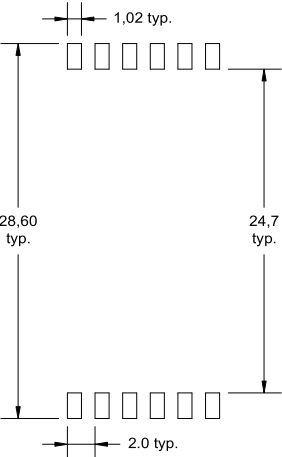
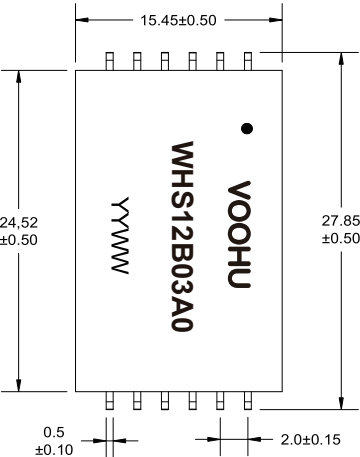
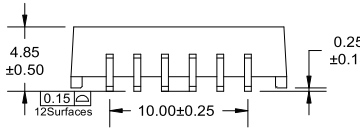


REACH & RoHS
COMPLIANT

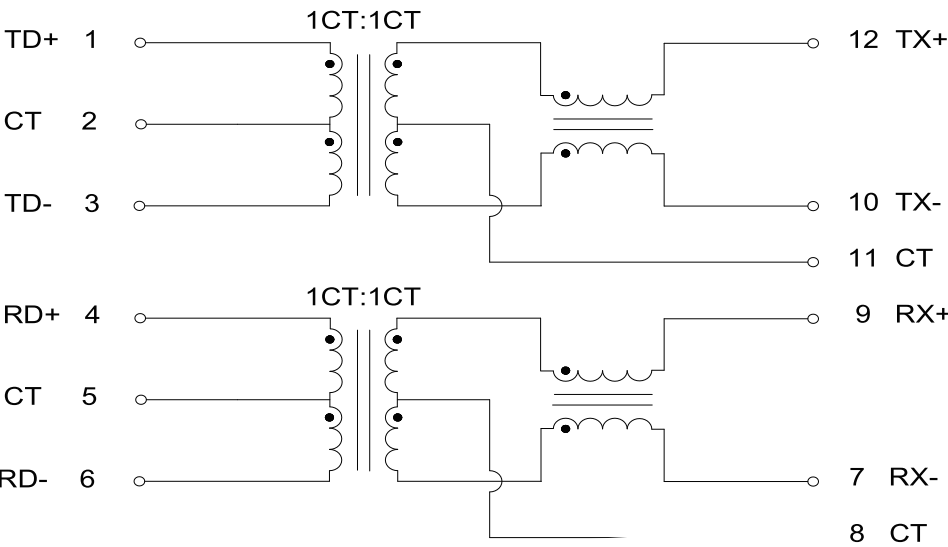
A. MECHANICAL(unit:mm)



