

DC/DC Transformer

- Forward transformer for PoE applications
- RoHS Compliant
- Operating Temperature -40°C to +125°C
- Storage Temperature -40°C to +85°C
- Designed to operate at 250kHz
- Volt-time : 81.6(V-usec)

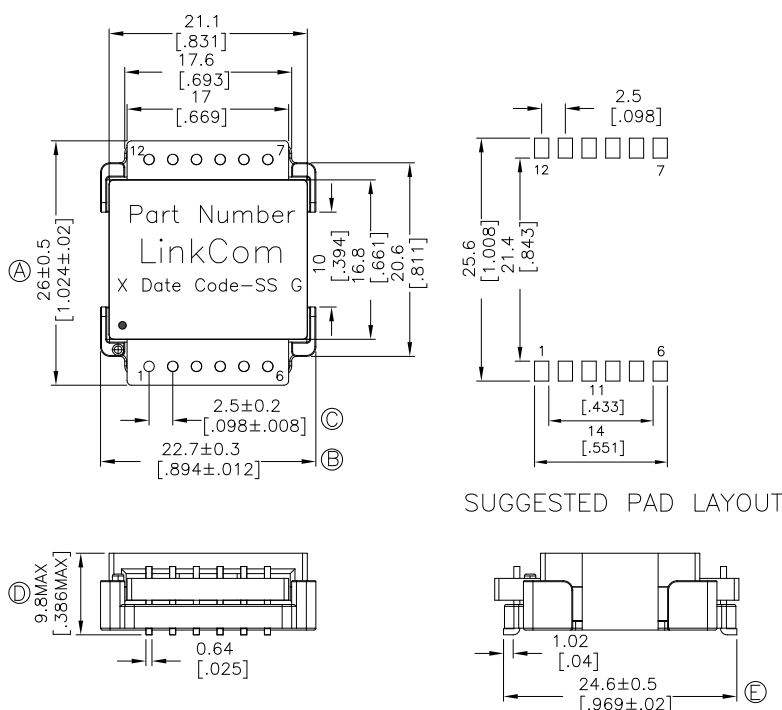


Electrical Specifications @25°C

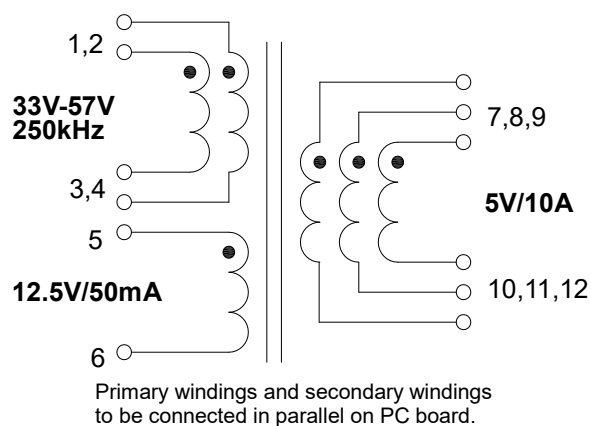
| | |
|---------------------|--|
| Inductance: | PIN 1,2-3,4 = 153uH Min. ~ 350uH Max. @ 100kHz/0.1V |
| Leakage Inductance: | PIN 1,2-3,4 = 0.4 uH Max. @ 100kHz/0.1V (PIN 5-6 & 7,8,9-10,11,12 Shorted) |
| D.C.R | PIN 1,2-3,4 = 90 mohm Max. |
| | PIN 7,8,9-10,11,12 = 4.7 mohm Max. |
| | PIN 5-6 = 150 mohm Max. |
| Turn Ratio: | PIN 1,2-3,4 : PIN 5-6 = 1.6 ± 3%:1 |
| | PIN 1,2-3,4 : PIN 7,8,9-10,11,12 = 4 ± 3%:1 |
| Hi-POT : | PRI. – SEC. = 1750Vdc/3Sec/0.5mA |

