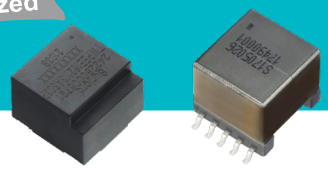
Wire Wound Transformer–TWP/ TWS Series

Customized



Operating temp. : -40°C ~+125°C

PRODUCT IDENTIFICATION

1	2	3	4	5	6	7	8	9	10	11
T	W	P	EP	07	06	09	B	3	01	T

1 Type

T	Transformer

2 Structure

W	Wire

3 Feature Code

S	For Signal
P	For Power
N	For Network

4 Core Type

EE/EP etc.

6 Bobbin Size of Pin Direct Typ. (Refer to Mark D in Fig.2)

06	6.0mm
18	18mm

8 Style

A	Horizontal & Pin
B	Horizontal & SMD
C	Vertical & Pin
D	Vertical & SMD

5 Core Size Typ. (Refer to Mark A in Fig.1)

07	7.0mm
16	16mm

7 Product Height Typ. (Refer to Mark H in Fig.3)

09	9.0mm

9 Number of Coil

1 ~ 9

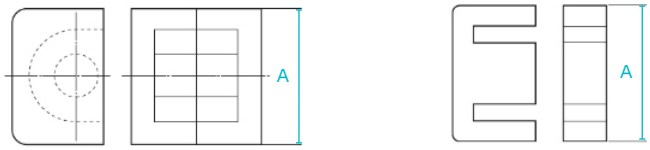
10 Design Code

00~99, A0~Y9

11 Packing

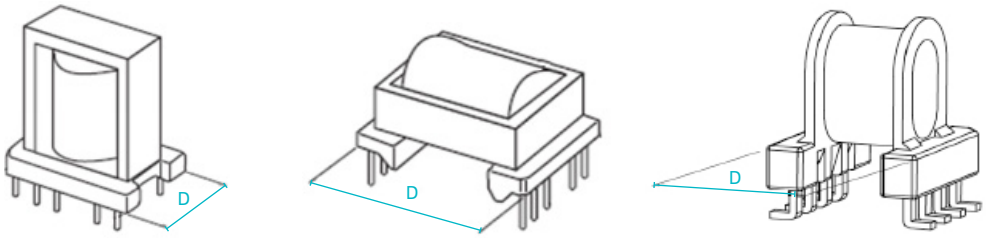
T--Taping, P--Pallet, B--Bulk

Core Type & Core A Size Fig. 1



EP EE

Bobbin Size of Pin Direct Fig. 2



Vertical Horizontal Horizontal

Product Height Fig. 3



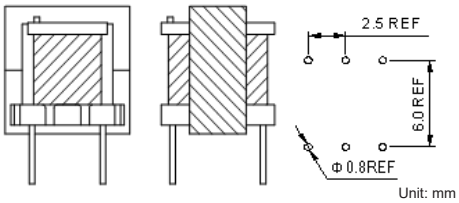
Core Type EE Reference Data — Power Transformer

FEATURES AND APPLICATIONS

- ◆ Common types, open shape for easy selection and good heat dissipation
- ◆ Widely used in the power of program-controlled switches, high-power UPS inverter power supplies, computer power, energy-saving lamps, and so on

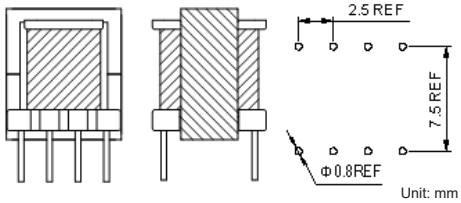
SPECIFICATIONS

◆ **P/N: TWPEE101011C □□□ P**



Unit: mm

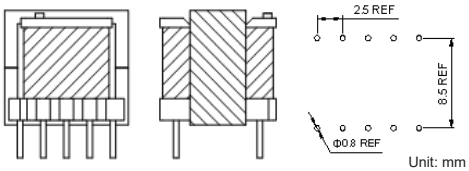
Core Type: EE08 Recommended PCB Layout
Reference dimension (L×W×H): 10×10×10mm Max.
Power: 2.5W Max.



Unit: mm

Core Type: EE10 Recommended PCB Layout
Reference dimension (L×W×H): 12×12×12mm Max.
Power: 5W Max.

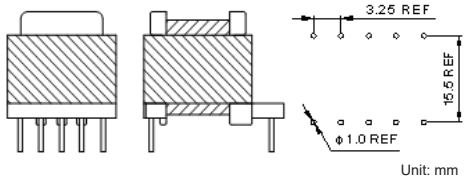
◆ **P/N:TWPEE080809C □□□ P**



Unit: mm

Core Type: EE13 Recommended PCB Layout
Reference dimension (L×W×H): 14×14×14mm Max.
Power: 7W Max.

◆ **P/N: TWPEE101011C □□□ P**

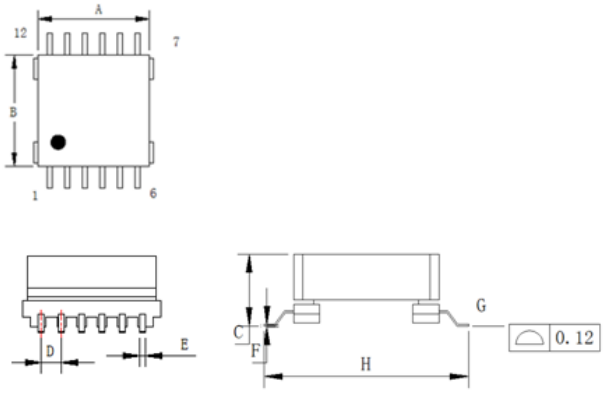


Unit: mm

Core Type: EE16 Recommended PCB Layout
Reference dimension (L×W×H): 20×17×14mm Max.
Power: 10W Max.

SHAPE AND DIMENSIONS

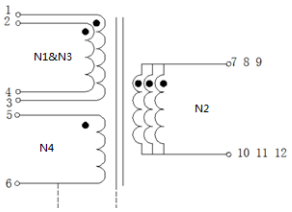
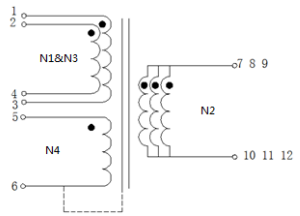
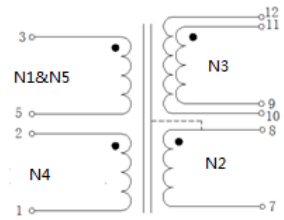
◆ **P/N: TWPEE151510B □□□ T**



Unit: mm

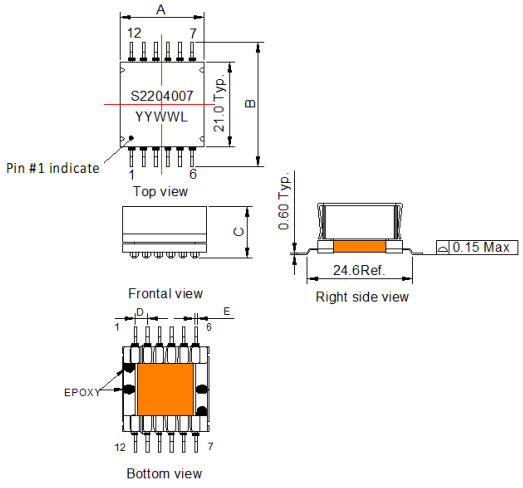
ITEM	A	B	C	D	E	F	G	H
DESIGN	17±0.25	16 REF.	10.0 Max.	2.5±0.25	0.7±0.1	0.4±0.1	0.12 Max.	21.3±1.0

