

SPECIFICATION FOR APPROVAL

产品承认书

CUSTOMER:

CUSTOMER NO. :

PPT PART NO. :

PSG-2448E

DESCRIPTION:

100/1000 BASE-T POE+ TRANSFORMER

ATTACHMENT:

■ SPECIFICATION

■ SAMPLE Q'TY OF SAMPLES _____ PCS



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

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

1. FEATURES:

- 1.1 Compliant with 802.3at and ANSI X3.263 standards including 350 uH OCL with 8mA DC Bias .
- 1.2 The part is POE enable with 720 mA DC current .
- 1.3 RoHS-6 peak reflow temperature rating 245°C
- 1.4 Operating temperature range is -40°C TO +85°C
- 1.5 Storage temperature range is -40°C ~ +125°C .
- 1.6 Designed To Meet IEEE 802.30 Requirement.
- 1.7 Remark: Contact PPT For Further Requirements.

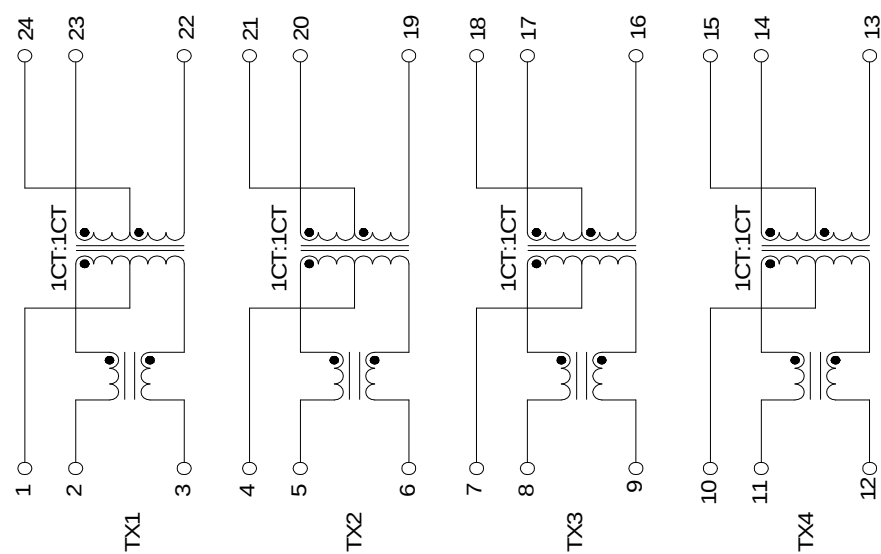
2. ELECTRICAL SPECIFICATIONS @25°C

- 2.1 OCL : 350 uH Min. @100KHz, 100mV with 8mA DC Bias
- 2.2 Turn ratio: 1CT:1CT±5%@ 100 KHz, 100mV
- 2.3 Primary DCR : 1.2 Ω Max
- 2.4 L.K. : 0.5uH Max. @100KHz, 0.1V
- 2.5 Isolation HI-POT: 1500VAC 1mA 2Second
- 2.6 Insertion Loss : -1.0dB Max. @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

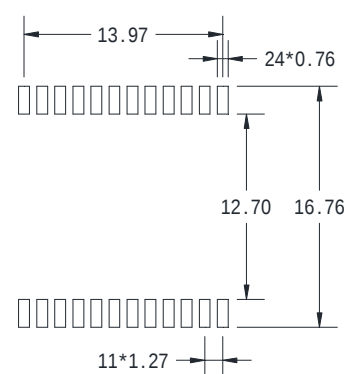
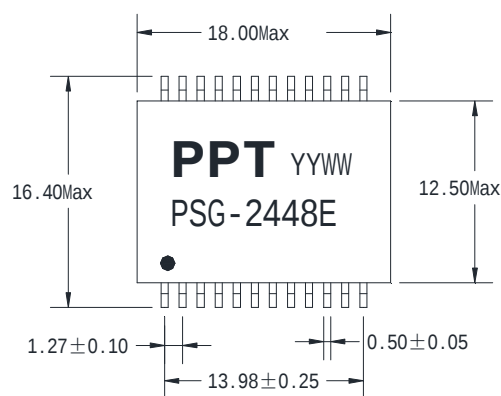


