REACH & RoHS COMPLIANT

Specification for Approval

1 Features And Benefits

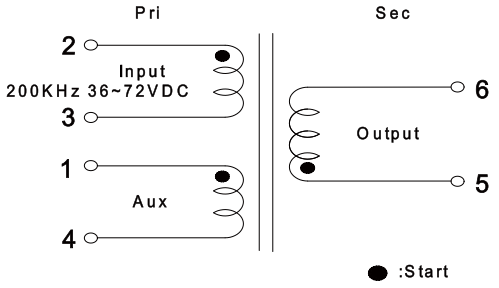
- Core material Ferrite
- Typical Topology : Active Clamp Forward converters.
- Multilayer PCB for transformer Winding.
- High efficiency; excellent DCR; very low leakage inductance,
- 1500 Vrms, one minute primary to secondary isolation.
- Turn ratios adopted to different output voltages
- 21.0×22.8×8.0mm maximum surface mount package.
- RoHS compatible
- Operating temperature–40°C to +125°C(Including self - temperature rise) .

2 Electrical Specifications @ 25°C

VOOHU P/N	VOOHU Model	Power (W)	Inductance (uH Min)	Leakage Inductance (uH Max)	DCR(mΩ Max)			Turns ratio			Output
					Pri	Sec	Aux	Pri	Sec	Aux	
WHPT-EQ200-019	SPER20S11	90	280.0	0.5	90	8	350	1	0.166	0.666	3.3V/27A
WHPT-EQ200-020	SPER20S12	90	280.0	0.5	40	2.5	220	1	0.25	0.5	5.0V/18A
WHPT-EQ200-021	SPER20S13	90	280.0	0.5	40	8	220	1	0.5	0.5	12V/7.5A
WHPT-EQ200-022	SPER20S14	90	280.0	0.5	40	33	220	1	1	0.5	24V/3.7A

Notes：

1.Measuring conditions 100 kHz, 1V.
2.Leakage inductance is for the primary and is measured with the secondary winding shorted.
3.DC current at 25°C that causes an inductance drop of <15% from its value without current.
4.HI-POT:Pri—Sec:1500VAC/2mA/5S ,Pri,Sec-Core:500VAC/2mA/5S.
5.Output is for the secondary. Output of the aux winding is 12 V, 30 mA.

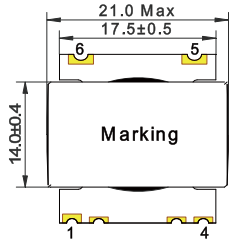


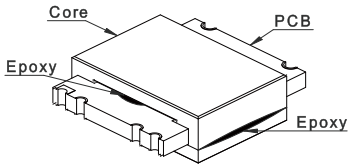
苏州沃虎电子科技有限公司 Su Zhou Voohu Electronic Tech.Co.Ltd	TITLE: 90W Planar Transformers Surface Mount Package	SIZE A4	UNITS MM[INCH]	GENERAL TOLERANCES UNLESS SPECIFIED	APPROVED BY: Geoffrey.Song
	PART NO.: WHPT-EQ200-90W Series WH-N-23023	SACLE 1:1	REV A1	x±0.35 / x°±3.0° / .x±0.30 / .x°±2.0°	CHECKED BY: Elvis.Song
TEL: +86 400 1048 018 WEB: WWW.VOOHU.CN	REMARK: Size:21.0x22.8x8.0mm maximum	SHEET 1/4		.xx±0.25 / .xx°±1.5° / .xxx±0.10 / .xxx°±1.0°	DESIGND BY: Sunny.Xu

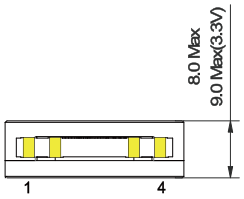
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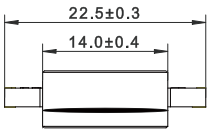
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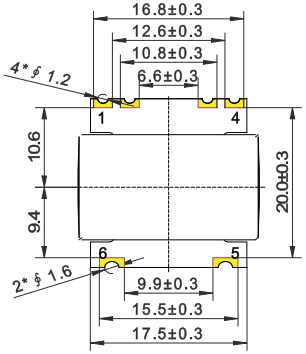
4 Dimensions (mm)& recommend layout