SPECIFICATIONS

Part No.	Test Item	Test Terminal	Test Condition	Specification	Schematic
TWPEE151510B300T Marking:(S1710013)	L	Pin(1,2-3,4)	100kHz, 0.1V	95uH±10%	
	L_K	Pin(1,2-3,4), Pin(5-6)&(7 to12) shorted	100kHz, 0.1V	1.5uH Max.	
	DCR	Pin(1,2-3,4)	25±5°C	145mΩ Max.	
		Pin(7,8,9-10,11,12)		370mΩ Max.	
		Pin(5-6)		30mΩ Max.	
	Turns Raito	Pin(1,2-3,4):(5-6):(7,8,9-10,11,12)	15.75kHz, 1V	1:0.532:0.25±3%	
	Hi-Pot	Pri to Sec	50Hz, 1.0mA 3S	2250V	
TWPEE151510B301T Marking:(S1710014)	L	Pin(1,2-3,4)	100kHz, 0.1V	95uH±10%	
	L_K	Pin(1,2-3,4), Pin(5-6)&(7 to12) shorted	100kHz, 0.1V	2.2uH Max.	
	DCR	Pin(1,2-3,4)	25±5°C	258mΩ Max.	
		Pin(7,8,9-10,11,12)		10mΩ Max.	
		Pin(5-6)		400mΩ Max.	
	Turns Raito	Pin(1,2-3,4):(5-6):(7,8,9-10,11,12)	15.75kHz, 1V	1:0.866:0.166 ±3%	
	Hi-Pot	Pri to Sec	50Hz, 1.0mA 3S	2250V	
TWPEE151510B400T Marking:(S1710012)	L	Pin(3-5)	100kHz, 0.1V	166.5uH±10%	
	L_K	Pin(3-5), shorted other Pins	100kHz, 0.1V	3.7uH Max.	
	DCR	Pin(3-5)	25±5°C	1.35Ω Max.	
		Pin(2-1)		0.76Ω Max.	
		Pin(8-7)		0.33Ω Max.	
		Pin(12,11-10,9)		15mΩ Max.	
	Turns Raito	Pin(3-5):(2-1):(8-7):(12,11-10,9)	15.75kHz, 1V	1:0.5:0.269:0.154 ±3%	
	Hi-Pot	Pri to Sec	50Hz, 1.0mA 3S	1500V	

SHAPE AND DIMENSIONS

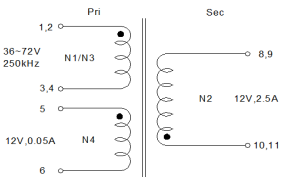
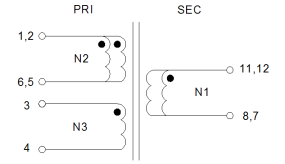
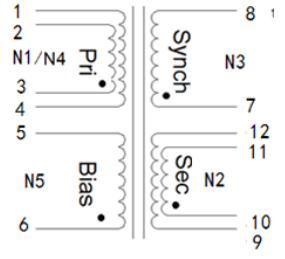
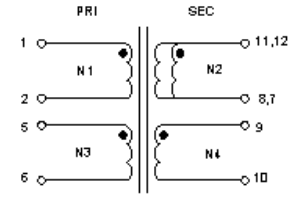
◆ **P/N: TWPEE202111B□□□T**



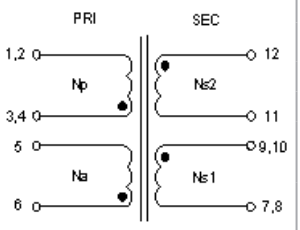
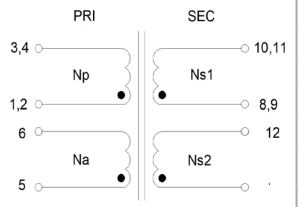
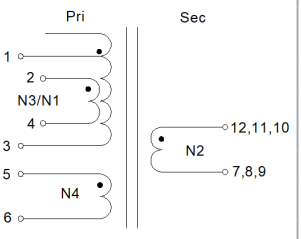
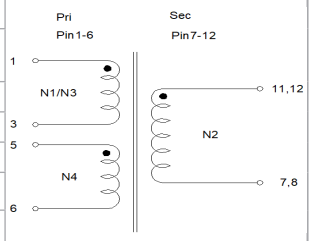
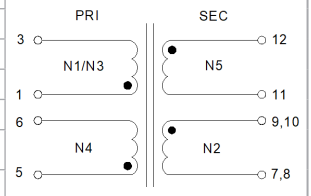
Unit: mm

ITEM	A	B	C	D	E	Coplanarity
DESIGN SPECIFICATION	21.50 Max.	29.21 Max.	11.43 Max.	3.0±0.3	0.7±0.2	0.15 Max.

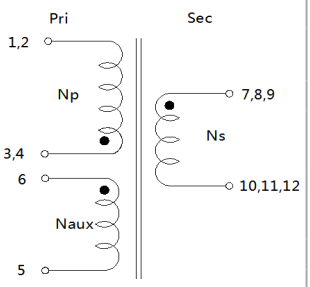
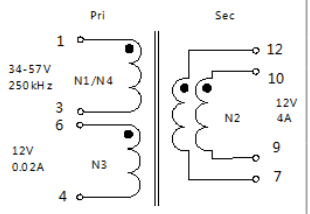
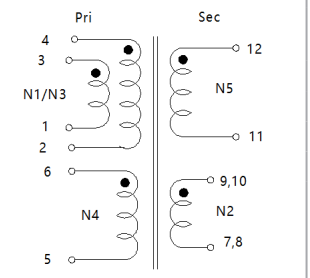
SPECIFICATIONS

Part No.	Test Item	Test Terminal	Test Condition	Specification	Schematic
TWPEE202111B303T Marking:(S2204007)	L	Pin(1,2-3,4)	100kHz, 0.1V	42uH±10%	
	L_K	Pin(1,2-3,4), shorted all other pins	100kHz, 0.1V	0.5uH Max.	
	DCR	Pin(1,2-3,4)	25±5℃	66mΩ Max.	
		Pin(5-6)		156mΩ Max.	
		Pin(10,11-8,9)		20.4mΩ Max.	
	Turns Raito	Pin(1,2-3,4): Pin(5-6): Pin(10,11-8,9)	100kHz, 0.1V	21:7:7±0.5Ts	
	Hi-Pot	Pri to Sec	50Hz, 1.0mA 3S	1500V	
		Coil to Core	50Hz, 1.0mA 3S	500V	
	Isat	Pin(1,2-3,4)	100kHz, 0.1V @L≥90%	4.0A Min.	
TWPEE202111B303T Marking:(S2212001)	L	Pin(1,2-6,5)	10kHz, 0.1V	16uH±10%	
	L_K	Pin(1,2-6,5), shorted all other pins	100kHz, 0.01V	0.6uH Max.	
	DCR	Pin(1,2-6,5)	25±5℃	48mΩ Max.	
		Pin(11,12-8,7)		40mΩ Max.	
		Pin(3-4)		240mΩ Max.	
	Turns Raito	Pin(1,2-6,5): Pin(11,12-8,7): Pin(3-4)	10kHz, 0.1V	2:1.88:1±3%	
	Hi-Pot	Pri to Sec	50Hz, 1.0mA 3S	1500V	
		Coil to Core	50Hz, 1.0mA 3S	500V	
	Isat	Pin(1,2-6,5)	10kHz, 0.1V @L≥90%	10.4A Min.	
TWPEE202111B402T Marking:(S1710004)	L	Pin(1,2-3,4)	100kHz, 0.1V	230uH±10%	
	L_K	Pin(1,2-3,4), shorted all other pins	100kHz, 0.1V	2.5uH Max.	
	DCR	Pin(1,2-3,4)	25±5℃	230mΩ Max.	
		Pin(12,11-10,9)		30mΩ Max.	
		Pin(8-7)		400mΩ Max.	
		Pin(5-6)		700mΩ Max.	
	Turns Raito	Pri:Sec:Bias:Synch	15.75kHz, 1V	1:0.357:0.357: 0.214 ±2%	
	Hi-Pot	Pri & Bias to Sec	50Hz, 3.0mA 1S	1500V	
		Coil to Core	50Hz, 3.0mA 1S	500V	
	Isat	Pin(1,2-3,4)	100kHz, 0.1V @L≥90%	1.9A Min.	
TWPEE202111B403T Marking:(S2204005)	L	Pin(1-2)	350kHz, 0.1V	100uH Min.	
	L_K	Pin (1-2), shorted all other pins	350kHz, 0.1V	2.0uH Max.	
	DCR	Pin(1-2)	25±5℃	160mΩ Max.	
		Pin(5-6)		390mΩ Max.	
		Pin(9-10)		166mΩ Max.	
		Pin(11,12-8,7)		145mΩ Max.	
	Turns Raito	Pin(1-2):Pin(5-6): Pin(9-10): Pin(11,12-8,7)	350kHz, 0.1V	28:28:7:33±0.5Ts	
	Hi-Pot	Pri to Sec	50Hz, 1.0mA 3S	1500V	

