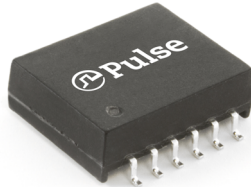
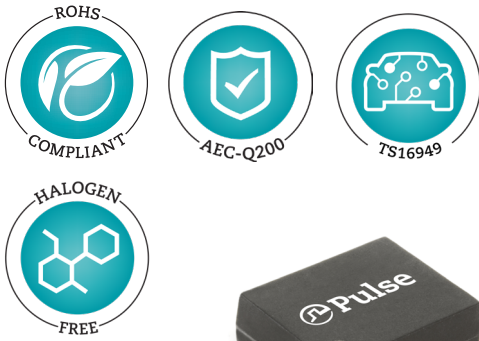


# Halogen Free BMS Transformer

Approved for ADBM6830 16-channel multicell battery monitor IC



- Fully qualified with leading BMS Silicon from ADI
- UL Compliance to IEC/UL62368-1
- Low profile height 4.88mm max
- High temperature performance up to +125°C
- Automated Winding and Production Process

## Applications:

Ideal for Electric Vehicles (EV), Energy Storage (ESS) and marine or aviation transportation.

### Electrical Specifications @ 25°C - Operating Temperature -40°C to +85°C

| Part Number | Inductance<br>(100kHz, 100mVrms) | Turns Ratio | Choke<br>fitted | Isolation<br>breakdown<br>(Pri:Sec) | Working<br>Voltage | Insulation &<br>Creepage<br>(mm) | Operating<br>Temperature | Qualified<br>BMS Silicon |
|-------------|----------------------------------|-------------|-----------------|-------------------------------------|--------------------|----------------------------------|--------------------------|--------------------------|
| HM2171HL    | 150 uH min<br>450 uH max         | 1.00 +/- 2% | YES             | 4300Vrms / 60sec                    | 1500VDC            | Functional >3mm                  | -40 to +125°C            | ADI - ADBM6830           |

## Additional Electrical performance

### RJ45 Material Specification

| Part Number | Leakage Inductance<br>(Max) | Winding DCR ( $\Omega$ ) |           | Insertion Loss     | Return Loss          | CMRR      |             |
|-------------|-----------------------------|--------------------------|-----------|--------------------|----------------------|-----------|-------------|
|             |                             | PHY Side                 | Line Side |                    | Z out = 100 $\Omega$ | 1 - 10MHz | 10- 1000MHz |
| HM2113ZNL   | 0.50 uH @ 100kHz            | 0.45 max                 | 0.85 max  | -0.30dB max @ 4MHz | -20 dB min @ 4MHz    | -35dB     | -20dB       |

#### Notes:

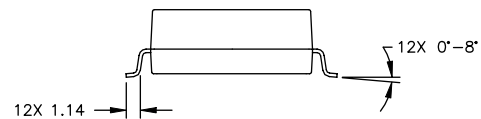
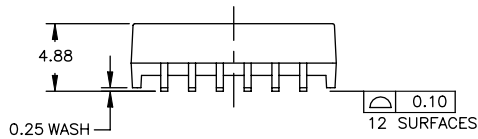
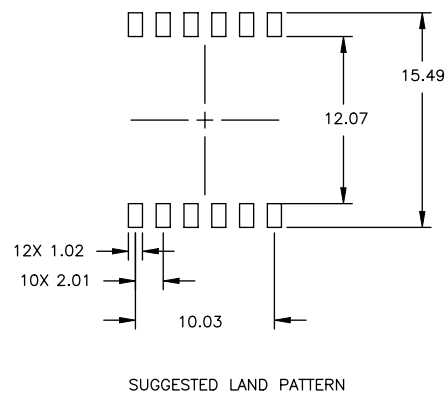
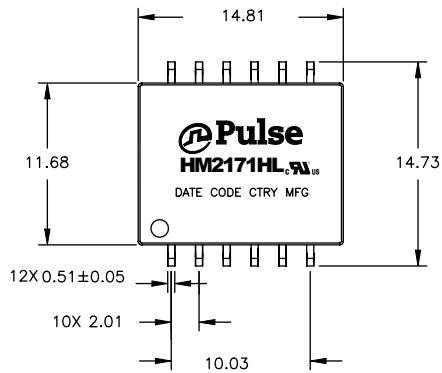
- Storage Temperature: -50°C to +125°C
- Compliance to J-STD:
  - J-STD-002: Solderability at 245°C Reflow Profile
  - J-STD-020: Moisture Sensitive Level 1
  - J-STD-075: R7, 245°C Maximum Through Reflow Solder
- The NL suffix part comes in Tubes with 35pcs per tube. To order tape and reel packaging add a 'T' suffix to the part number (ie: HM2171HL becomes H2171HLT). Quantity per reel is 350pcs/reel.
- Header: DAP (Diallyl Phthalate) with flammability Rating UL 94V-0 or better
- Lead Frame: Cooper Alloy  
Under plated: Half Hard Ductile Nickel 50-100" (1.3-2.5um)  
Over plated : 100% Tin electro-deposited per ASTM B545 300 - 50u" (8-13um)  
Finish : Matte finish 100% Tin solder
- AEC-Q200 Qualified, PPAP on request

