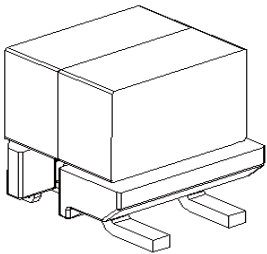


REACH & RoHS
COMPLIANT

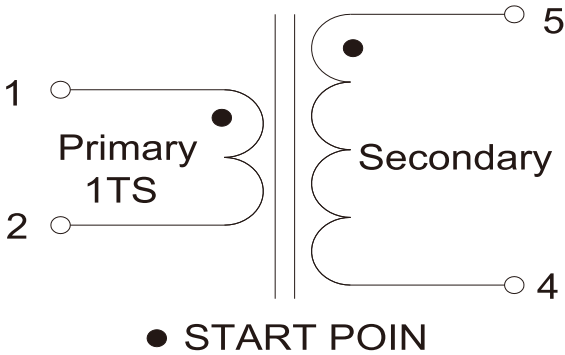
1 Features And Benefits

- Very low primary resistance.
- Sensed current up to 40 Amps.
- Small SMD package.
- Operating temperature range -40 °C to 125 °C.
- Switch-mode power supplies.
- Feedback control.
- Overload sensing.
- Load drop/shut down detection.
- RoHS Compliant

2 Electrical Specifications @ 25°C



3 Schematics



Part Number	Secondary Inductance (mH)	Current Rating (A)	Turns Ratio	DCR (mΩ)		Hipot (V _{AC})
				Max	Max	
				Primary	Secondary	
				1-2	5-4	
WHPT-EP100-016	1.7	40	1:50	0.5	1500	3750
WHPT-EP100-017	3.0	40	1:70	0.5	2100	3750
WHPT-EP100-018	7.0	40	1:100	0.5	3100	3750
WHPT-EP100-019	11.0	40	1:125	0.5	4000	3750
WHPT-EP100-021	25.0	40	1:180	0.5	9000	3750
WHPT-EP100-020	32.0	40	1:200	0.5	10400	3750

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Su Zhou Voohu Electronic Tech.Co.Ltd

TITLE:
SMT Current Sense Transformers

SIZE
A4

UNITS
MM[INCH]

GENERAL TOLERANCES
UNLESS SPECIFIED

APPROVED BY:
Geoffrey.Song

PART NO.:
WHPT-EP100-018

SACLE
1:1

REV
A0

x±0.35
.x±0.30

x°±3.0°
.x°±2.0°

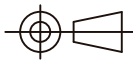
CHECKED BY:
Elvis.Song

TEL: +86 400 1048 018

WEB: WWW.WOHU-TEK.COM

REMARK:
50K---500 kHz Available

SHEET
1/4



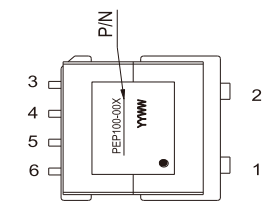
.xx±0.25
.xxx±0.10

.xx°±1.5°
.xxx°±1.0°

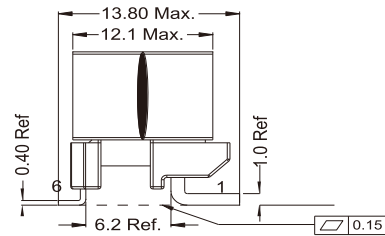
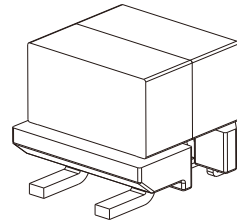
DESIGND BY:
Sunny.Xu

