Winding Transformer–ATWP Series

Customized

Operating Temp. : -40℃~+125℃

PRODUCT IDENTIFICATION

A	T	W	P	EP	06	07	08	B	3	06	T
①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪	⑫

①

Product Type	
A	Automotive

②

Type	
T	Transformer

③

Structure	
W	Wire Wound

④

Feature Code	
P	for Power

⑤

Core Type
EE/EP/ES etc.

⑥

Core Length (Typ.)	
06	6.0mm

⑦

Bobbin Length (Typ.)	
07	7.0mm

⑧

Product Height (Typ.)	
08	7.0mm

⑨

Style	
B	Horizontal & SMD
D	Vertical & SMD

⑩

Number of Coil
1～9

⑪

Design Code
00~99, A0~Y9

⑫

Packing	
T	Taping
P	Pallet
B	Bulk

Sunlord Industrial Park, Dafuyuan Industrial Zone, Guanlan, Shenzhen, China 518110 **Tel**: 0086-755-29832660 **Fax**: 0086-755-82269029 **E-Mail**: sunlord@sunlordinc.com

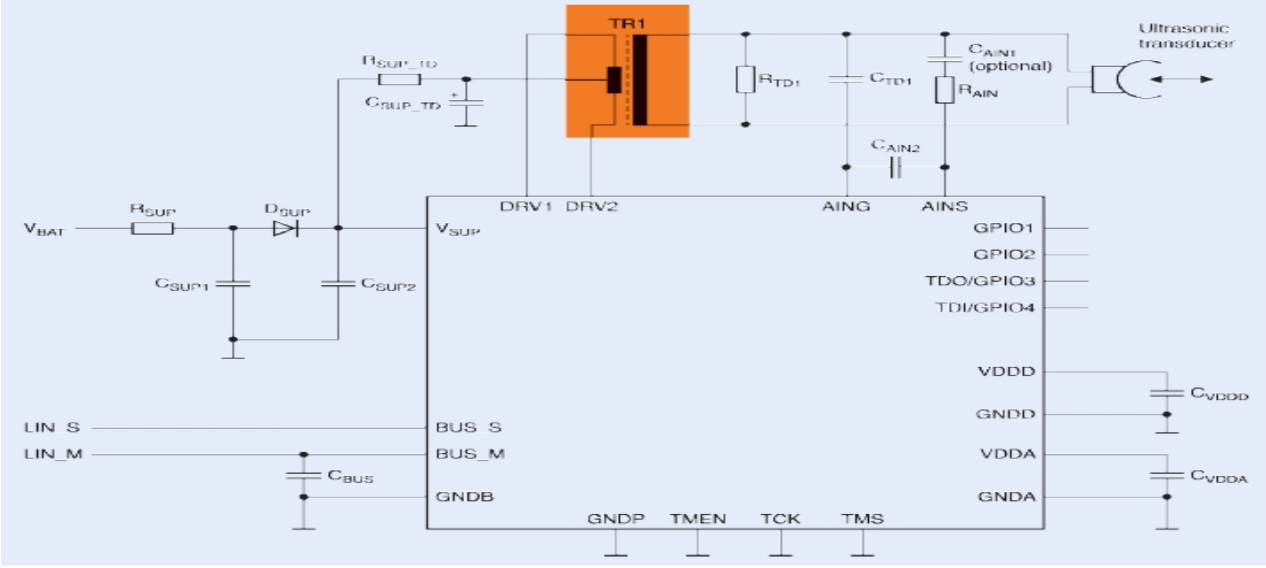
TRANSFORMER FOR PARKING SENSOR

FEATURES

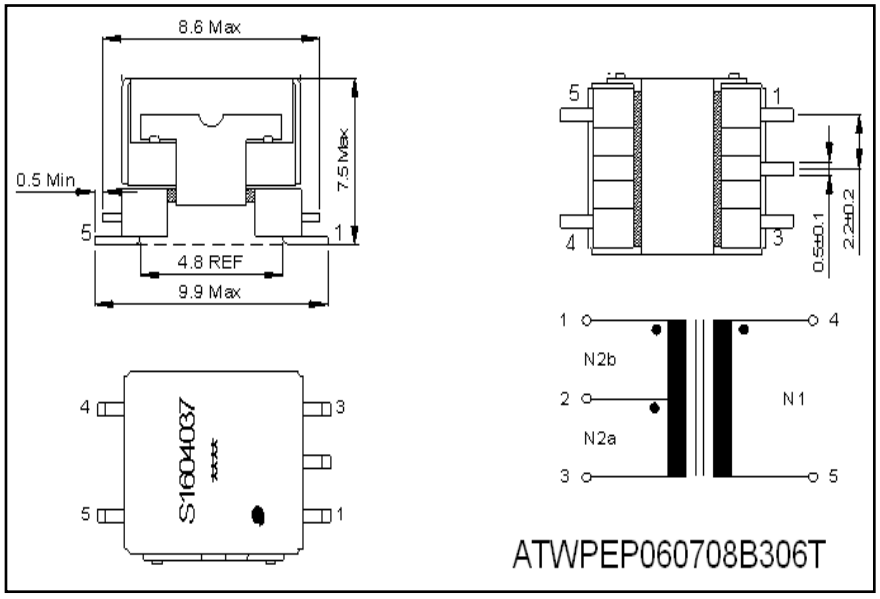
- Resistance to reflow soldering heat in accordance with JEDEC J-STD-020D with 245℃ for 10sec.
- MSL level 1
- AEC-Q200 verified
- High reliability and sensitivity

APPLICATIONS

- Ultrasonic parking system



