10.0dB Min.
1	-35.37	-24.57	-19.14	-33.58	-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
2	-36.54	-22.68	-18.62	-32.01	-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
3	-33.27	-21.60	-17.57	-30.99	-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
4	-31.60	-23.26	-19.15	-32.58	-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
5	-30.99	-21.44	-18.92	-34.54	-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
MEAN	-33.55	-22.71	-18.68	-32.74	-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
CPK	2.18	1.74	3.39	5.51	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
MIN	-36.54	-24.57	-19.15	-34.54	-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
MAX	-30.99	-21.44	-17.57	-30.99	-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
MAX-MIN	5.55	3.13	1.58	3.55	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

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PSG-4885E TEST DATA

TEST ITEM	Cross talk							CMRR							
	RX1&TX1	TX1&RX2	RX2&TX2	TX2&RX3	RX3&TX3	TX3&RX4	RX4&TX4	RX1	TX1	RX2	TX2	RX3	TX3	RX4	TX1
	30MHz	30MHz	30MHz	30MHz	30MHz	30MHz	30MHz	1-100MHz	1-100MHz	1-100MHz	1-100MHz	1-100MHz	1-100MHz	1-100MHz	1-100MHz
	-30dB Min.	-30dB Min.	-30dB Min.	-30dB Min.	-30dB Min.	-30dB Min.	-30dB Min.	-30dB Min.	-30dB Min.	-30dB Min.	-30dB Min.	-30dB Min.	-30dB Min.	-30dB Min.	-30dB Min.
1	-33.66	-32.96	-34.32	-34.30	-34.34	-33.82	-33.66	-34.80	-33.65	-35.65	-37.64	-35.80	-36.65	-33.65	-35.64
2	-33.97	-33.29	-33.66	-33.31	-33.54	-33.54	-33.97	-37.54	-35.38	-35.65	-38.00	-36.54	-38.38	-35.65	-36.00
3	-34.23	-34.34	-34.31	-34.63	-34.14	-35.40	-35.34	-36.25	-34.60	-39.20	-40.65	-37.25	-37.60	-37.20	-38.65
4	-35.00	-34.97	-35.20	-35.00	-35.32	-33.81	-35.00	-34.26	-36.90	-36.85	-36.50	-36.26	-35.90	-34.85	-37.50
5	-34.67	-34.67	-34.67	-34.67		-34.02	-34.67	-35.30	-35.60	-37.26	-37.88	-34.30	-34.60	-35.26	-35.88
MEAN	-34.31	-34.05	-34.43	-34.38	-34.34	-34.12	-34.53	-35.63	-35.23	-36.92	-38.13	-36.03	-36.63	-35.32	-36.73
CPK	2.68	1.54	2.62	2.25	1.95	1.86	2.15	1.45	1.44	1.58	1.78	1.83	1.50	1.38	1.73
MIN	-35.00	-34.97	-35.20	-35.00	-35.32	-35.40	-35.34	-37.54	-36.90	-39.20	-40.65	-37.25	-38.38	-37.20	-38.65
MAX	-33.66	-32.96	-33.66	-33.31	-33.54	-33.54	-33.66	-34.26	-33.65	-35.65	-36.50	-34.30	-34.60	-33.65	-35.64
MAX-MIN	1.34	2.01	1.54	1.69	1.78	1.86	1.68	3.28	3.25	3.55	4.15	2.95	3.78	3.55	3.01

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