Suggested PAD Layout



B. SCHEMATICS



VOOHU 苏州沃虎电子科技有限公司
Su Zhou Voohu Electronic Tech.Co.Ltd

TEL: +86 400 1048 018

WEB: WWW.WOHU-TEK.COM

TITLE:
Transformer

PART NO.:
WHS12B03A0

REMARK: BMS Application
Meet AEC-Q200 Standard

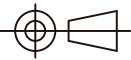
SIZE
A4

SACLE
1:1

SHEET
1/3

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

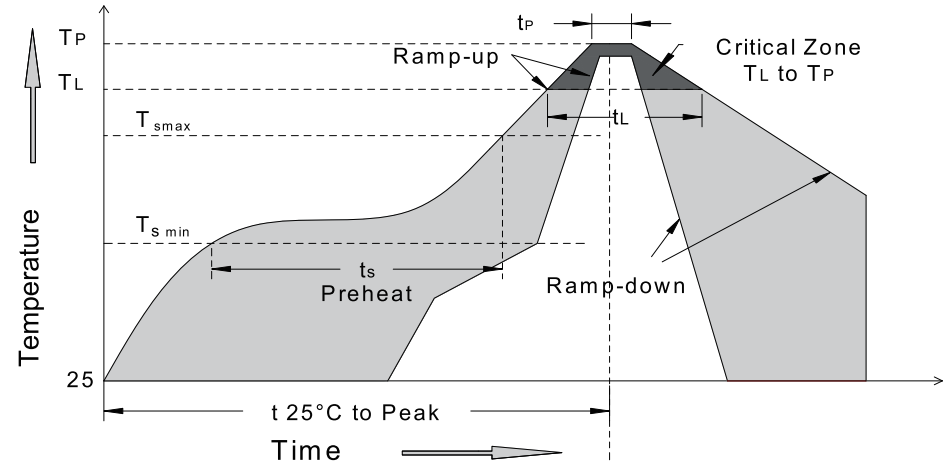
REACH & RoHS
COMPLIANT

C. ELECTRICAL SPECIFICATIONS @25°C

Unless Otherwise Specified, Testing is Performed at 25°C ± 5°C

1. OCL(TD & RD): 250uH Min. @ 100 KHz, 0.1V, 25°C
100uH Min. @ 100 KHz, 0.1V, -40°C~125°C
2. Leakage Inductance(TD & RD,TX & RX shorted): 0.5uH Max @ 100KHz, 0.1V
3. DCR(TD & RD): 750mΩ Max
DCR(TX & RX): 1000mΩ Max
4. Turns Ratio(Pri to Sec): 1CT:1CT±2%
5. Insertion Loss(TD to TX & RD to RX): -0.40 dB Max @ 4 MHz
6. Return Loss(TD & RD,TX & RX with 100 ohm load): -20 dB Min @ 4 MHz
7. Crosstalk Adjacent Channels (TD to RD): -50 dB Min @ 4 MHz
8. Common Mode Rejection(TD to TX & RD to RX): -35 dB Min @ 1-10 MHz
-20 dB Min @ 10-100 MHz
9. Differential to common rejection ratio: -35 dB Min @1-30MHz
-30 dB Min @ 30-80 MHz
-25 dB Min @ 80-100 MHz
10. Isolation Hipot: 6300VDC 1mA 60S (Equivalent to 4400VAC 1mA 60S) or
5300VAC 1mA 2s
11. Reinforced Insulation At a Working Voltage Of 1500VDC And The Creepage Distance Of
22mm Min And The clearance distance Of 20mm Min.
12. Insulation Resistance:400 Mohm Min
13. IEC 60112 Compliant, Comparative Tracking Index (CTI): I (≥600V)
14. Operating Temperature: -40°C to +125°C
15. Storage Temperature(With Package): +10°C to +40°C
16. Storage Temperature(Without Package, Just For Components): -40°C to +125°C
17. RoHS Compliant

D. RECOMMEND REFLOW SOLDERING CURVE



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): 20~40s

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

VOOHU 苏州沃虎电子科技有限公司
Su Zhou Voohu Electronic Tech.Co.Ltd

TITLE:
Transformer

SIZE
A4

UNITS
MM[INCH]