SHAPE AND DIMENSIONS



ATWPEP060708B306T

Sunlord Industrial Park, Dafuyuan Industrial Zone, Guanlan, Shenzhen, China 518110 **Tel**: 0086-755-29832660 **Fax**: 0086-755-82269029 **E-Mail**: sunlord@sunlordinc.com

SPECIFICATION

ATWPEP060708B306T	Test Terminal	Test Specification
Inductance	Pin(4-5)	4.2±5%mH
DCR	Pin(4-5)	40Ω Max.
	Pin(1-2)	0.7Ω Max.
	Pin(2-3)	0.7Ω Max.
HI-POT	Pri. to Sec.	200 V_{DC} /(50/60)Hz/1mA /2sec.
	All winding to core	200 V_{DC} /(50/60)Hz/1mA /2sec.
Insulation Resistance	Pri. to Sec.	100 V_{DC}/10MΩ Min./2sec.
	All winding to core	100 V_{DC}/10MΩ Min./2sec.
Coupling Capacitance	Pin(4-2)	50pF Max.
Turns Ratio	Pin(4-5): Pin(1-2): Pin(2-3)	15: 1: 1

CUSTOMIZED PRODUCT PRESENTATION

We can customize transformers for parking sensor according to your requirements. Please refer to the following feature ranges:

Core Type	Sensor Distance(m)
EP	≤2.5; ≤4; ≤5

Sunlord Industrial Park, Dafuyuan Industrial Zone, Guanlan, Shenzhen, China 518110 **Tel**: 0086-755-29832660 **Fax**: 0086-755-82269029 **E-Mail**: sunlord@sunlordinc.com

