

FEATURES

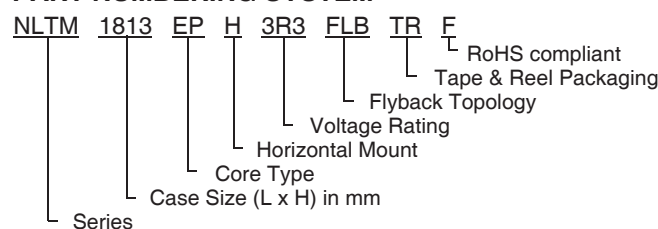
- Flyback Transformers for 13W POE Applications
- 3 Output Voltages available 3.3V, 5V and 12V
- WIDE TEMPERATURE (-40°C ~ +105°C)
- SMALL SIZE, LOW PROFILE (12.3MM MAX. HEIGHT)
- SMT GULL-WING TERMINATIONS
- 260°C Reflow Compliant

**RoHS
Compliant**
includes all homogeneous materials

SPECIFICATIONS TABLE

Item		Part Numbers		
		NLTM1813EPH3R3FLBTRF	NLTM1813EPH5R5FLBTRF	NLTM1813EPH120FLBTRF
Windings	Primary - N1 : (T3 ~ T4)	24 Turns (UEW-F ϕ 0.28)	24 Turns (UEW-F ϕ 0.28)	24 Turns (UEW-F ϕ 0.28)
	Secondary - N2 : (T7, 8 ~ T9, 10)	4 Turns (UEW-F ϕ 0.40*2P)	6 Turns (UEW-F ϕ 0.35*2P)	12 Turns (UEW-F ϕ 0.28*2P)
	Primary - N3 : (T3 ~ T4)	24 Turns (UEW-F ϕ 0.28)	24 Turns (UEW-F ϕ 0.28)	24 Turns (UEW-F ϕ 0.28)
	Primary - N4 : (T2 ~ T1)	12 Turns (UEW-F ϕ 0.20)	12 Turns (UEW-F ϕ 0.20)	12 Turns (UEW-F ϕ 0.20)
	Turns Ratio N1 (N3) : N2:N4 (no gap core)	6:1:3 $\pm$ 5% @ 100KHz, 1.0V	4:1:1 $\pm$ 5% @ 100KHz, 1.0V	2:1:1 $\pm$ 5% ~ 100KHz, 1.0V
Electrical Specifications	Inductance (T3 ~ T4) @ 250KHz, 0.2V	127 μ H $\pm$ 10%	127 μ H $\pm$ 10%	127 μ H $\pm$ 10%
	LK Inductance (T3 ~ T4) 250KHz, 0.2V shorted other pins	3.50 μ H max.	2.50 μ H max.	1.50 μ H max.
	DCR (T3 ~ T4) @ +25°C	0.255 Ω max.	0.222 Ω max.	0.199 Ω max.
	DCR (T2 ~ T1) @ +25°C	0.310 Ω max.	0.348 Ω max.	0.308 Ω max.
	DCR (T7, 8 ~ T9, 10) @ +25°C tie pin 7+8, 9+10	0.024 Ω max.	0.039 Ω max.	0.129 Ω max.
	Hi-Pot (Primary ~ Secondary) No Breakdown	1.5KVAC, 1mA for 2 seconds		
	Hi-Pot (Coil to Core) No Breakdown	1.5KVAC, 1mA for 2 seconds		

PART NUMBERING SYSTEM

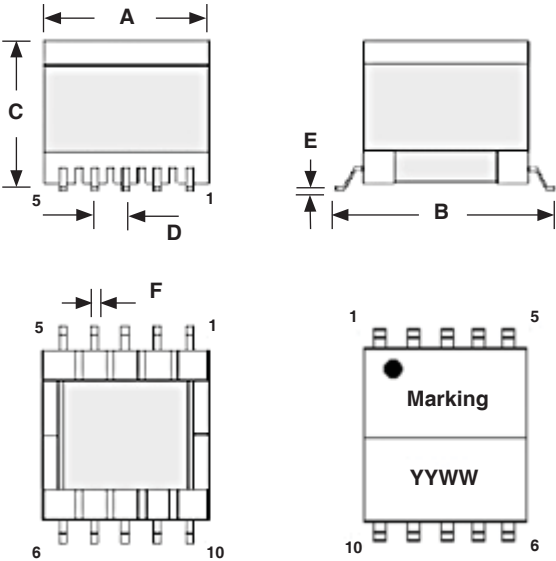


COMPONENT MATERIALS

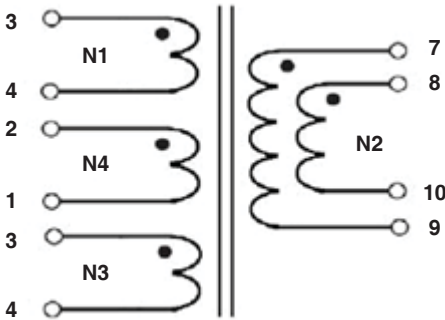
Item	Sub. Part	Manufacturer	Material	Type	UL#
1	Core	TDG Holding Co., Ltd.	TP4	EP13	n/a
2	Bobbin	Sumitomo Bakelite Co., Ltd.	PM9630	EP13	E41429
3	Wire	Elektrisola Hangzhou Co., Ltd.	P155	see specifications table	E258243
4	Tape	Jingjiang Yahua Pressure Sensitive Glue Co., Ltd.	Kapton Tape	PF-301	E165111
5	Solder	Huajun Metal Products Co., Ltd.	Sn99.3%, Cu0.7%	HB07H	n/a
6	Varnish	Elantas Electrical Insulation Elantas Pdg Inc.	Epoxy Resin	BC-359	E317427

DIMENSIONS TABLE

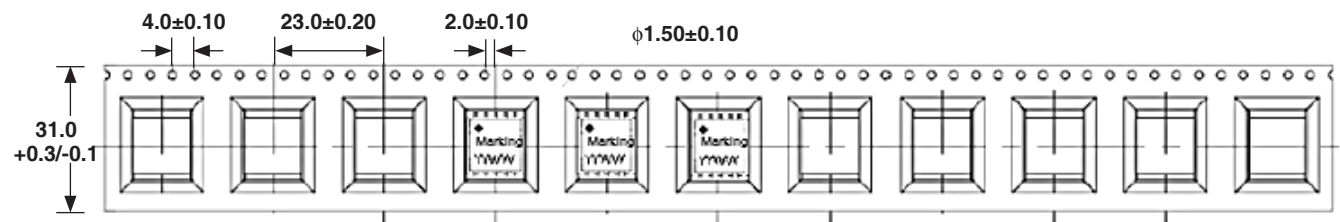
Item	Dimension (mm)
A	13.5 max.
B	17.8 max.
C	12.3 max.
D	2.54 ± 0.25
E	0.40 typ.
F	0.70 typ.



Circuit Schematic



CARRIER TAPE DIMENSIONS (mm)



REEL DIMENSIONS (mm)
QTY: 200 PIECES/REEL