SPECIFICATIONS

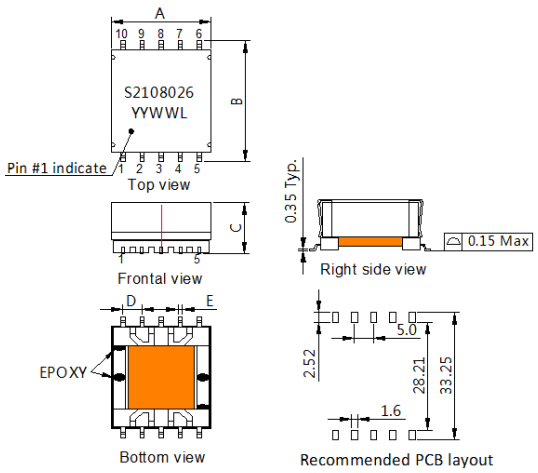
Part No.	Test Item	Test Terminal	Test Condition	Specification	Schematic
TWPEE202111B404T Marking:(S2205008)	L	Pin(3,4-1,2)	100kHz, 0.1V	18uH±10%	
	L_K	Pin(3,4-1,2) shorted other pins	100kHz, 0.1V	1.0uH Max.	
	DCR	Pin(3,4-1,2)	25±5℃	30mΩ Max.	
		Pin(6-5)		126mΩ Max.	
		Pin(9,10-7,8)		5.8mΩ Max.	
		Pin(12-11)		104mΩ Max.	
	Turns Raito	Pin(3,4-1,2):Pin(6-5): Pin(9,10-7,8): Pin(12-11)	100kHz, 0.1V	12:4:4:3±0.5Ts	
	Hi-Pot	Pri to Sec	50Hz, 1.0mA 3S	1500V	
TWPEE202111B405T Marking:(S2207003)	L	Pin(1,2-3,4)	100kHz, 0.1V	100uH±10%	
	L_K	Pin(1,2-3,4) shorted other pins	100kHz, 0.1V	1.0uH Max.	
	DCR	Pin(1,2-3,4)	25±5℃	25mΩ Max.	
		Pin(5-6)		130mΩ Max.	
		Pin(8,9-10,11)		27mΩ Max.	
		Pin(7-12)		75mΩ Max.	
	Turns Raito	Np:Ns1:Na:Ns2	100kHz, 0.1V	12:12:5:2±0.5Ts	
	Hi-Pot	Pri to Sec	50Hz, 1.0mA 2S	1500V	
		Coil to Core	50Hz, 1.0mA 2S	500V	
TWPEE202111B406T Marking:(S2208010)	L	Pin(1,2-3,4)	200kHz, 0.3V	40uH±10%	
	L_K	Pin(1,2-3,4) shorted other pins	200kHz, 0.1V	0.8uH Max.	
	DCR	Pin(1-3)	25±5℃	286mΩ Max.	
		Pin(2-4)		247mΩ Max.	
		Pin(5-6)		151mΩ Max.	
		Pin(12,11,10-7,8,9)		32mΩ Max.	
	Turns Raito	N1:N2:N3 :N4	200kHz, 0.3V	22:8:22:5±0.5Ts	
	Hi-Pot	Pri to Sec	50Hz, 1.0mA 3S	3000V	
		Coil to Core	50Hz, 1.0mA 3S	1000V	
TWPEE202111B407T Marking:(S2211003)	L	Pin(1-3)	100kHz, 0.1V	16uH±10%	
	L_K	Pin(1-3) shorted other pins	100kHz, 0.1V	0.16uH Max.	
	DCR	Pin(1-3)	25±5℃	15.5mΩ Max.	
		Pin(5-6)		127.5mΩ Max.	
		Pin(11,12-7,8)		58.5mΩ Max.	
	Turns Raito	N2:N1:N4	100kHz, 0.1V	20:10:6±0.5Ts	
	Hi-Pot	Pri to Sec	50Hz, 1.0mA 3S	1500V	
TWPEE202111B501T Marking:(S2208006)	L	Pin(1-3)	100kHz, 0.1V	100uH±10%	
	L_K	Pin(1-3) shorted other pins	100kHz, 0.1V	2.0uH Max.	
	DCR	Pin(1-3)	25±5℃	118mΩ Max.	
		Pin(9,10-7,8)		18mΩ Max.	
		Pin(5-6)		330mΩ Max.	
		Pin(12-11)		276mΩ Max.	
	Turns Raito	N1:N2:N3:N4:N5	100kHz, 0.1V	26:5:26:12:10 ±0.5Ts	
	Hi-Pot	Pri to Sec	50Hz, 1.0mA 2S	1500V	
		Pri to Core	50Hz, 1.0mA 2S	500V	
		Sec to Core	50Hz, 1.0mA 2S	1500V	

SPECIFICATIONS

Part No.	Test Item	Test Terminal	Test Condition	Specification	Schematic
TWPEE203113B300T Marking:(S2201006)	L	Pin(3,4-1,2)	100kHz, 1.0V	25uH±10%	
	L_K	Pin(3,4-1,2) shorted other pins	100kHz, 1.0V	1.0uH Max.	
	DCR	Pin(3,4-1,2)	25±5°C	60mΩ Max.	
		Pin(6-5)		350mΩ Max.	
		Pin(7,8,9-10,11,12)		6.5mΩ Max.	
	Turns Raito	Pin(3,4-1,2): Pin(6-5): Pin(7,8,9-10,11,12)	100kHz, 1.0V	18:6:6±0.5Ts	
	Hi-Pot	Pri to Sec	50Hz, 1.0mA 3S	1500V	
		Coil to Core	50Hz, 1.0mA 3S	500V	
TWPEE203113B404T Marking:(S2108022)	L	Pin(1-3)	100kHz, 0.1V	55uH±7%	
	L_K	Pin(1-3), shorted other pins	100kHz, 0.1V	0.6uH Max.	
	DCR	Pin(1-3)	25±5°C	55.0mΩ Max.	
		Pin(12-7) & Pin(10-9)		15.0mΩ Max.	
		Pin(6-4)		26.0mΩ Max.	
	Turns Raito	Pin(1-3): Pin(12,10-7,9): Pin(6-4)	100kHz, 0.1V	2.33:1:1±3%	
	Hi-Pot	Pri to Sec	50Hz, 1.0mA 3S	1500V	
	Isat	Pin(1-3)	100kHz, 0.1V @L≥80%	2.0A Min.	
TWPEE203113B405T Marking:(S2111026)	L	Pin(3,4-1,2)	100kHz, 0.1V	50uH±10%	
	L_K	Pin(3,4-1,2), shorted all other pins	100kHz, 0.1V	0.7uH Max.	
	DCR	Pin(3,4-1,2)	25±5°C	70.0mΩ Max.	
		Pin(6-5)		200.0mΩ Max.	
		Pin(9,10-7,8)		15.0mΩ Max.	
		Pin(12-11)		200.0mΩ Max.	
	Turns Raito	Pin(3,4-1,2): Pin(6-5): Pin(9,10-7,8): Pin(12-11)	100kHz, 0.1V	26:8:9:8±0.5Ts	
	Hi-Pot	Pri to Sec	50Hz, 1.0mA 3S	1500V	
		Coil to Core	50Hz, 1.0mA 3S	500V	

