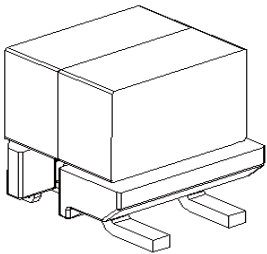


REACH & RoHS
COMPLIANT

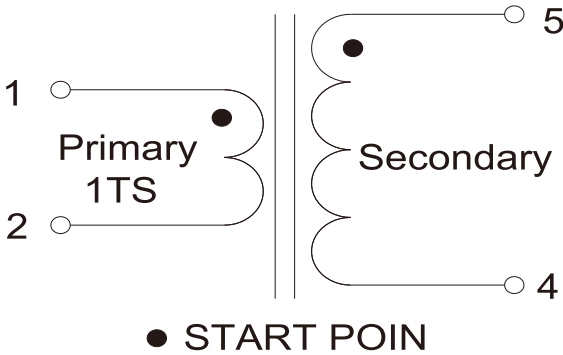
1 Features And Benefits

- 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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TEL: +86 400 1048 018

WEB: WWW.WOHU-TEK.COM

TITLE:
SMT Current Sense Transformers

PART NO.:
WHPT-EP100-016

REMARK:
50K---500 kHz Available

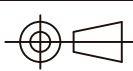
SIZE
A4

SACLE
1:1

SHEET
1/4

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°

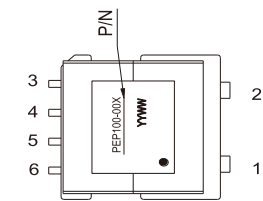
APPROVED BY:
Geoffrey.Song

CHECKED BY:
Elvis.Song

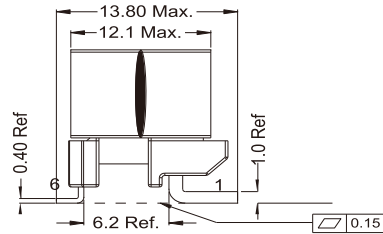
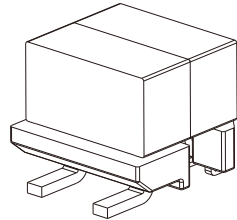
DESIGND BY:
Sunny.Xu

REACH & RoHS
COMPLIANT

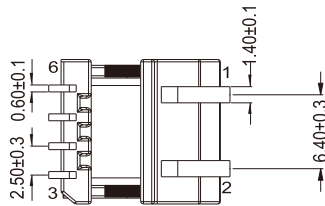
4 Dimensions (mm)& recommend layout



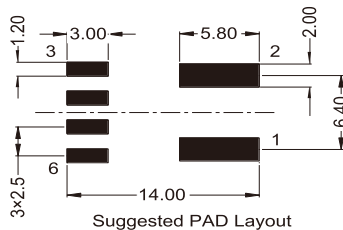
Top View



Front view

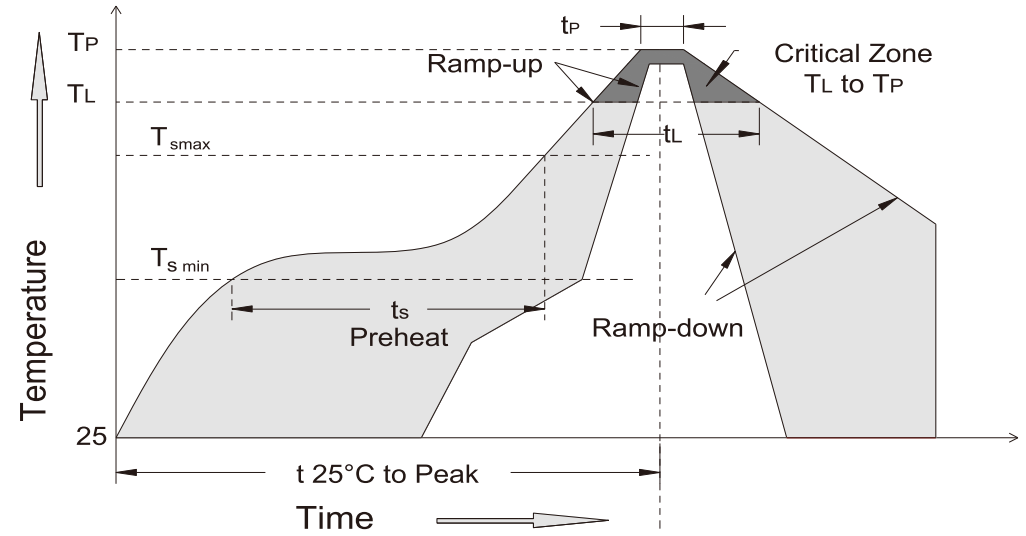


Bottom View



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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TITLE:
SMT Current Sense Transformers