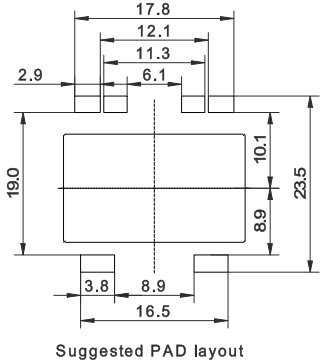








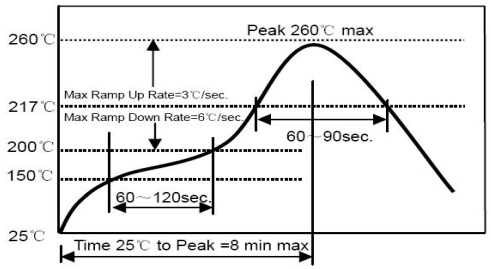




Suggested PAD layout

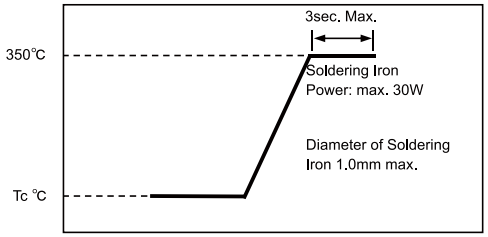
5 Recommended Solder Profile

a. Reflow Profile



Preheat condition: 150 ~200℃/60~120sec.
Allowed time above 217℃: 60~90sec.
Max temp: 260℃
Max time at max temp: 10 sec.
Solder paste: Sn/3.0Ag/0.5Cu
Allowed Reflow time: 2x max

b. Iron Soldering Profile



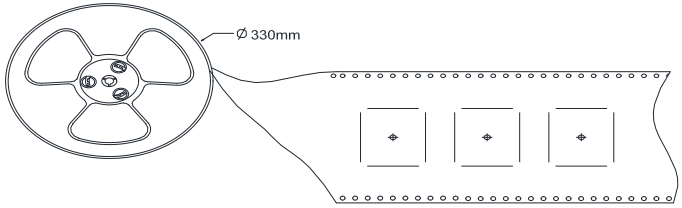
Iron soldering power: Max. 30W
Pre-heating: 150℃/60sec.
Soldering Tip temperature: 350℃ Max.
Soldering time: 3sec. Max.
Solder paste: Sn/3.0Ag/0.5Cu
Max.1 times for iron soldering

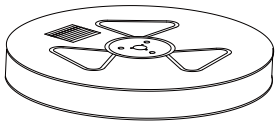
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TEL: +86 400 1048 018 WEB: WWW.VOOHU.CN	REMARK: Size:21.0x22.8x8.0mm maximum	SHEET 2/4		.xx±0.25 / .xx°±1.5° / .xxx±0.10 / .xxx°±1.0°	DESIGND BY: Sunny.Xu

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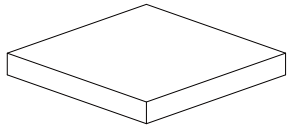
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7 Package

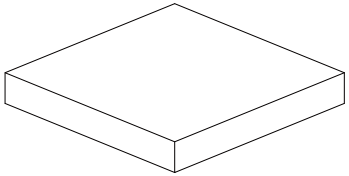




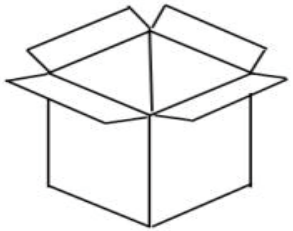
Two Reel



Inner Carton



Two Inner Carton



Export Carton

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

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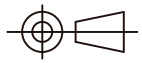
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REMINDERS

- 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 Autimotive application.

VOOHU 苏州沃虎电子科技有限公司
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