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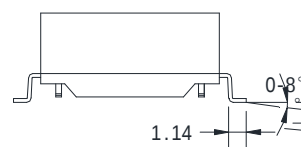
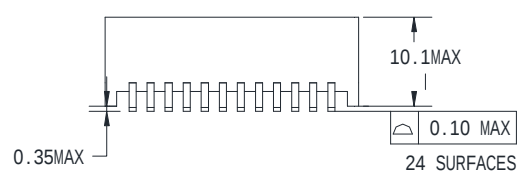
3. SCHEMATICS:



4. DIMENSIONS & MARKING:

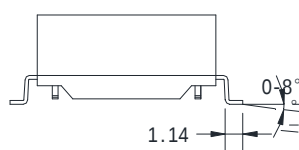
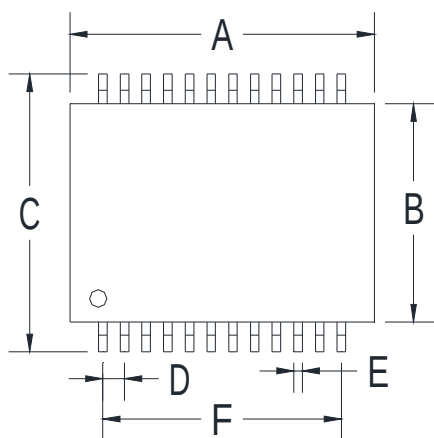


LAYOUT



Dimension:mm
Unless otherwise specified,all tolerance are ±0.25

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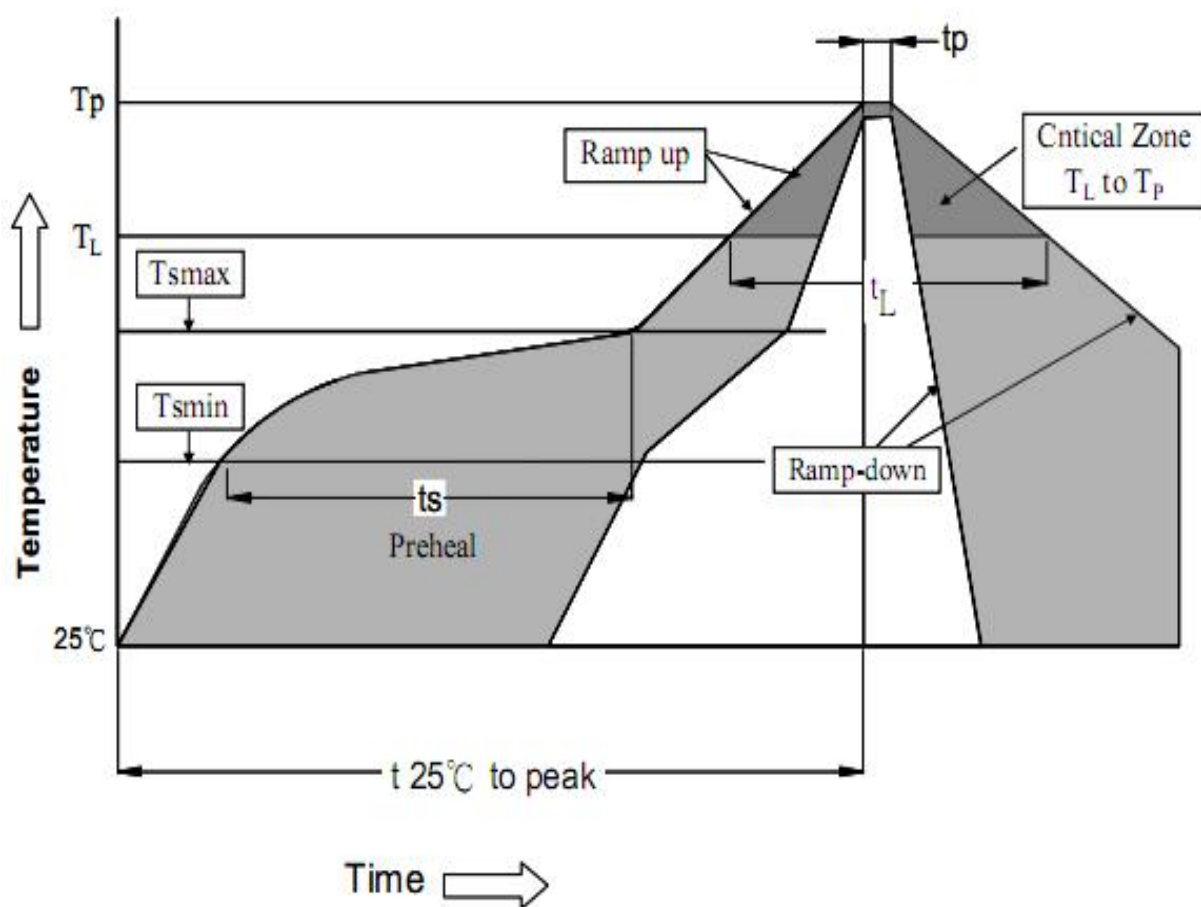
磁创新成品PSG-2448E外观尺寸测量数据

