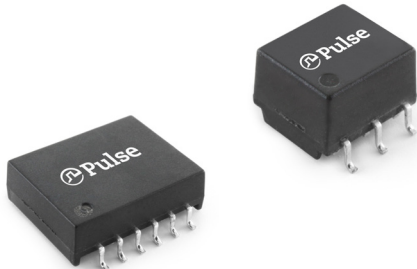


NXP Approved BMS Transformers

Approved for NXP MC33774x 18-channel multicell battery monitor IC



- Fully qualified with leading BMS Silicon from NXP
- Transformer only design provides for flexible PCB layout
- Construction meets IEC 61558 and IEC/UL62368-1
- High temperature performance up to +125°C
- Automated Winding and Production Process
- AEC-Q200 qualified, RoHS and REACH Compliant

Applications:

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

Electrical Specifications @ 25°C - Operating Temperature -40°C to +125°C

Part Number	Inductance (100kHz, 100mVrms)	Number of Channels	Choke fitted	Isolation breakdown (Pri:Sec)	Working Voltage	Insulation & Creepage (mm)	Operating Temperature	Qualified BMS Silicon
HM2118NL	150 uH min 450 uH max	DUAL	NO	4300VDC / 60sec	1600VDC	Functional	-40 to +125°C	NXP- MC33774x
HM2119NL	150 uH min 450 uH max	Single	NO	4300VDC / 60sec	1000VDC	Functional	-40 to +125°C	NXP- MC33774x

Additional Electrical performance

Material Specification

Part Number	Leakage Inductance (Max)	Winding DCR (Ω)		Insertion Loss	Return Loss	Insulation Resistance (MOhms)
		PHY Side	Line Side		Z out = 100 Ω	
HM2118NL	0.50 uH @ 100kHz	0.45 max	0.45 max	0.25dB max @ 4MHz	20 dB min @ 4MHz	400 min
HM2119NL	0.50 uH @ 100kHz	0.45 max	0.45 max	0.25dB max @ 4MHz	20 dB min @ 4MHz	400 min

Notes:

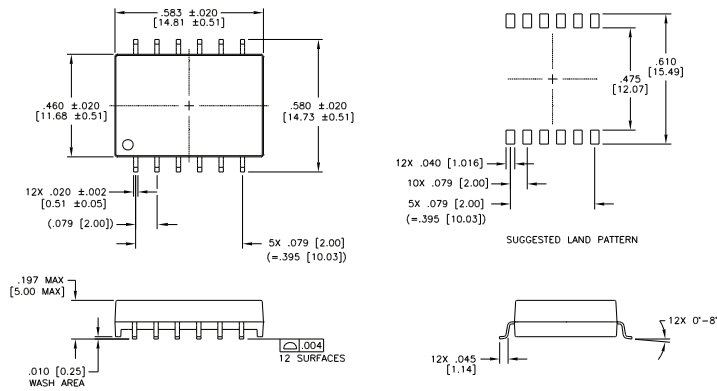
- Storage Temperature: -50°C to +125°C
- Compliance to J-STD:
 - J-STD-002: Solderability at 245°C Reflow Profile
 - J-STD-020: Moisture Sensitive Level 1
 - J-STD-075: R7, 245°C Maximum Through Reflow Solder
- The NL suffix part comes in Tubes with 35pcs per tube. To order tape and reel packaging add a 'T' suffix to the part number (ie: HM2118NL becomes HM2118NLT). Quantity per reel is 350pcs and 700pcs/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

NXP Approved BMS Transformers

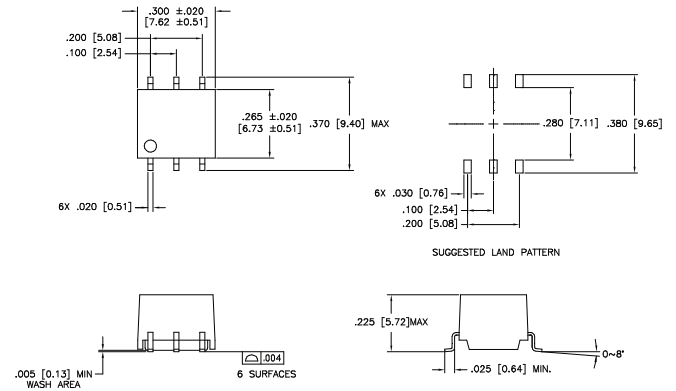
Approved for NXP MC33774x 18-channel multicell battery monitor IC

MECHANICALS

HM2118NL



HM2119NL

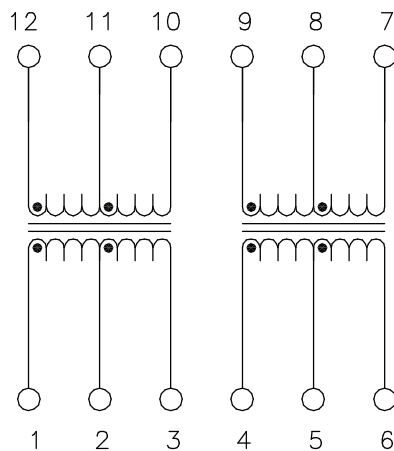


Dimensions:

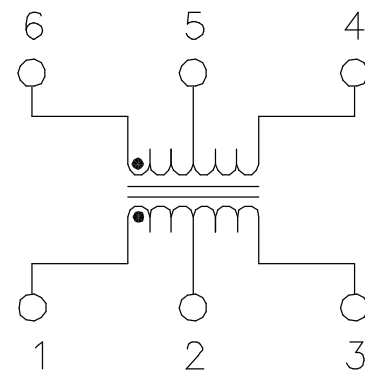
Unless otherwise specified,
all tolerances are ± 0,25

SCHEMATIC

HM2118NL



HM2119NL

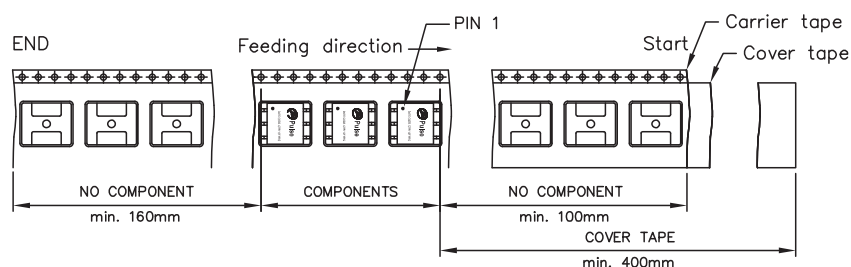
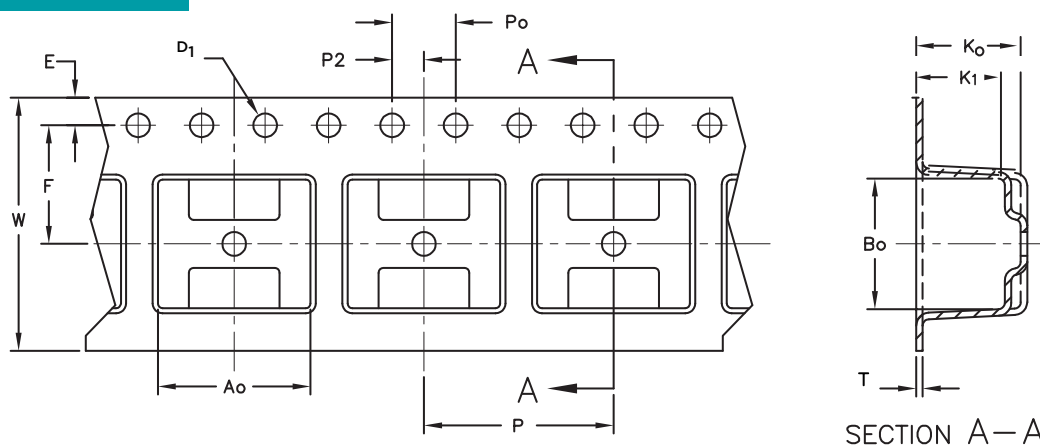


NXP Approved BMS Transformers

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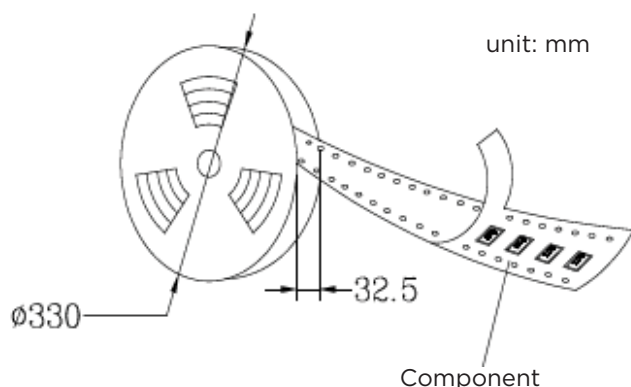
TAPE & REEL

HM2118NL, HM2119NL



HM2118NL							
W	24.0±0.30	P	24.00	A ₀	12.19	B ₀	15.24
S ₀	-----	P ₀	4.00	A ₁	-----	B ₁	-----
E	1.75	P ₂	2.00	A ₂	-----	B ₂	-----
F	11.56	D ₀	-----	K ₀	6.10	K ₁	5.26
T	0.40±0.05	D ₁	1.50 ±0.10 -0.00	QUANTITY PER REEL		300 PCS	

HM2119NL							
W	16.0±0.03	P	12.00	A ₀	9.65	B ₀	8.28
S ₀	-----	P ₀	4.00	A ₁	-----	B ₁	-----
E	1.75	P ₂	-----	A ₂	-----	B ₂	-----
F	7.5	D ₀	1.5	K ₀	6.6	K ₁	5.75
T	0.40±0.05	D ₁	1.50 ±0.10 -0.00	QUANTITY PER REEL		700 pcs	



1. Material: Black Conductive Polystyrene
2. Components per Reel: see table
3. Quantity per carton:
5 reels x 300 = 1500 pcs
6 reels x 700 = 4200 pcs

For More Information:

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