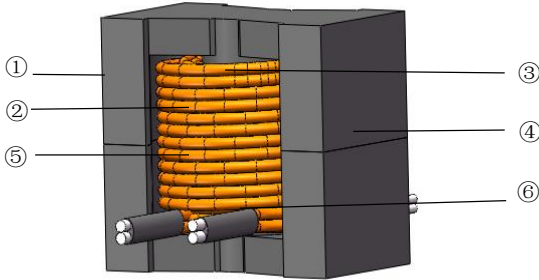


Proposal of Automotive LLC Transformers for ATWPPQ656264A202P

Approved By	Checked By	Prepared By
Jinbo Cai	Jimmy Zhang	Binglong Hu
2024/4/17	2024/4/17	2024/4/17

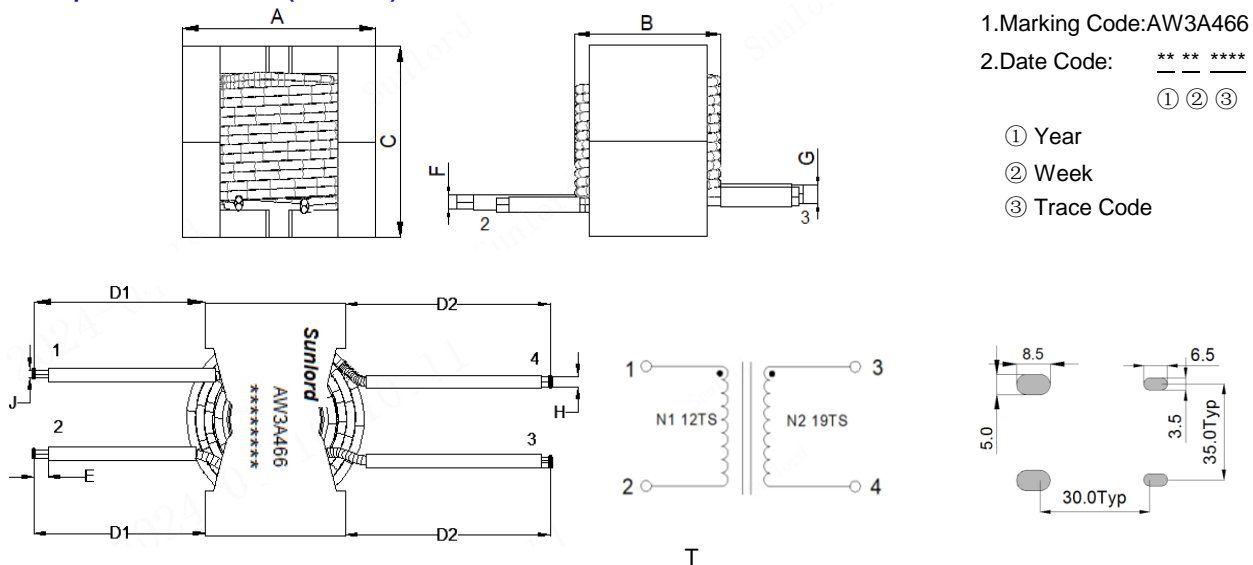
Note: This is a preliminary proposal and the final product P/N, Structure, Shape and Dimensions, Electrical Characteristics may be changed. You are requested to confirm and approve our spec.

1. Structure and Material



No.	Part Name	Material Name	UL NO.
①	Core	Mn-Zn Ferrite (PQ65, $\mu_i=3300$)	/
②	Wire	Primary: Mylar Wire ($\varnothing 0.08\text{mm} \times 780\text{P}$, Class H) Secondary: Mylar Wire ($\varnothing 0.08\text{mm} \times 450\text{P}$, Class H)	E172395
③	Bobbin	PM9630	E39252
④	Glue	ES5691	/
⑤	Tape	FK-01 Class H	E248834
⑥	Tube	Poly Tetra Fluoro Ethylene	/

2. Shape and Dimensions (unit: mm)



Shape and Dimensions

Recommended PCB Pattern

Item	A	B	C	D1	D2	E	F	G
Sunlord Spec.	66.20Max	57.00Max	62.50Max	80.00Min	130.00Min	7.50±1.00	7.50±1.00	5.00±1.00

Item	H	J						
Sunlord Spec.	2.30±0.80	3.70±0.80						

3. Electrical Characteristics (Operating Temperature: - 40°C to + 125°C; Operating Frequency: 100kHz)

Sunlord P/N: ATWPPQ656264A202P

Parameters	Inductance	Lk	Q	Turn Ratio	DCR	
Unit	uH	uH	/	Ts	mΩ	
Test Terminal	Pin(1-2)	Pin(1-2), shorted other pins	Pin(1-2)	Pin(1-2):Pin(3-4)	Pin(1-2)	Pin(3-4)
Sunlord Design	48.00 ± 5%	1.20 Max	40.00 Min	12:19 ± 0.5Ts	6.50 Max	18.00 Max
Test Condition	Measured at 100KHz, 1.0V 25°C			Measured at 15.75KHz, 1.0V, 25°C	Measured at 25°C	

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Parameters	HI-POT	
Unit	/	
Test Terminal	Pin1 to Sec	Pin3 to Core
Sunlord Design	3600Vac/50Hz/ 2s/2mA	3600Vac/50Hz /2s/2mA
Test Condition	Measured at 25°C	

Note: • Resistance to wave soldering heat in accordance with JEDEC J-STD-020D with 245 °C for 10~40 seconds

- MSL level 1
- RoHS compatible
- All requirements shall be fulfilled over lifetime