内容 项目	SPEC	1	2	3	4	5	判定	单位
A	18.00 Max	18.00	18.00	18.02	18.01	18.01	OK	mm
B	12. Max	12.15	12.14	12.19	12.14	12.13	OK	
C	16.0Max	15.94	15.95	15.97	15.99	15.92	OK	
D	1.27±0.10	1.26	1.28	1.27	1.27	1.28	OK	
E	0.50±0.05	0.49	0.50	0.48	0.49	0.47	OK	
F	13.97±0.25	13.97	13.96	13.98	13.97	13.97	OK	
G	10.1MAX	9.25	9.24	9.26	9.31	9.32	OK	



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6. Recommended Reflow Soldering Curve:



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

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

$t_s = 60-180\text{s}$ $T_s \text{ max} = 200^{\circ}\text{C}$

$T_s \text{ min} = 150^{\circ}\text{C}$

$t_L = 60-150\text{s}$ $t_p = 20-40\text{s}$

$T_{25^{\circ}\text{C to peak}} = 8\text{min}$

Ramp up rate = 3°C/s max

Ramp down rate = 6°C/s

*ROHS Compliant

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PSG-2448E TEST DATA

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TEST ITEM	OCL				LL				DCR				CW/W				T/R				HI-POT	Insertion Loss				
	100KHz,0.1V 8mA				100KHz,0.1V				1.2 Ω Max.				100KHz,0.1V				50KHz,1V				1500Vrms 1mA 2S	1-100MHz				
	350uH Min.				0.5uH Max								32pF Max				1CT:1CT±3%					-1.0dB Max.				
	2-3	5-6	8-9	11-12	2-3	5-6	8-9	11-12	2-3	5-6	8-9	11-12	1-24	4-21	7-18	10-15	TX1	RX1	RX2	TX2	Pri. TO Sec.	TX1	RX1	RX2	TX2	
1	516	549	548	581	0.3	0.27	0.3	0.29	0.49	0.53	0.57	0.53	17.57	17.51	17.64	17.58	PASS	PASS	PASS	PASS	PASS	-0.56	-0.41	-0.55	-0.7	
2	544	570	591	536	0.28	0.27	0.27	0.28	0.46	0.57	0.71	0.65	19.34	17.67	18.57	17.56	PASS	PASS	PASS	PASS	PASS	-0.67	-0.64	-0.75	-0.5	
3	498	509	520	574	0.27	0.25	0.25	0.27	0.52	0.49	0.56	0.49	18.76	18.86	17.6	18.59	PASS	PASS	PASS	PASS	PASS	-0.54	-0.68	-0.74	-0.68	
4	553	566	567	593	0.26	0.26	0.27	0.25	0.435	0.437	0.576	0.51	18.79	17.75	18.65	17.78	PASS	PASS	PASS	PASS	PASS	-0.68	-0.67	-0.6	-0.52	
5	528	531	562	522	0.24	0.28	0.29	0.27	0.54	0.53	0.5	0.49	19.67	17.97	19.59	18.76	PASS	PASS	PASS	PASS	PASS	-0.61	-0.75	-0.68	-0.71	
AVERAGE	528	545	558	561	0.27	0.27	0.28	0.27	0.49	0.51	0.58	0.53	18.83	17.95	18.41	18.05	N/A	N/A	N/A	N/A	N/A	-0.61	-0.63	-0.66	-0.62	
CPK	2.70	2.56	2.65	2.30	3.43	6.84	3.83	5.12	7.88	6.55	3.96	4.81	5.49	8.77	5.49	8.06	N/A	N/A	N/A	N/A	N/A	8.53	4.20	6.35	5.25	
MIN	498	509	520	522	0.24	0.25	0.25	0.25	0.44	0.44	0.50	0.49	17.57	17.51	17.60	17.56	N/A	N/A	N/A	N/A	N/A	-0.68	-0.75	-0.75	-0.71	
MAX	553	570	591	593	0.30	0.28	0.30	0.29	0.54	0.57	0.71	0.65	19.67	18.86	19.59	18.76	N/A	N/A	N/A	N/A	N/A	-0.54	-0.41	-0.55	-0.50	
MAX-MIN	55.00	61.00	71.00	71.00	0.06	0.03	0.05	0.04	0.11	0.13	0.21	0.16	2.10	1.35	1.99	1.20	N/A	N/A	N/A	N/A	N/A	0.14	0.34	0.20	0.21	
PREPARED BY:									CHECKED BY:									APPROVED BY:								