GENERAL TOLERANCES
UNLESS SPECIFIED

APPROVED BY:
Geoffrey.Song

PART NO.:
WHS12B03A0

SACLE
1:1

REV
A0

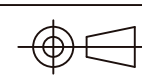
$x\pm 0.35$
 $.x\pm 0.30$

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

CHECKED BY:
Elvis.Song

REMARK: BMS Application
Meet AEC-Q200 Standard

SHEET
2/3



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

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

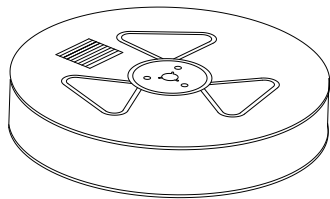
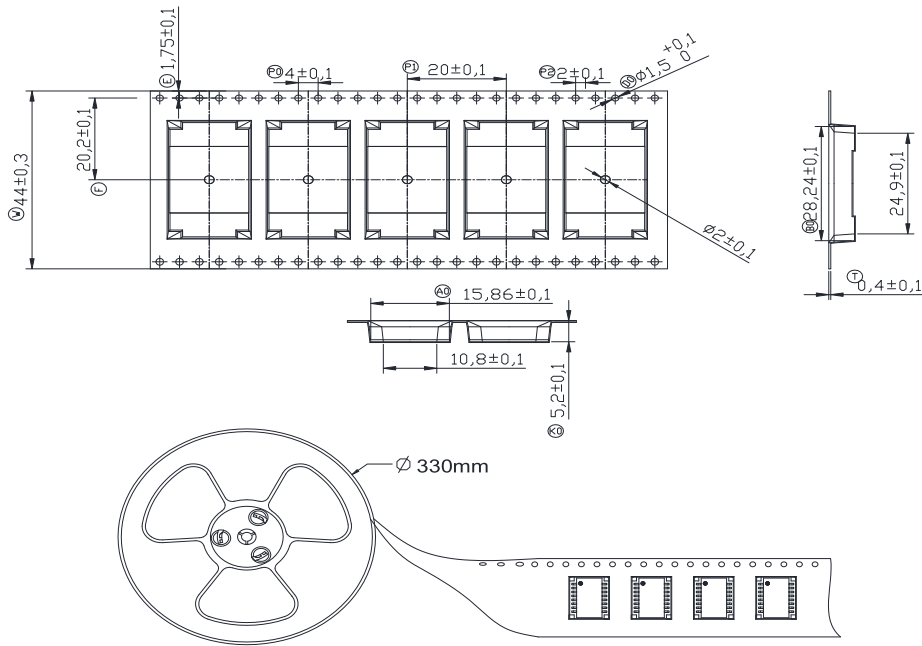
DESIGND BY:
Sunny.Xu

TEL: +86 400 1048 018

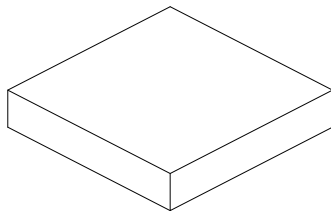
WEB: WWW.WOHU-TEK.COM

REACH & RoHS
COMPLIANT

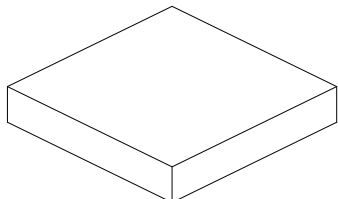
E. PACKAGE INFORMATION



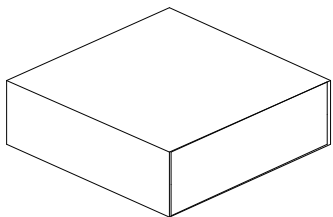
Two Reel



Two Inner Carton



Inner Carton



Export Carton

Package Quantity:
One Reel=600Pcs
One Inner Carton=600*2=1200Pcs
One Export Carton=1200*2=2400Pcs

VOOHU 苏州沃虎电子科技有限公司
Su Zhou Voohu Electronic Tech.Co.Ltd

TEL: +86 400 1048 018

WEB: WWW.WOHU-TEK.COM

TITLE:
Transformer

PART NO.:
WHS12B03A0

REMARK: BMS Application
Meet AEC-Q200 Standard

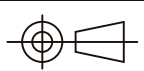
SIZE
A4

SACLE
1:1

SHEET
3/3

UNITS
MM[INCH]

REV
A0



GENERAL TOLERANCES
UNLESS SPECIFIED

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

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

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

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

APPROVED BY:
Geoffrey.Song

CHECKED BY:
Elvis.Song

DESIGND BY:
Sunny.Xu