Dimensions

(Units: $\frac{\text{Inches}}{\text{mm}}$, Unless otherwise specified, all tolerances are $\pm \frac{.010}{0.25}$)



Schematic



Mark

1. Part Number----LPD0001
2. X----PRODUCT LINE or BLANK
3. DATE CODE----YYWW
4. SS----50 or BLANK
5. G----RoHS

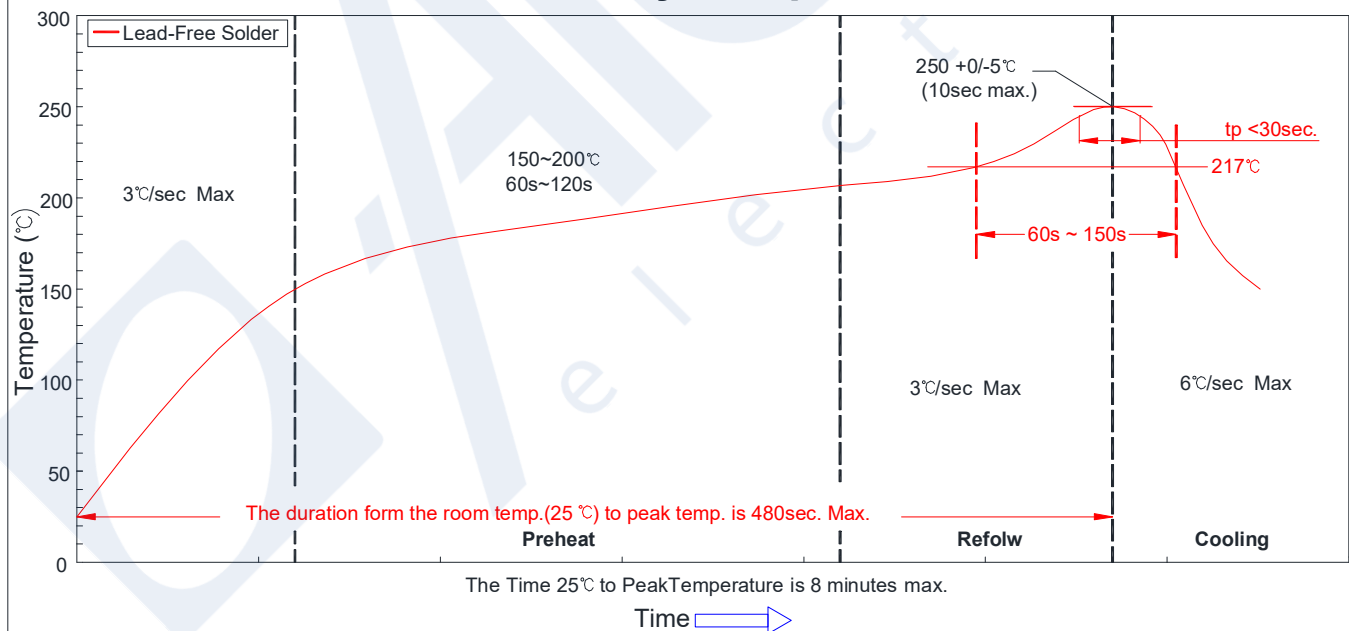
Package info

LPD0001-53R-Tape reel

Advice Soldering Profile

| Profile Feature | |
|--|------------------------------------|
| Average Ramp-Up Rate (Ts max. to Tp) | 3° C/second max. |
| Preheat -Temperature Min (Ts min.) -Temperature Max (Ts max.) -Time (ts min. to ts max.) | 150 °C 200 °C 60-120 seconds |
| Time maintained above: -Temperature (TL) -Time (tL) | 217 °C 60-150 seconds |
| Peak/Classification Temperature (Tp) | 250°C |
| Time within 5 °C of actual Peak Temperature (tp) | 10seconds max. |
| Ramp-Down Rate | 6 °C/second max. |
| Time 25 °C to Peak Temperature | 8 minutes max. |