SHAPE AND DIMENSIONS

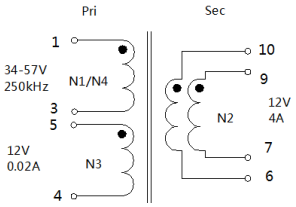
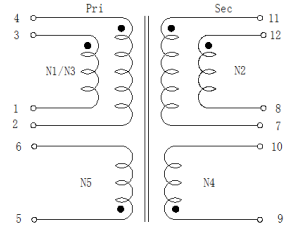
◆ **P/N: TWPEE253214B □□□ T**



Unit: mm

ITEM	A	B	C	D	E	Coplanarity
DESIGN SPECIFICATION	26.50 Max.	33.0 Max.	14.5 Max.	5.00±0.30	1.0±0.30	0.15 Max.

SPECIFICATIONS

Part No.	Test Item	Test Terminal	Test Condition	Specification	Schematic
TWPEE253214B401T Marking:(S2108026)	L	Pin(1-3)	100kHz, 0.1V	55uH±10%	
	L_K	Pin(1-3), shorted all other pins	100kHz, 0.1V	0.6uH Max.	
	DCR	Pin(1-3)	25±5°C	55.0mΩ Max.	
		Pin(10-6) & Pin(9-7)		15.0mΩ Max.	
		Pin(5-4)		110.0mΩ Max.	
	Turns Raito	Pin(1-3): Pin(10,9-7,6): Pin(5-4)	15.75kHz, 1V	2.33:1:1±3%	
	Hi-Pot	Pri to Sec	50Hz, 1.0mA 3S	1500V	
	Isat	Pin(1-3)	100kHz, 0.1V @L≥80%	4.5A Min.	
TWPEE253214B402T Marking:(S2110003)	L	Pin(3,4-1,2)	100kHz, 0.1V	8.0uH±10%	
	L_K	Pin(3,4-1,2), shorted other pins	100kHz, 0.1V	90nH Max.	
	DCR	Pin(3,4-1,2)	25±5°C	8.0mΩ Max.	
		Pin(5-6)		200.0mΩ Max.	
		Pin(12,11-8,7)		85.0mΩ Max.	
		Pin(9-10)		170.0mΩ Max.	
	Turns Raito	Pin(3,4-1,2): Pin(11,12-8,7): Pin(9-10): Pin(5-6)	100kHz, 0.1V	7:25:4:5±0.5Ts	
	Hi-Pot	Pri-Sec Sec-Core	50Hz, 1.0mA 3S	1500V	
		Pri -Core	50Hz, 1.0mA 3S	500V	
	Isat	Pin(1-3)	100kHz, 0.1V @L≥80%	4.5A Min.	

Safety Transformer

FEATURES

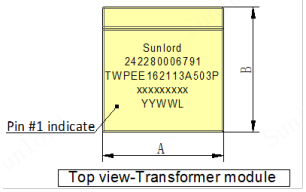
- ◆ Pouring glue structure, good moisture-proof, water-proof and dust-proof performance
- ◆ Low loss, low leakage inductance, uniform magnetic field, high EMC Performance
- ◆ Compliant IEC60335-1&IEC61558-2-16 Safety Certificate

APPLICATIONS

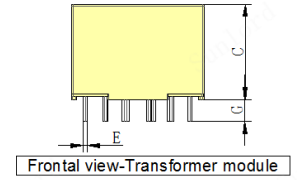
- ◆ Widely used in AC/DC switches power supply

SHAPE AND DIMENSIONS

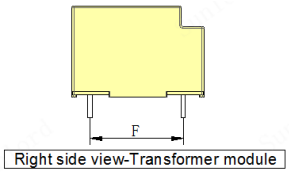
◆ **P/N: TWPEE162113A503P**



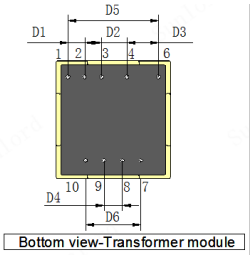
Top view-Transformer module



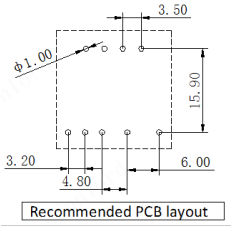
Frontal view-Transformer module



Right side view-Transformer module



Bottom view-Transformer module

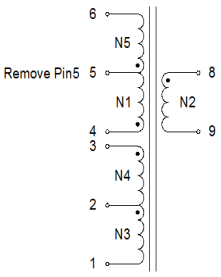


Recommended PCB layout

Unit: mm

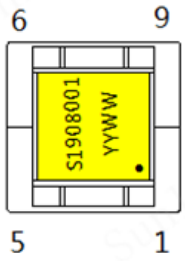
ITEM	A	B	C	D1	D2	D3
LIMIT	21.90±0.30	22.60±0.30	16.0 Max.	3.20±0.20	4.80±0.20	6.00±0.20
ITEM	**D4**	**D5**	**D6**	**E**	**F**	**G**
LIMIT	3.50±0.20	17.20±0.20	10.50±0.20	0.70±0.10	15.90±0.20	3.50±0.30

SPECIFICATIONS

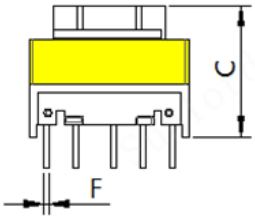
Part No.	Test Item	Test Terminal	Test Condition	Specification	Schematic
TWPEE162113A503P	L	Pin(4-6)	100kHz, 0.1V	5.0mH±10%	
	L_K	Pin(4-6) (short 1,2,3,8,9)	100kHz, 0.1V	50μH Max.	
	DCR	Pin(4-6)	25±5°C	6.0Ω Max.	
		Pin(3-1)		1.2Ω Max.	
		Pin(8-9)		0.3Ω Max.	
	Turns Raito	Pin(4-6): (3-2): (2-1): (8-9)	100kHz, 0.1V	120:12:14:15 Ts	
	Hi-Pot	Pri , Aux to Sec	3400Vac/50Hz/ 0.5mA/60Sec	No breakdown	

SHAPE AND DIMENSIONS

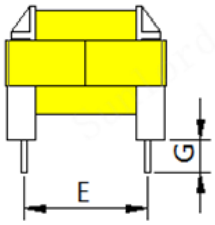
◆ **P/N: TWPEE212118A500P**



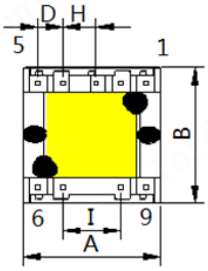
Top View



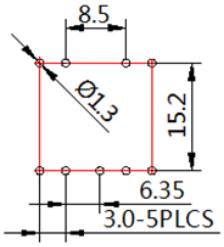
Right Size View



Frontal View



Bottom View

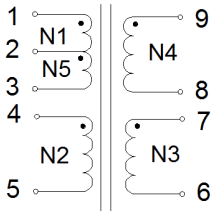


Recommended PCB Layout

Unit: mm

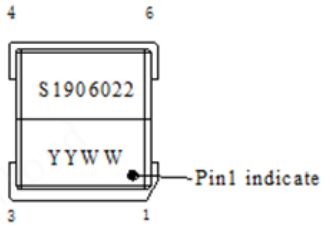
ITEM	A	B	C	D	E	F	G	H	I
LIMIT	21.0 Max.	21.0 Max.	18.0 Max.	3.0±0.3	15.2±0.5	SQ0.64±0.10	4.0±0.5	6.35±0.3	8.5±0.3