REACH & RoHS
COMPLIANT

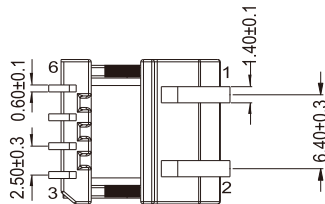
4 Dimensions (mm)& recommend layout



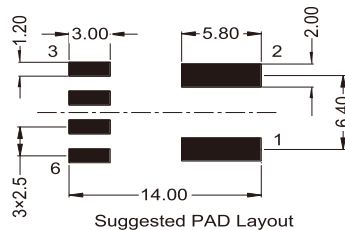
Top View



Front view

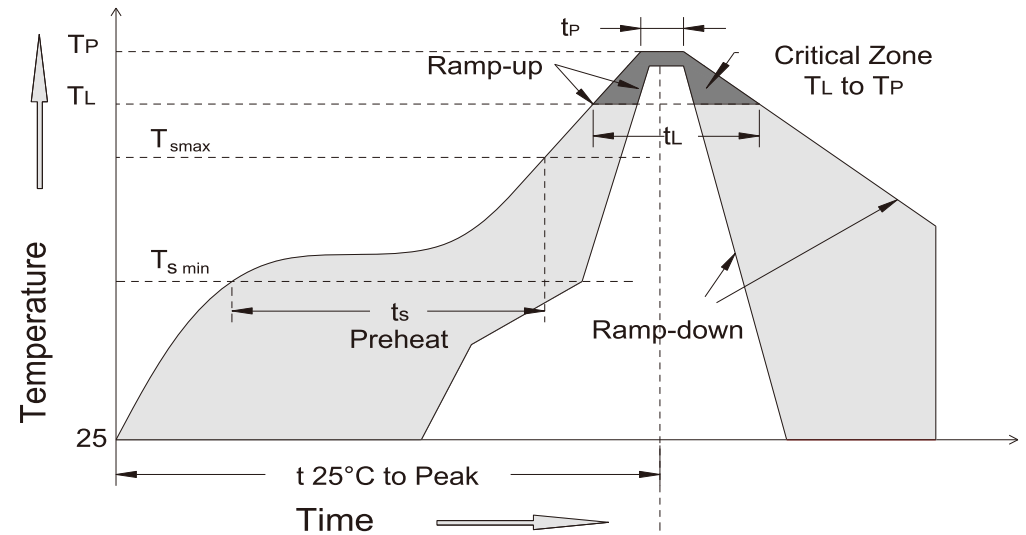


Bottom View



Suggested PAD Layout

5 Recommended Reflow Profile



MSL:

Grade: 1 level. Floor life: 0.5 year Condition: $\leq 30^{\circ}\text{C}/60\%\text{RH}$.

Ramp up rate= $3^{\circ}\text{C}/\text{s}$ max Ramp down rate= $6^{\circ}\text{C}/\text{s}$ max

$T_L=217^{\circ}\text{C}$ $t_L=60\text{s}-150\text{s}$ $T_P=250\pm 3^{\circ}\text{C}$ Time within 5°C of actual Peak Temperature (t_P): $20\sim 40\text{s}$

$T_s \text{ min}=150^{\circ}\text{C}$ $T_s \text{ max}=200^{\circ}\text{C}$ $T_s \text{ min to } T_s \text{ max}$: $60\text{s}-180\text{s}$, 25°C to peak Temperature: 8minutes max

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PART NO.:
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SACLE
1:1