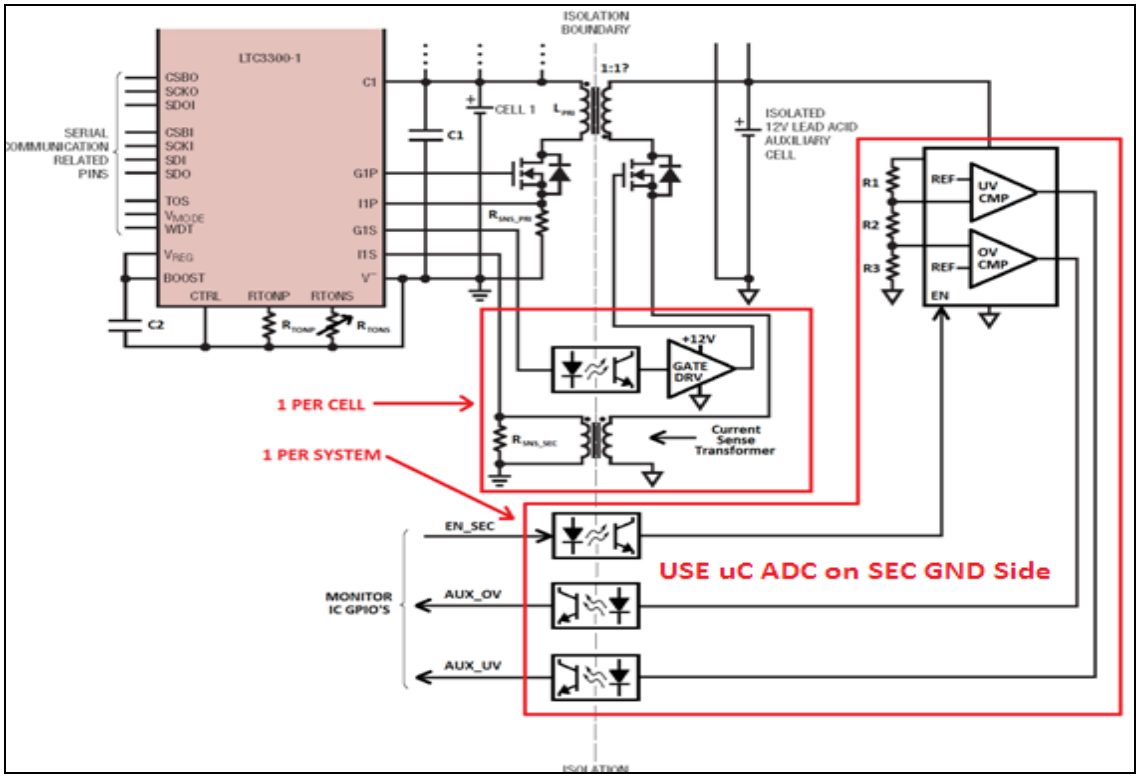
TRANSFORMER FOR BATTERY MANAGEMENT SYSTEM

FEATURES

- 2500V
-
- RoHS
- AEC-Q200
- 2500 Volts of isolation
- Low inter-winding capacitance
- RoHS compliant
- AEC-Q200 verified

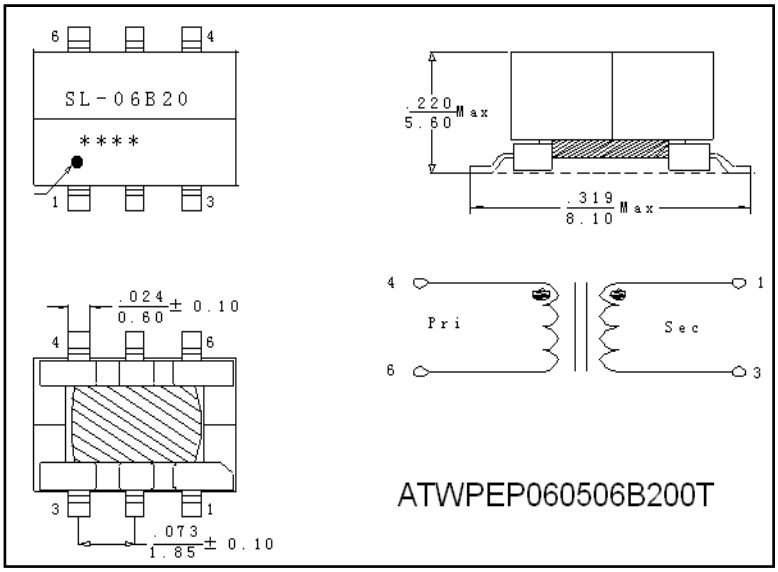
APPLICATION

- Battery management system (BMS)