Test Solderability Temperature Profile



Packing Specification

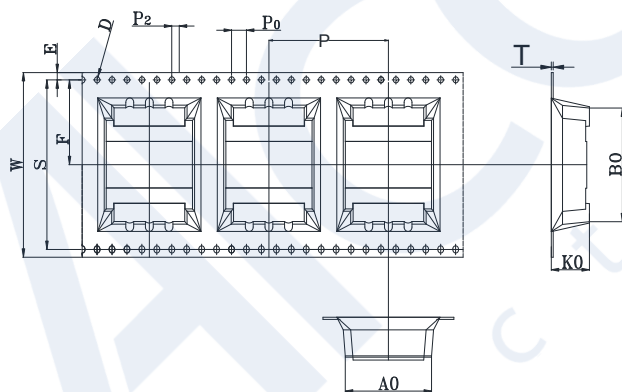
| | | | |
|------------------|------------|-------------|-----|
| <1>Model Number | LPD0001-53 | <2>Customer | |
| <3> Product Size | ED-21 | <4> Version | 1.1 |

| | | | | | | | | |
|-------------------|------------------------------------|-----|---|---|------------------------|---|-----|-----|
| <5> Package Item: | 1. Each Reel Qty | 150 | X | 2 | (Total Reel in Carton) | = | 300 | PCS |
| | 2.Total unit transformer in carton | 300 | X | 1 | (Carton Qty) | = | 300 | PCS |

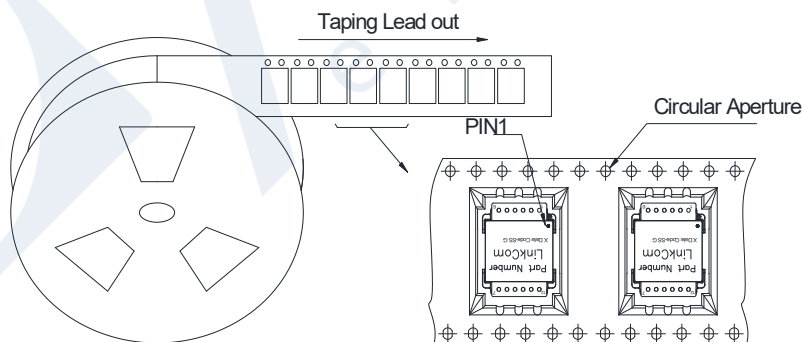
| | | | | | | | | |
|-------------------|-------|---|------|------|----|------|------|----|
| <6>Product weight | | | | | | | | |
| unit | 13.61 | g | N.W. | 4.08 | kg | G.W. | 6.48 | Kg |

- <7> Remark:
1. PIN1 face the aperture (one side have aperture) or round aperture (both sides have apertures).
 2. Front taping leave 160mm space, behind taping leave 390mm space
 3. Using protected-tape wrap one round after taping.
 4. The tape and reel will be blister packed with PVC and sealed.
 5. Each corner of inside carton will be place hard cardboard.
 6. After taping will seal with scotch magic tape. (MSL “1”)