SIZE
A4

UNITS
MM[INCH]

GENERAL TOLERANCES
UNLESS SPECIFIED

APPROVED BY:
Geoffrey.Song

PART NO.:
WHPT-EP100-016

SACLE
1:1

REV
A0

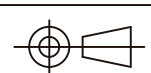
$x\pm 0.35$
 $.x\pm 0.30$

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

CHECKED BY:
Elvis.Song

REMARK:
50K---500 kHz Available

SHEET
2/4



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

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

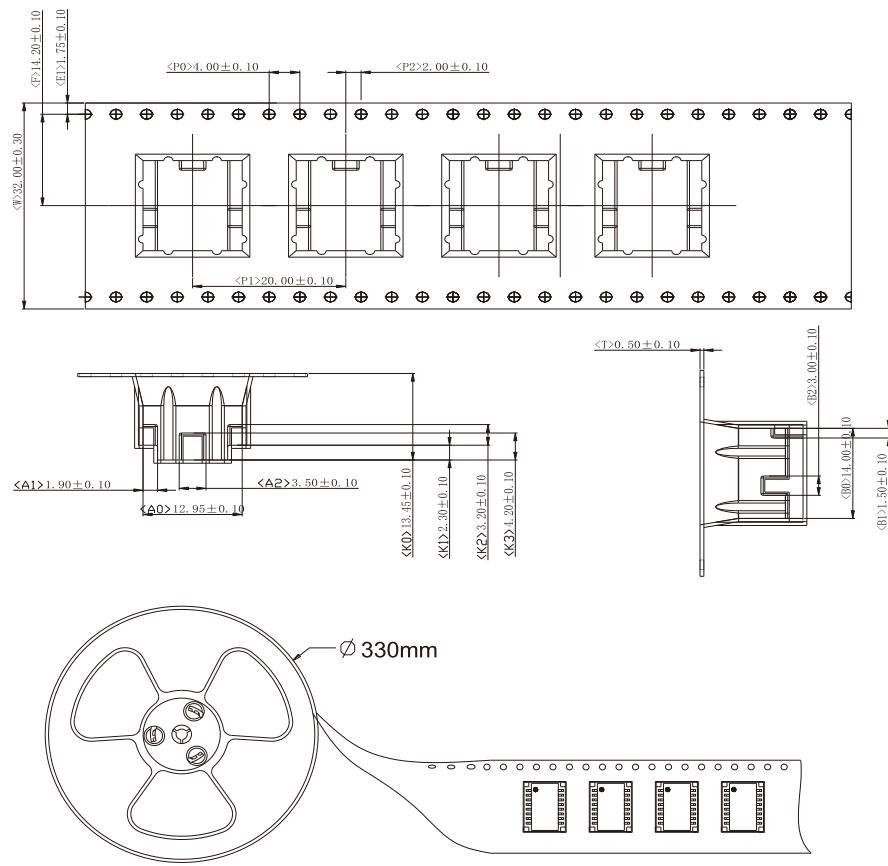
DESIGND BY:
Sunny.Xu

TEL: +86 400 1048 018

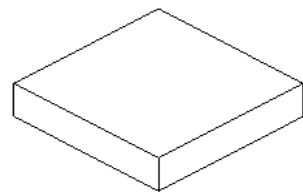
WEB: WWW.WOHU-TEK.COM

REACH & RoHS
COMPLIANT

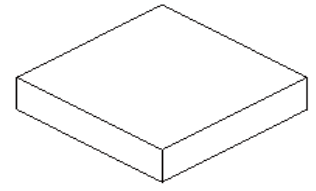
6 Packaging specification



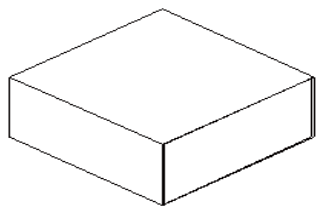
Two Reel



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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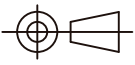
PART NO.:
WHPT-EP100-016