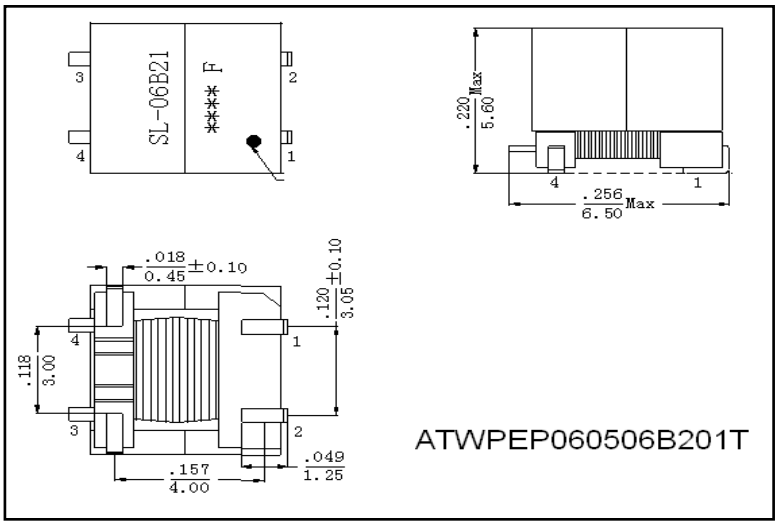


Sunlord Industrial Park, Dafuyuan Industrial Zone, Guanlan, Shenzhen, China 518110 **Tel**: 0086-755-29832660 **Fax**: 0086-755-82269029 **E-Mail**: sunlord@sunlordinc.com

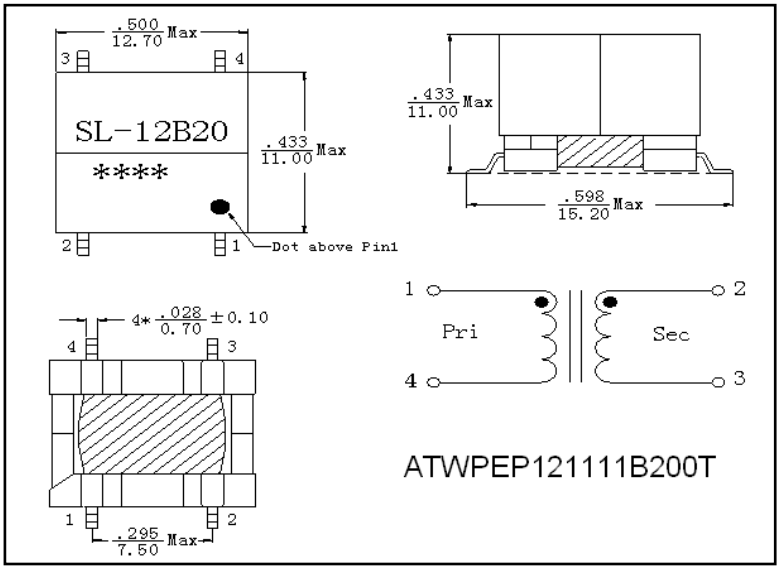
SHAPE AND DIMENSIONS



ATWPEP060506B200T
Application：
Linear IC
Gate Drive Transformer for Linear IC



ATWPEP060506B201T
Application：
Linear IC
Current Sensor Transformer for Linear IC



ATWPEP121111B200T
Application：
Linear IC
Flyback Transformer for Linear IC

Sunlord Industrial Park, Dafuyuan Industrial Zone, Guanlan, Shenzhen, China 518110 **Tel**: 0086-755-29832660 **Fax**: 0086-755-82269029 **E-Mail**: sunlord@sunlordinc.com