SPECIFICATIONS

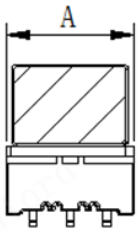
Part No.	Test Item	Test Terminal	Test Condition	Specification	Schematic
TWPEE212118A500P	L	Pin(1-3)	100kHz, 0.1V	1.4mH±10%	
	L_K	Pin(1-3), shorted other pins	100kHz, 0.1V	70.0uH Max.	
	DCR	Pin(1-3)	25±5°C	15.0Ω Max.	
		Pin(4-5)		5.0Ω Max.	
		Pin(7-6)		0.7Ω Max.	
		Pin(9-8)		0.6Ω Max.	
	Turns Raito	Pin(1-3):(4-5):(7-6):(9-8)	15.75kHz, 1.0V	148:49:49:49Ts	
	Hi-Pot	N1&N5 to N2, N1&N5 to N3, N2 to N3	3000Vac/50Hz/1mA/60 Sec	No breakdown	

SHAPE AND DIMENSIONS

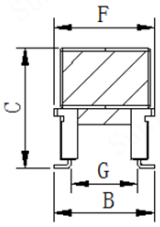
◆ **P/N: TWPEP131517B400T**



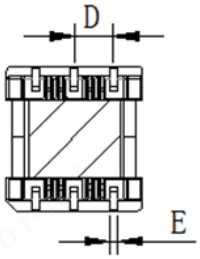
Top View



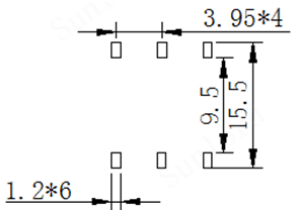
Right Size View



Frontal View



Bottom View

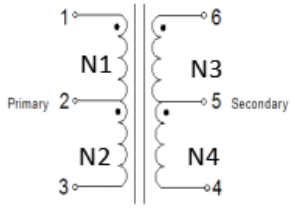


Recommended PCB Layout

Unit: mm

ITEM	A	B	C	D	E	F	G	Co-planarity
LIMIT	16.0 Max.	16.5 Max.	17.0 Max.	3.95±0.15	0.80±0.1	14.6±0.5	9.60TYP	0.15 Max.

SPECIFICATIONS

Part No.	Test Item	Test Terminal	Test Condition	Specification	Schematic
TWPEE212118A500P	Lpri	Pin(1-3)	100kHz, 20mV	142uH±20%	
	Lsec	Pin(6-4)	100kHz, 20mV	500~610uH	
	L_K	Pin(1-3), shorted other pins	100kHz, 0.25V	4.0uH Max.	
	DCR	Pin(1-3)	25±5°C	0.50Ω Max.	
	Cp	Pin(1-6)	100kHz, 20mV	15.0 Max.	
	Ipk	Pin(1-3)	100kHz, 20mV, 20% Rolloff from initial	0.4A Min.	
	Hi-Pot	N1&N5 to N2, N1&N5 to N3, N2 to N3	3000Vac/50Hz/1mA/ 60 Sec	No breakdown	
	Turns Raito	Pin(1-3):(4-5): (7-6):(9-8)	15.75kHz, 1.0V	148:49:49:49Ts	

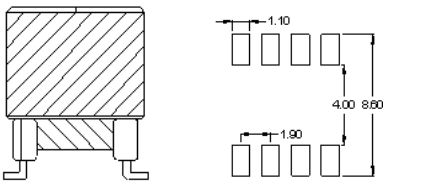
Core Type EP Reference Data — Signal Transformer

FEATURES AND APPLICATIONS

- Excellent magnetic shielding, low distributed capacitance
- Excellent THD, LB, insertion loss, return loss performance
- Most of them are suitable for SMD structure
- Applied to network equipment, hubs, IPTV, LAN and so on that adopt xDSL and G. Fast Technology

SPECIFICATIONS

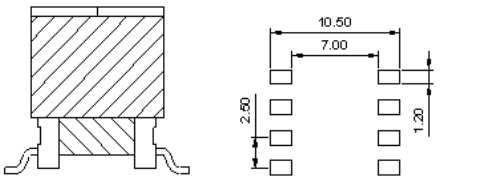
◆ **P/N: TWPEP070609B □□□ T**
◆ **P/N: TWSEP070609B □□□ T**



Unit: mm

Core Type: EP05 Recommended PCB Layout
Reference dimension(L×W×H): 8.0×7.0×10mm Max.
Power: 3W Max.

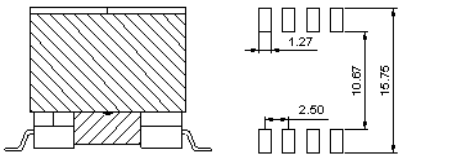
◆ **P/N: TWPEP090710B □□□ T**
◆ **P/N: TWSEP090710B □□□ T**



Unit: mm

Core Type: EP07 Recommended PCB Layout
Reference dimension(L×W×H): 10×10×11mm Max.
Power: 5W Max.

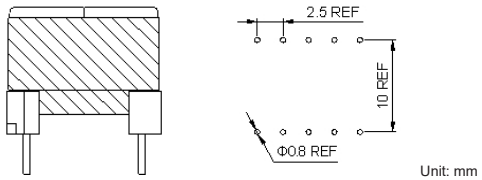
◆ **P/N: TWPEP121110B □□□ T**
◆ **P/N: TWSEP121110B □□□ T**



Unit: mm

Core Type: EP10 Recommended PCB Layout
Reference dimension(L×W×H): 16×13×11mm Max.
Power: 10W Max.

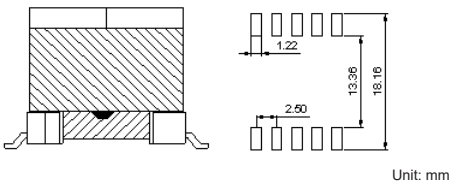
◆ **P/N: TWPEP131412A □□□ P**
◆ **P/N: TWSEP131412A □□□ P**



Unit: mm

Core Type: EP13 Recommended PCB Layout
Reference dimension(L×W×H): 15×14×13mm Max.
Power: 15W Max.

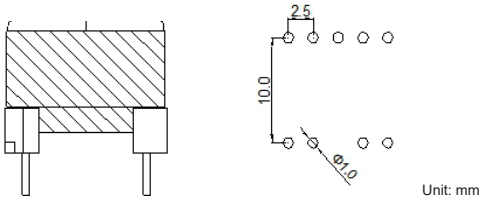
◆ **P/N: TWPEP131312B □□□ T**
◆ **P/N: TWSEP131312B □□□ T**



Unit: mm

Core Type: EP13 Recommended PCB Layout
Reference dimension(L×W×H): 18×14×13mm Max.
Power: 15W Max.

◆ **P/N: TWPEP141514A □□□ F**
◆ **P/N: TWSEP141514A □□□ F**



Unit: mm

Core Type: EP14 Recommended PCB Layout
Reference dimension(L×W×H): 14.5×14.5×13.5mm Max.
Power: 15W Max.