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## MECHANICAL

HM2171HL

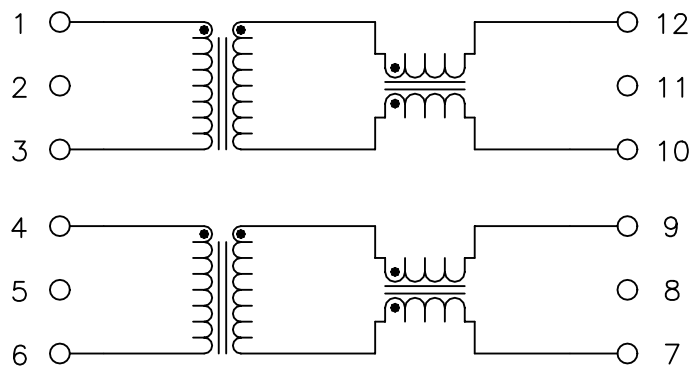


### Dimensions:

Unless otherwise specified,  
all tolerances are  $\pm 0.25$

## SCHEMATIC

HM2171HL

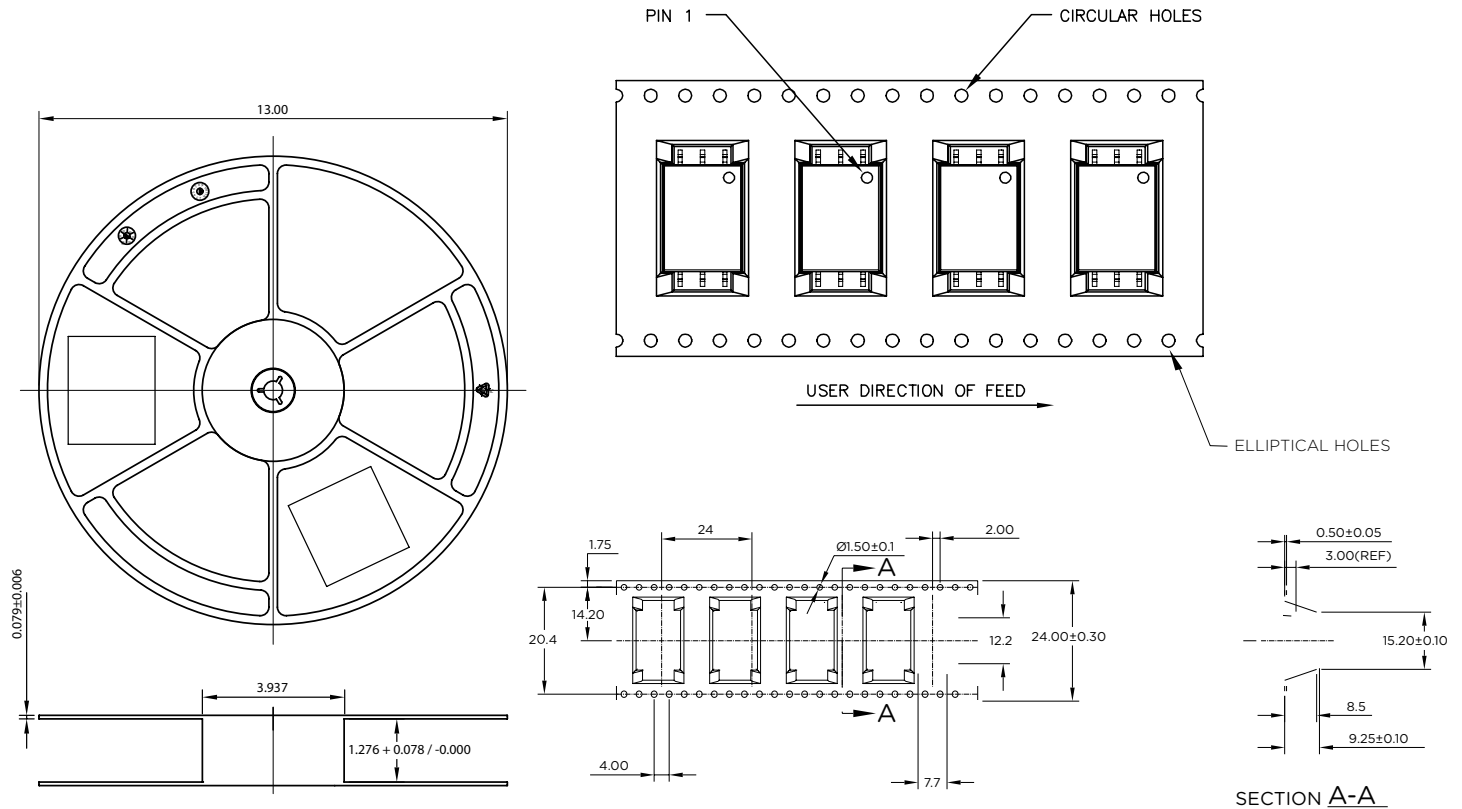


# Halogen Free BMS Transformer

Approved for ADBM6830 16-channel multicell battery monitor IC

## TAPE & REEL

HM2171HL



### For More Information:

Americas - [prodinfonetworkamericas@yageo.com](mailto:prodinfonetworkamericas@yageo.com) | Europe - [comms-apps-europe@yageo.com](mailto:comms-apps-europe@yageo.com) | Asia - [prodinfonetworkapac@yageo.com](mailto:prodinfonetworkapac@yageo.com)

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