SPECIFICATION

ATWPEP060506B200T	Test Terminal	Test Specification
Inductance	Pin(4-6)	690μH Min.
Leakage Inductance	Pin(4-6), shorted all other pins	2.5μH Max.
DCR	Pin(4-6)	1.65Ω Max.
	Pin(1-3)	1.0Ω Max.
HI-POT	Winding to winding	2500 V_{AC} /(50/60)Hz/1mA 60sec.
	All winding to core	1250 V_{AC} /(50/60)Hz/1mA/60sec.
Coupling Capacitance	Pin(1-4)	30pF Max.
Self-Resonant Frequency	Pin(4-6)	0.75MHz Min.
Turns Ratio	Pin(4-6): Pin(1-3)	1.5: 1

ATWPEP060506B201T	Test Terminal	Test Specification
Inductance	Pin(4-3)	2.5mH
DCR	Pin(4-3)	4.8Ω Max.
	Pin(1-2)	24mΩ Max.
HI-POT	Winding to winding	2500 V_{AC} /(50/60)Hz/1mA/60sec.
	All winding to core	1250 V_{AC} /(50/60)Hz/1mA/60sec.
Coupling Capacitance	Pin(1-4)	2pF Max.
Sensed Current	Pin(1-2)	10A Max.
Turns Ratio	Pin(4-3): Pin(1-2)	100: 1

ATWEP121111B200T	Test Terminal	Test Specification
Inductance	Pin(1-4)	10~12μH
Leakage Inductance	Pin(1-4), shorted all other pins	100nH Max.
DCR	Pin(1-4)	20mΩ Max.
	Pin(2-3)	200mΩ Max.
HI-POT	Winding to winding	2500 V_{AC} /(50/60)Hz/1mA /60sec.
	All winding to core	1250 V_{AC} /(50/60)Hz/1mA /60sec.
Coupling Capacitance	Pin(1-2)	38pF Max.
Turns Ratio	Pin(1-4): Pin(2-3)	1: 2

Sunlord Industrial Park, Dafuyuan Industrial Zone, Guanlan, Shenzhen, China 518110 **Tel**: 0086-755-29832660 **Fax**: 0086-755-82269029 **E-Mail**: sunlord@sunlordinc.com

TRANSFORMER FOR CURRENT SENSE-ATWPEP060606

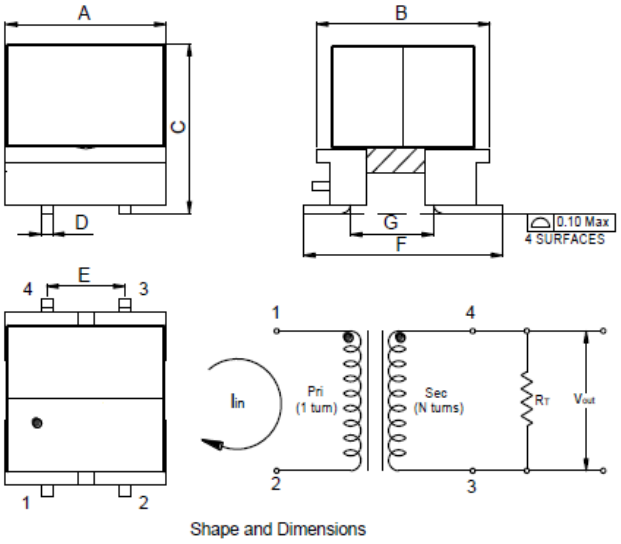
FEATURES

- Low leakage inductance
- Low inter-winding capacitance
- High SRF
- High isolation between primary and secondary side
- AEC-Q200 verified

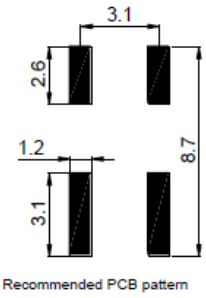
APPLICATIONS

- DC/DC converter for flyback control, overload detection, off detection (can be used as power and safety systems)

SHAPE AND DIMENSIONS



Shape and Dimensions



Recommended PCB pattern

ATWPEP060606B

Unit: mm

A	B	C	D	E	F	G
7.0Max.	7.5Max.	8.5Max.	0.5±0.1	3.1±0.2	9.0Max.	3.3Ref.