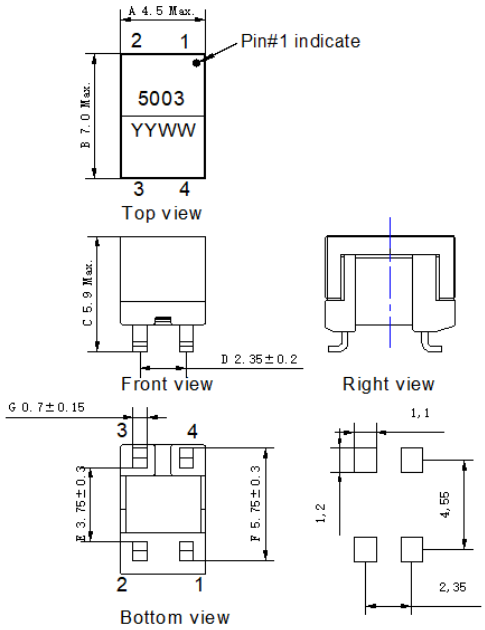
Current Sensor Transformer Reference Data

FEATURES AND APPLICATIONS

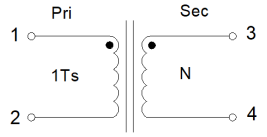
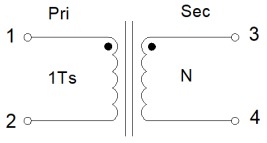
- ◆ Excellent magnetic shielding, low distributed capacitance
- ◆ Low loss, low leakage inductance, uniform magnetic field
- ◆ Used for accurate current detection

SHAPE AND DIMENSIONS

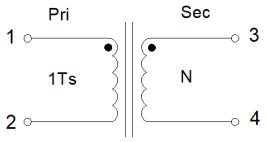
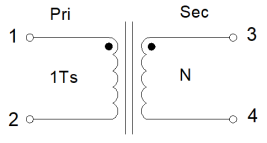
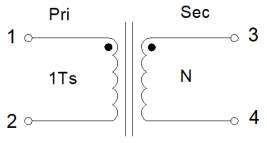
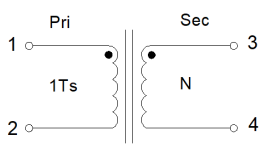
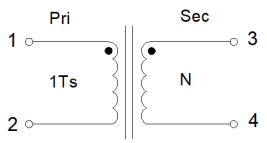
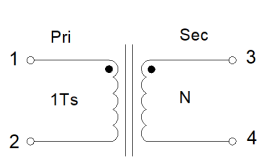
◆ **P/N: TWPEP050706B □□□ T**



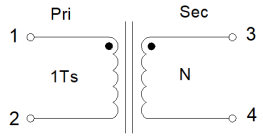
SPECIFICATIONS

Part No.	Test Item	Test Terminal	Test Condition	Specification	Schematic
TWPEP050706B202T Marking:(5001)	L	Pin(3-4)	100kHz, 0.1V	7500μH Max.	
	DCR	Pin(1-2)	25±5℃	17mΩ Max.	
		Pin(3-4)		3.9Ω Max.	
	V-usec	Pin(3-4)	/	78.8	
	Turns Raito	Pri: Sec	15.75kHz, 1V	1:125	
	Sensed Current	Pin(1-2)	/	6A	
TWPEP050706B203T Marking:(5003)	L	Pin(3-4)	100kHz, 0.1V	48μH Max.	
	DCR	Pin(1-2)	25±5℃	17mΩ Max.	
		Pin(3-4)		28mΩ Max.	
	V-usec	Pin(3-4)	/	6.3	
	Turns Raito	Pri: Sec	15.75kHz, 1V	1:10	
	Sensed Current	Pin(1-2)	/	6 A	

SPECIFICATIONS

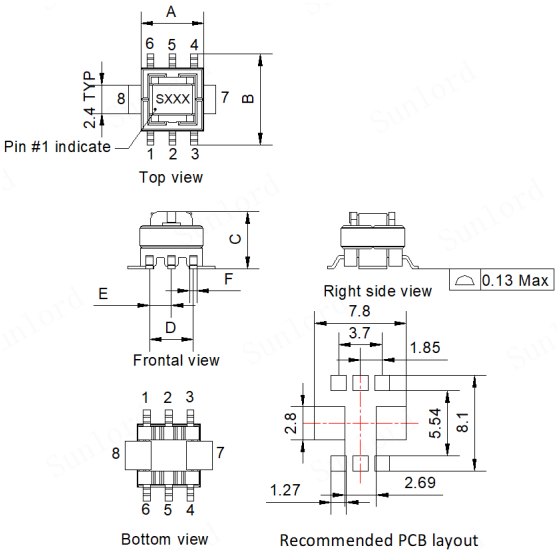
Part No.	Test Item	Test Terminal	Test Condition	Specification	Schematic
TWPEP050706B204T Marking:(5004)	L	Pin(3-4)	100kHz, 0.1V	192μH Max.	
	DCR	Pin(1-2)	25±5°C	17mΩ Max.	
		Pin(3-4)		81mΩ Max.	
	V-usec	Pin(3-4)	/	12.6	
	Turns Raito	Pri: Sec	15.75kHz, 1V	1:20	
	Sensed Current	Pin(1-2)	/	6A	
TWPEP050706B205T Marking:(5005)	L	Pin(3-4)	100kHz, 0.1V	432μH Max.	
	DCR	Pin(1-2)	25±5°C	17mΩ Max.	
		Pin(3-4)		220mΩ Max.	
	V-usec	Pin(3-4)	/	18.9	
	Turns Raito	Pri: Sec	15.75kHz, 1V	1:30	
	Sensed Current	Pin(1-2)	/	6A	
TWPEP050706B206T Marking:(5006)	L	Pin(3-4)	100kHz, 0.1V	768μH Max.	
	DCR	Pin(1-2)	25±5°C	17mΩ Max.	
		Pin(3-4)		360mΩ Max.	
	V-usec	Pin(3-4)	/	25.2	
	Turns Raito	Pri: Sec	15.75kHz, 1V	1:40	
	Sensed Current	Pin(1-2)	/	6A	
TWPEP050706B207T Marking:(5007)	L	Pin(3-4)	100kHz, 0.1V	1200μH Max.	
	DCR	Pin(1-2)	25±5°C	17mΩ Max.	
		Pin(3-4)		560mΩ Max.	
	V-usec	Pin(3-4)	/	31.5	
	Turns Raito	Pri: Sec	15.75kHz, 1V	1:50	
	Sensed Current	Pin(1-2)	/	6A	
TWPEP050706B208T Marking:(5008)	L	Pin(3-4)	100kHz, 0.1V	1728μH Max.	
	DCR	Pin(1-2)	25±5°C	17mΩ Max.	
		Pin(3-4)		840mΩ Max.	
	V-usec	Pin(3-4)	/	37.8	
	Turns Raito	Pri: Sec	15.75kHz, 1V	1:60	
	Sensed Current	Pin(1-2)	/	6A	
TWPEP050706B209T Marking:(5009)	L	Pin(3-4)	100kHz, 0.1V	2352μH Max.	
	DCR	Pin(1-2)	25±5°C	17mΩ Max.	
		Pin(3-4)		1.1Ω Max.	
	V-usec	Pin(3-4)	/	44.1	
	Turns Raito	Pri: Sec	15.75kHz, 1V	1:70	
	Sensed Current	Pin(1-2)	/	6A	

SPECIFICATIONS

Part No.	Test Item	Test Terminal	Test Condition	Specification	Schematic
TWPEP050706B210T Marking:(5010)	L	Pin(3-4)	100kHz, 0.1V	4800μH Max.	
	DCR	Pin(1-2)	25±5°C	17mΩ Max.	
		Pin(3-4)		2.6Ω Max.	
	V-usec	Pin(3-4)	/	63.0	
	Turns Raito	Pri: Sec	15.75kHz, 1V	1:100	
	Sensed Current	Pin(1-2)	/	6A	