REMARK:
50K---500 kHz Available

SIZE
A4

SACLE
1:1

SHEET
3/4



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		REMINDERS 7 Reliability test <table><tr><th>NO.</th><th>Test Item</th><th>Standard Reference</th><th>Test Condition</th></tr><tr><td>1</td><td>Low temperature test</td><td>GB/T 2423.1</td><td>Temperature: -40±2℃ Time: 168 hours Measurement at 24±4 hours after test conclusion."</td></tr><tr><td>2</td><td>High temperature storage test</td><td>GB/T 2423.2</td><td>Temperature: 125±2℃ Time: 168 hours Measurement at 24±4 hours after test conclusion.</td></tr><tr><td>3</td><td>Constant temperature and constant humidity test</td><td>GB/T 2423.3 (IEC 60068-2-78)</td><td>Temperature: 40±2℃ / humidity:93±2%RH Time: 168 hours Measurement at 24±4 hours after test conclusion.</td></tr><tr><td>4</td><td>High temperature and high humidity test</td><td>GB/T 2423.50</td><td>Temperature: 85±2℃ / humidity:85±2%RH Time: 168 hours Measurement at 24±4 hours after test conclusion.</td></tr><tr><td>5</td><td>Thermal shock test</td><td>GB/T 2423.22 (IEC 60068-2-14)</td><td>First -40±5℃ for 30±2 minutes, last 85℃ 30±2 minutes as 1 cycle. Total 10 cycles.</td></tr><tr><td>6</td><td>Salt spray test</td><td>GB/T2423.17 (IEC 60068-2-11)</td><td>Concentration :(5±0.1) % PH : 6.5 ~ 7.2 Temperature: 35 ±2 ℃ Time: 24 hours</td></tr><tr><td>7</td><td>Solder ability test</td><td>GB/T 2423.28 (IEC 60068-2-20)</td><td>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.</td></tr><tr><td>8</td><td>Drop test</td><td>GB/T 2423.8 (IEC 60068-2-32)</td><td>Floor should be hard,strong,concrete. Height:1m. Test 6 surfaces , 3 ridges and 1 corner of Test-box.</td></tr><tr><td>9</td><td>Vibration test</td><td>GB/T 4857.7</td><td>Frequency: 10-55-10Hz Sweep time: 1Min. Displacement:0.75mm, X,Y,Z axis 30Min respectively</td></tr><tr><td>10</td><td>Soldering resistance test</td><td>GB/T 2423.50</td><td>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.</td></tr></table>														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.
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		PART NO.: WHPT-EP100-016		SACLE 1:1	REV A0	x±0.35	x°±3.0°	CHECKED BY:																																																			
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TEL: +86 400 1048 018		WEB: WWW.WOHU-TEK.COM		REMARK: 50K---500 kHz Available	SHEET 4/4		.xx±0.25	.xx°±1.5°	DESIGND BY:																																																		
							.xxx±0.10	.xxx°±1.0°	Sunny.Xu																																																		
1		2		3		4		5		6		7		8																																													

- The best assembly quality guarantee period of product: 12 months (From shipment date)
Storage condition : seal in packaging, (temperature: 5 to 40°C, humidity: 10 to 75% RH or less).
- If taking out for use, the remaining products should be sealed in plastic bags and preserved in accordance with the above conditions, to avoid oxidation of electrodes and affect soldering status.
- Do not use or store in locations where there are conditions such as gas corrosion (salt, acid, alkali, etc.).
- Before soldering, be sure to preheat components.
The preheating temperature should be set so that the temperature difference between the solder temperature and chip temperature does not exceed 150°C.
- Always handle products with care to avoid damage.
- Do not touch electrodes with bare hands directly, as oil secretions may inhibit soldering.
Always ensure optimum conditions for soldering.
- Soldering corrections after mounting should be within the range of the conditions determined in the specifications.If overheated, a short circuit, performance deterioration, or lifespan shortening may occur.
- Use a wrist band to discharge static electricity in your body through the grounding wire.
- Do not expose the products to magnets or magnetic fields.
- Do not use for a purpose outside of the contents regulated in the delivery specifications.
- Do not use for Automotive application.