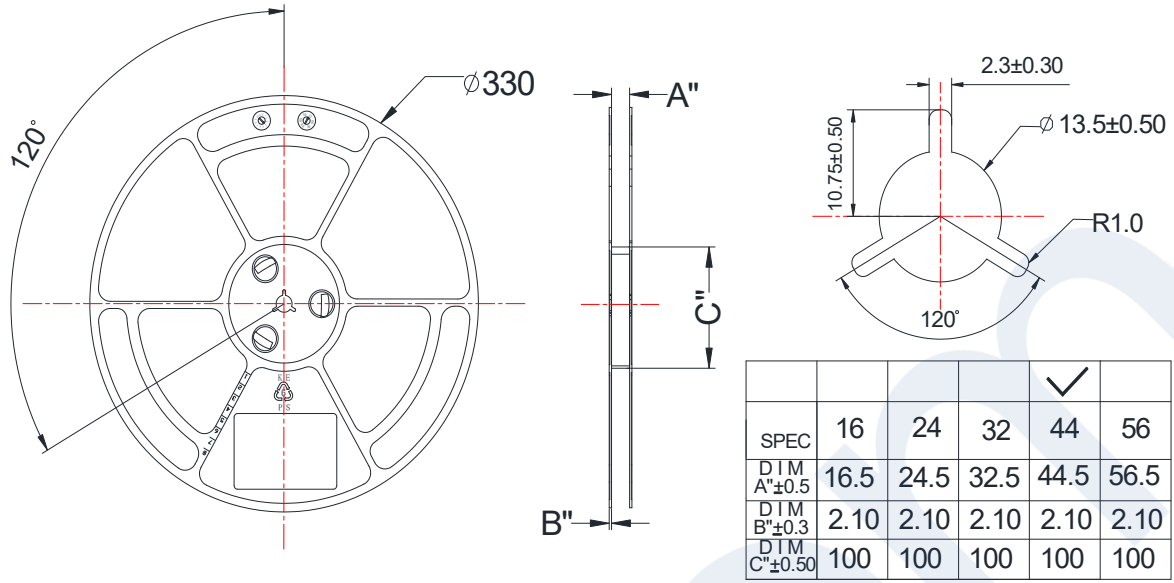
<8> Tapping Dimension & Lead Out



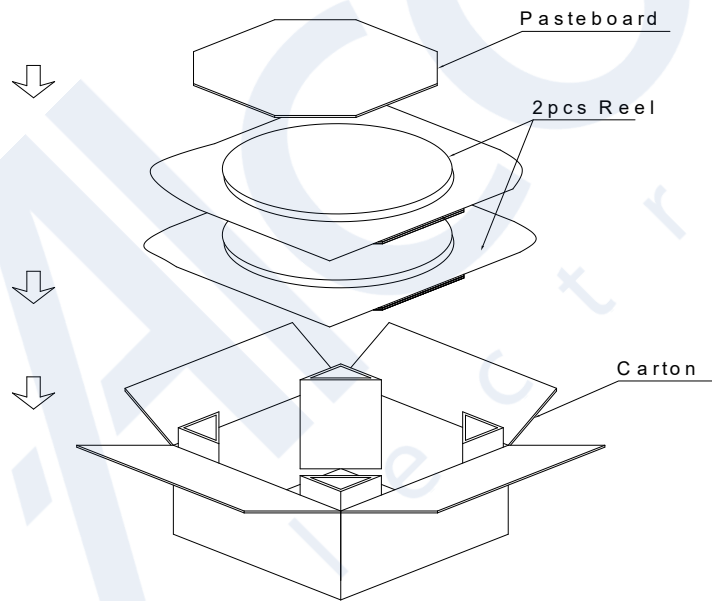
| ITEM | W | A0 | B0 | K1 | K0 | P | F | E | D0 | D1 | P0 | P2 | T |
|------|--|---|---|--|---|--|---|--|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|--|
| DIM | 44.0 ^{+0.30} _{-0.30} | 23.10 ^{+0.10} _{-0.10} | 27.10 ^{+0.10} _{-0.10} | 0.00 ^{+0.10} _{-0.10} | 10.20 ^{+0.10} _{-0.10} | 32.0 ^{+0.10} _{-0.10} | 20.20 ^{+0.10} _{-0.10} | 1.75 ^{+0.10} _{-0.10} | 1.5 ^{+0.10} _{-0.00} | 1.5 ^{+0.10} _{-0.00} | 4.0 ^{+0.10} _{-0.10} | 2.0 ^{+0.10} _{-0.10} | 0.50 ^{+0.05} _{-0.05} |



<9> Reel Dimension



<10> Packing Illustration



<11> Carton outside