SHAPE AND DIMENSIONS

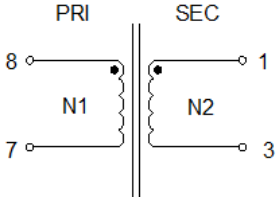
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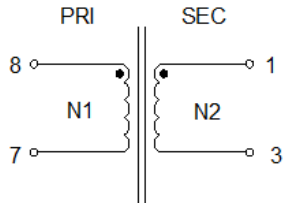
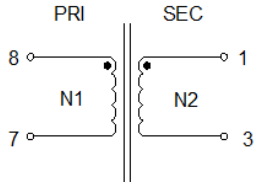
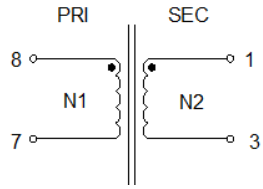
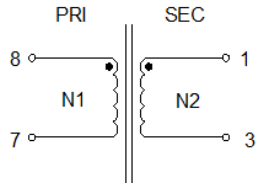
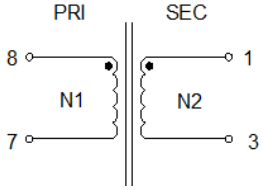
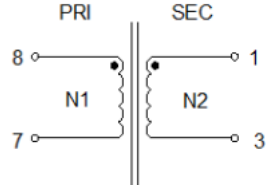
Unit: mm

ITEM	A	B	C	D	E	F	Coplanarity
DESIGN SPECIFICATION	7.11 Max.	8.13 Max.	5.08 Max.	3.70±0.30	1.85±0.20	0.60±0.10	0.13 Max.

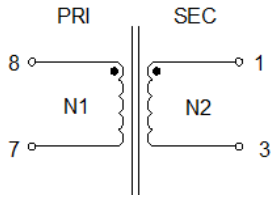
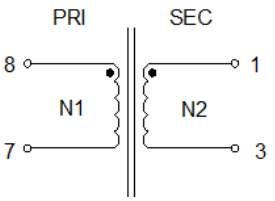
SPECIFICATIONS

Part No.	Test Item	Test Terminal	Test Condition	Specification	Schematic
TWPEE070805B200T Marking:(S200)	L	Pin(1-3)	100kHz, 0.1V	80μH Min.	
	DCR	Pin(1-3)	25±5°C	400mΩ Max.	
		Pin(8-7)		0.6mΩ Max.	
	V-usec	Pin(1-3)	/	/	
	Turns Raito	Pri: Sec	15.75kHz, 1V	1:20	
	Sensed Current	Pin(8-7)	/	20A	

SPECIFICATIONS

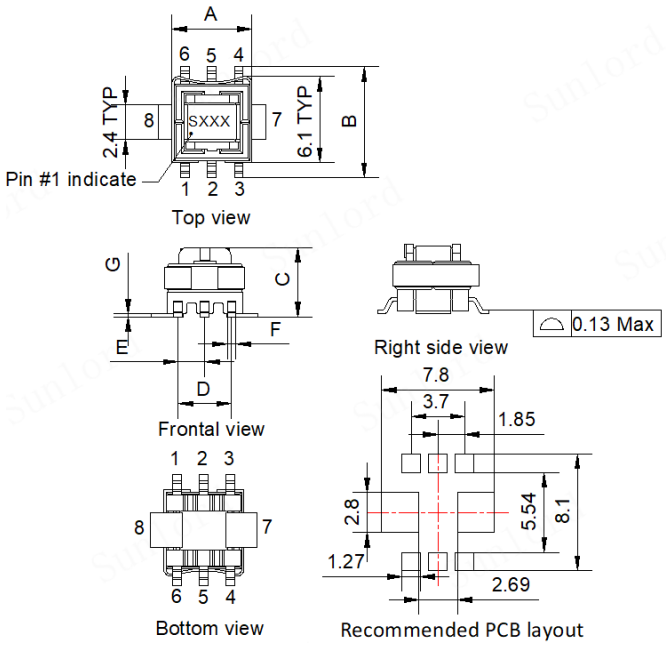
Part No.	Test Item	Test Terminal	Test Condition	Specification	Schematic
TWPEE070805B201T Marking:(S201)	L	Pin(1-3)	100kHz, 0.1V	180μH Min.	
	DCR	Pin(1-3)	25±5°C	870mΩ Max.	
		Pin(8-7)		0.6mΩ Max.	
	V-usec	Pin(1-3)	/	/	
	Turns Raito	Pri: Sec	15.75kHz, 1V	1:30	
	Sensed Current	Pin(8-7)	/	20A	
TWPEE070805B202T Marking:(S202)	L	Pin(1-3)	100kHz, 0.1V	320μH Min.	
	DCR	Pin(1-3)	25±5°C	1140mΩ Max.	
		Pin(8-7)		0.6mΩ Max.	
	V-usec	Pin(1-3)	/	/	
	Turns Raito	Pri: Sec	15.75kHz, 1V	1:40	
	Sensed Current	Pin(8-7)	/	20A	
TWPEE070805B203T Marking:(S203)	L	Pin(1-3)	100kHz, 0.1V	500μH Min.	
	DCR	Pin(1-3)	25±5°C	1500mΩ Max.	
		Pin(8-7)		0.6mΩ Max.	
	V-usec	Pin(1-3)	/	/	
	Turns Raito	Pri: Sec	15.75kHz, 1V	1:50	
	Sensed Current	Pin(8-7)	/	20A	
TWPEE070805B204T Marking:(S204)	L	Pin(1-3)	100kHz, 0.1V	720μH Min.	
	DCR	Pin(1-3)	25±5°C	1980mΩ Max.	
		Pin(8-7)		0.6mΩ Max.	
	V-usec	Pin(1-3)	/	/	
	Turns Raito	Pri: Sec	15.75kHz, 1V	1:60	
	Sensed Current	Pin(8-7)	/	20A	
TWPEE070805B205T Marking:(S205)	L	Pin(1-3)	100kHz, 0.1V	980μH Min.	
	DCR	Pin(1-3)	25±5°C	3000mΩ Max.	
		Pin(8-7)		0.6mΩ Max.	
	V-usec	Pin(1-3)	/	/	
	Turns Raito	Pri: Sec	15.75kHz, 1V	1:70	
	Sensed Current	Pin(8-7)	/	20A	
TWPEE070805B206T Marking:(S206)	L	Pin(1-3)	100kHz, 0.1V	2000μH Min.	
	DCR	Pin(1-3)	25±5°C	5500mΩ Max.	
		Pin(8-7)		0.6mΩ Max.	
	V-usec	Pin(1-3)	/	/	
	Turns Raito	Pri: Sec	15.75kHz, 1V	1:100	
	Sensed Current	Pin(8-7)	/	20A	

SPECIFICATIONS

Part No.	Test Item	Test Terminal	Test Condition	Specification	Schematic
TWPEE070805B207T Marking:(S207)	L	Pin(1-3)	100kHz, 0.1V	3000μH Min.	
	DCR	Pin(1-3)	25±5°C	6500mΩ Max.	
		Pin(8-7)		0.6mΩ Max.	
	V-usec	Pin(1-3)	/	/	
	Turns Raito	Pri: Sec	15.75kHz, 1V	1:125	
	Sensed Current	Pin(8-7)	/	20A	
TWPEE070805B208T Marking:(S208)	L	Pin(1-3)	100kHz, 0.1V	8000μH Min.	
	DCR	Pin(1-3)	25±5°C	33240mΩ Max.	
		Pin(8-7)		0.6mΩ Max.	
	V-usec	Pin(1-3)	/	/	
	Turns Raito	Pri: Sec	15.75kHz, 1V	1:200	
	Sensed Current	Pin(8-7)	/	20A	