TYPICAL SPECIFICATION

Part Number	Voltage Time	Inductance	DCR		Turns Ratio	HI-POT	
Units	V·μs	mH Min.	Ω Max.	mΩ Max.	/	/	
Test Terminal	/	Pin(4-2)	Pin(4-2)	Pin(11-12)	Pin(11-12): Pin(4-2)	Winding to winding	All windings to core
ATWPEP060606B201T	55	0.6	1.6	22	1: 50±3.0%	2500V_{AC}/ (50/60)Hz/ 1mA/ 60sec	1500V_{AC} / (50/60)Hz/ 1mA / 60sec
ATWPEP060606B202T	110	2.5	3.2	22	1: 100±3.0%		
ATWPEP060606B203T	170	5.6	8.0	22	1: 150±3.0%		

Sunlord Industrial Park, Dafuyuan Industrial Zone, Guanlan, Shenzhen, China 518110 **Tel**: 0086-755-29832660 **Fax**: 0086-755-82269029 **E-Mail**: sunlord@sunlordinc.com

TRANSFORMER FOR CURRENT SENSE-ATWPEP070710

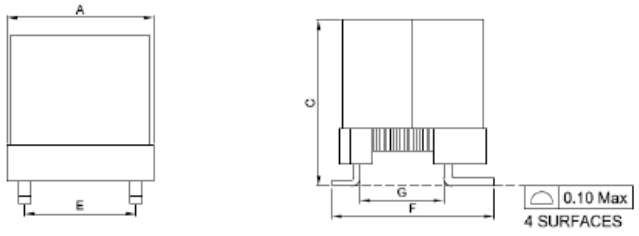
FEATURES

- Low leakage inductance
- Low inter-winding capacitance
- High SRF
- High isolation between primary and secondary side
- AEC-Q200 verified

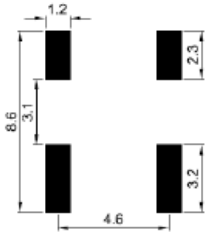
APPLICATIONS

- DC/DC converter for flyback control, overload detection, off detection (can be used as power and safety systems)

SHAPE AND DIMENSIONS



Shape and Dimensions



Recommended PCB pattern

ATWPEP070710B

Unit: mm

A	B	C	D	E	F	G
8.00Max.	8.00Max.	9.80Max.	0.50±0.1	4.60±0.2	8.30Max.	4.00Ref.

Sunlord Industrial Park, Dafuyuan Industrial Zone, Guanlan, Shenzhen, China 518110 **Tel**: 0086-755-29832660 **Fax**: 0086-755-82269029 **E-Mail**: sunlord@sunlordinc.com

TYPICAL SPECIFICATION

ATWPEP070710B	Test Terminal	Test Specification
Coupling Capacitance	Pin(4-3)	4.0pF Max.
Inductance	Pin(4-2)	6.0mH Min.
HI-POT	Pri. to Sec.	$2500V_{AC}$/1mA/(50/60)Hz/60sec
	All winding to core	$500V_{AC}$/1mA/(50/60)Hz/60sec
Turns Ratio	Pin(1-2): Pin(4-3)	Customizable

CUSTOMIZED PRODUCT PRESENTATION

We can customize transformers for BMS according to your requirements.

Remark：

※The picture is for reference and the real product may be different.

※ Recommended storage conditions :10℃~30℃, RH 70% (Max.)

※We can customize products according to your requirements. Please contact your local sales.

Sunlord Industrial Park, Dafuyuan Industrial Zone, Guanlan, Shenzhen, China 518110 **Tel**: 0086-755-29832660 **Fax**: 0086-755-82269029 **E-Mail**: sunlord@sunlordinc.com