PSG-2448E TEST DATA

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TEST ITEM	Return Loss												Cross talk			DCMR			
	TX1			RX1			RX2			TX2			TX1&RX1	RX1&RX2	RX2&TX2	TX1	RX1	RX2	TX2
	1-30MHz	50MHz	60-80MHz	1-30MHz	50MHz	60-80MHz	1-30MHz	50MHz	60-80MHz	1-30MHz	50MHz	60-80MHz	1-100MHz			1-100MHz			
	-18dB Min.	-14dB Min.	-12dB Min.	-18dB Min.	-14dB Min.	-12dB Min.	-18dB Min.	-14dB Min.	-12dB Min.	-18dB Min.	-14dB Min.	-12dB Min.	-35dB Min.			-30dB Min.			
1	-26.18	-21.28	-17.08	-32.68	-19.18	-19.28	-26.08	-20.28	-20.28	-24.08	-20.28	-17.08	-40.38	-47.18	-42.18	-40.98	-42.38	-39.18	-38.98
2	-29.68	-19.28	-16.68	-25.48	-19.94	-16.28	-24.08	-19.94	-19.28	-26.18	-21.28	-17.08	-44.68	-48.42	-48.18	-39.38	-38.38	-38.88	-37.78
3	-27.28	-22.38	-18.28	-25.48	-19.51	-19.28	-25.38	-22.38	-18.28	-25.68	-19.28	-16.68	-44.24	-41.28	-40.98	-45.58	-41.28	-42.58	-42.46
4	-26.28	-18.18	-19.28	-26.48	-20.08	-18.13	-26.28	-22.18	-19.28	-25.28	-22.38	-20.28	-46.18	-49.38	-49.68	-41.04	-35.90	-39.88	-40.28
5	-29.58	-21.08	-16.18	-27.73	-22.90	-18.18	-29.13	-23.30	-17.18	-28.13	-23.30	-19.28	-48.18	-49.94	-49.94	-39.26	-40.02	-49.58	-35.88
MEAN	-27.80	-20.44	-17.50	-27.57	-20.32	-18.23	-26.19	-21.62	-18.86	-25.87	-21.30	-18.08	-44.73	-47.24	-46.19	-41.25	-37.70	-42.02	-38.70
CPK	8.85	6.82	7.79	5.06	7.71	8.21	7.94	8.23	8.75	9.86	7.34	6.27	9.23	7.85	6.32	9.26	8.87	5.37	9.20
MIN	-29.68	-22.38	-19.28	-32.68	-22.90	-19.28	-29.13	-23.30	-20.28	-28.13	-23.30	-20.28	-48.18	-49.94	-49.94	-45.58	-42.38	-49.58	-42.46
MAX	-26.18	-18.18	-16.18	-25.48	-19.18	-16.28	-24.08	-19.94	-17.18	-24.08	-19.28	-16.68	-40.38	-41.28	-40.98	-39.26	-35.90	-38.88	-35.88
MAX-MIN	3.50	4.20	3.10	7.20	3.72	3.00	5.05	3.36	3.10	4.05	4.02	3.60	7.80	8.66	8.96	6.32	6.48	10.70	6.58
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