REV
A0

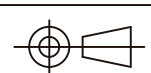
$x\pm 0.35$
 $.x\pm 0.30$

$x^{\circ}\pm 3.0^{\circ}$
 $.x^{\circ}\pm 2.0^{\circ}$

CHECKED BY:
Elvis.Song

REMARK:
50K---500 kHz Available

SHEET
2/4



$.xx\pm 0.25$
 $.xxx\pm 0.10$

$.xx^{\circ}\pm 1.5^{\circ}$
 $.xxx^{\circ}\pm 1.0^{\circ}$

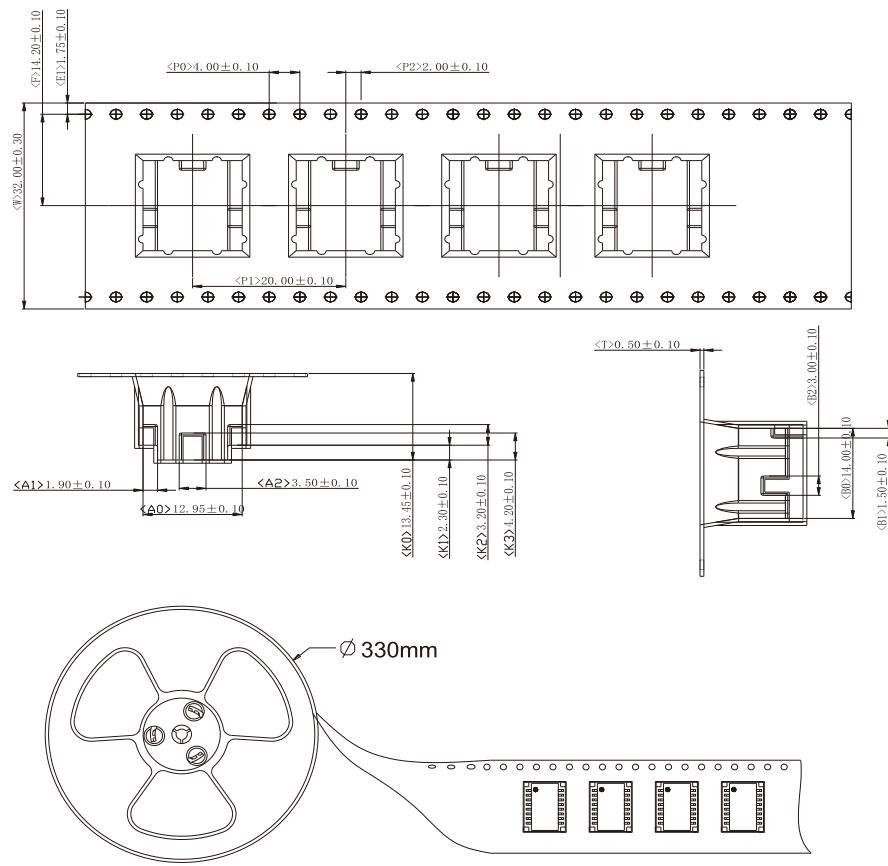
DESIGND BY:
Sunny.Xu

TEL: +86 400 1048 018

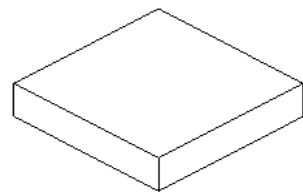
WEB: WWW.WOHU-TEK.COM

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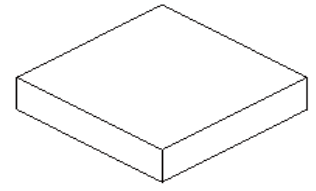
6 Packaging specification



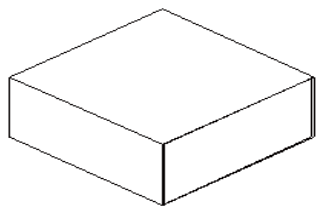
Two Reel



Two Inner Carton



Inner Carton



Export Carton

Package Quantity:
One Reel=200 Pcs
One Inner Carton=200*2=400 Pcs
One Export Carton=400*2=800 Pcs

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SMT Current Sense Transformers
PART NO.:
WHPT-EP100-018
REMARK:
50K---500 kHz Available

SIZE
A4
SACLE
1:1
SHEET
3/4

UNITS
MM[INCH]
REV
A0

GENERAL TOLERANCES
UNLESS SPECIFIED
x±0.35 x°±3.0°
.x±0.30 .x°±2.0°
.xx±0.25 .xx°±1.5°
.xxx±0.10 .xxx°±1.0°

APPROVED BY:
Geoffrey.Song
CHECKED BY:
Elvis.Song
DESIGND BY:
Sunny.Xu

1

2

3

4

5

6

7

8

REACH & RoHS COMPLIANT

7 Reliability test

NO.	Test Item	Standard Reference	Test Condition
1	Low temperature test	GB/T 2423.1	Temperature: -40±2℃ Time: 168 hours Measurement at 24±4 hours after test conclusion."
2	High temperature storage test	GB/T 2423.2	Temperature: 125±2℃ Time: 168 hours Measurement at 24±4 hours after test conclusion.
3	Constant temperature and constant humidity test	GB/T 2423.3 (IEC 60068-2-78)	Temperature: 40±2℃ / humidity:93±2%RH Time: 168 hours Measurement at 24±4 hours after test conclusion.
4	High temperature and high humidity test	GB/T 2423.50	Temperature: 85±2℃ / humidity:85±2%RH Time: 168 hours Measurement at 24±4 hours after test conclusion.
5	Thermal shock test	GB/T 2423.22 (IEC 60068-2-14)	First -40±5℃ for 30±2 minutes, last 85℃ 30±2 minutes as 1 cycle. Total 10 cycles.
6	Salt spray test	GB/T2423.17 (IEC 60068-2-11)	Concentration :(5±0.1) % PH : 6.5 ~ 7.2 Temperature: 35 ±2 ℃ Time: 24 hours
7	Solder ability test	GB/T 2423.28 (IEC 60068-2-20)	Preheating: 150±5℃, 60 seconds Immerse the terminal in flux for 5 seconds.then dip the terminal into a soldering bath of 245±5℃ for 3±1 seconds.
8	Drop test	GB/T 2423.8 (IEC 60068-2-32)	Floor should be hard,strong,concrete. Height:1m. Test 6 surfaces , 3 ridges and 1 corner of Test-box.
9	Vibration test	GB/T 4857.7	Frequency: 10-55-10Hz Sweep time: 1Min. Displacement:0.75mm, X,Y,Z axis 30Min respectively
10	Soldering resistance test	GB/T 2423.50	Preheating: 150±5℃, 60~120 seconds Immerse the terminal in flux for 5 seconds.then dip the terminal into a soldering bath of 260±5℃ for 10±1 seconds.

REMINDERS