SHAPE AND DIMENSIONS

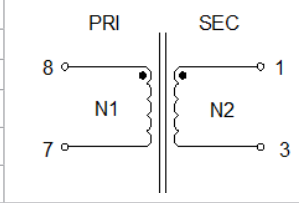
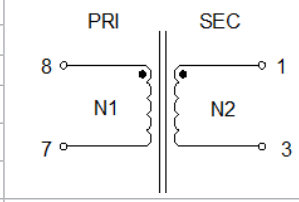
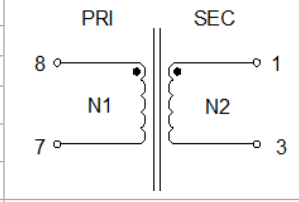
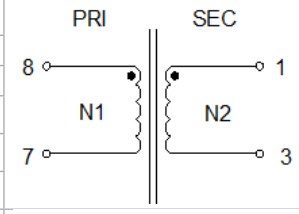
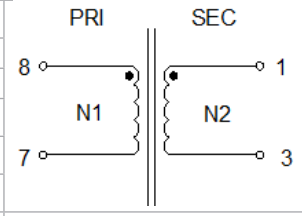
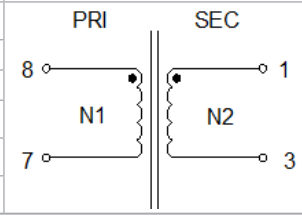
◆ **P/N: TWPEE070805B □□□ T (With Clamp.)**



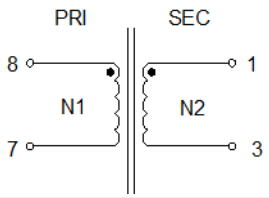
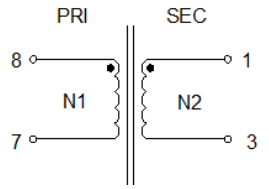
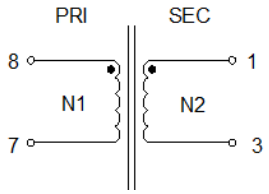
Unit: mm

ITEM	A	B	C	D	E	F	Coplanarity
DESIGN SPECIFICATION	7.11 Max.	8.13 Max.	5.08 Max.	3.70±0.30	1.85±0.20	0.60±0.10	0.13 Max.

SPECIFICATIONS

Part No.	Test Item	Test Terminal	Test Condition	Specification	Schematic
TWPEE070805B210T Marking:(S210)	L	Pin(1-3)	100kHz, 0.1V	80μH Min.	
	DCR	Pin(1-3)	25±5℃	400mΩ Max.	
		Pin(8-7)		0.6mΩ Max.	
	V-usec	Pin(1-3)	/	/	
	Turns Raito	Pri: Sec	15.75kHz, 1V	1:20	
	Sensed Current	Pin(8-7)	/	20A	
TWPEE070805B211T Marking:(S211)	L	Pin(1-3)	100kHz, 0.1V	180μH Min.	
	DCR	Pin(1-3)	25±5℃	870mΩ Max.	
		Pin(8-7)		0.6mΩ Max.	
	V-usec	Pin(1-3)	/	/	
	Turns Raito	Pri: Sec	15.75kHz, 1V	1:30	
	Sensed Current	Pin(8-7)	/	20A	
TWPEE070805B212T Marking:(S212)	L	Pin(1-3)	100kHz, 0.1V	320μH Min.	
	DCR	Pin(1-3)	25±5℃	1140mΩ Max.	
		Pin(8-7)		0.6mΩ Max.	
	V-usec	Pin(1-3)	/	/	
	Turns Raito	Pri: Sec	15.75kHz, 1V	1:40	
	Sensed Current	Pin(8-7)	/	20A	
TWPEE070805B213T Marking:(S213)	L	Pin(1-3)	100kHz, 0.1V	500μH Min.	
	DCR	Pin(1-3)	25±5℃	1500mΩ Max.	
		Pin(8-7)		0.6mΩ Max.	
	V-usec	Pin(1-3)	/	/	
	Turns Raito	Pri: Sec	15.75kHz, 1V	1:50	
	Sensed Current	Pin(8-7)	/	20A	
TWPEE070805B214T Marking:(S214)	L	Pin(1-3)	100kHz, 0.1V	720μH Min.	
	DCR	Pin(1-3)	25±5℃	1980mΩ Max.	
		Pin(8-7)		0.6mΩ Max.	
	V-usec	Pin(1-3)	/	/	
	Turns Raito	Pri: Sec	15.75kHz, 1V	1:60	
	Sensed Current	Pin(8-7)	/	20A	
TWPEE070805B215T Marking:(S215)	L	Pin(1-3)	100kHz, 0.1V	980μH Min.	
	DCR	Pin(1-3)	25±5℃	3000mΩ Max.	
		Pin(8-7)		0.6mΩ Max.	
	V-usec	Pin(1-3)	/	/	
	Turns Raito	Pri: Sec	15.75kHz, 1V	1:70	
	Sensed Current	Pin(8-7)	/	20A	

SPECIFICATIONS

Part No.	Test Item	Test Terminal	Test Condition	Specification	Schematic
TWPEE070805B216T Marking:(S216)	L	Pin(1-3)	100kHz, 0.1V	2000μH Min.	
	DCR	Pin(1-3)	25±5℃	5500mΩ Max.	
		Pin(8-7)		0.6mΩ Max.	
	V-usec	Pin(1-3)	/	/	
	Turns Raito	Pri: Sec	15.75kHz, 1V	1:100	
	Sensed Current	Pin(8-7)	/	20A	
TWPEE070805B217T Marking:(S217)	L	Pin(1-3)	100kHz, 0.1V	3000μH Min.	
	DCR	Pin(1-3)	25±5℃	6500mΩ Max.	
		Pin(8-7)		0.6mΩ Max.	
	V-usec	Pin(1-3)	/	/	
	Turns Raito	Pri: Sec	15.75kHz, 1V	1:125	
	Sensed Current	Pin(8-7)	/	20A	
TWPEE070805B218T Marking:(S218)	L	Pin(1-3)	100kHz, 0.1V	8000μH Min.	
	DCR	Pin(1-3)	25±5℃	33240mΩ Max.	
		Pin(8-7)		0.6mΩ Max.	
	V-usec	Pin(1-3)	/	/	
	Turns Raito	Pri: Sec	15.75kHz, 1V	1:200	
	Sensed Current	Pin(8-7)	/	20A	

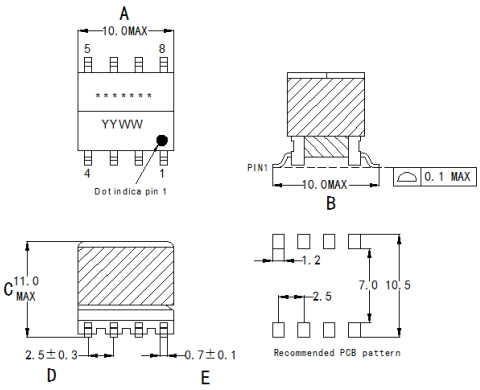
Core Type EP/EFD for PoE Power Reference Data — Power Transformer

FEATURES AND APPLICATIONS

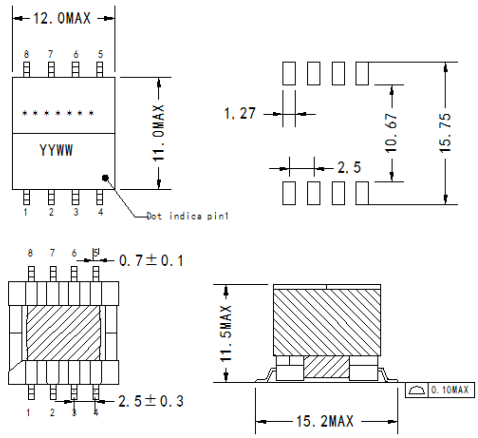
- Excellent magnetic shielding, low distributed capacitance
- Low loss, low leakage inductance, uniform magnetic field
- Suitable for PoE power supply

SHAPE AND DIMENSIONS

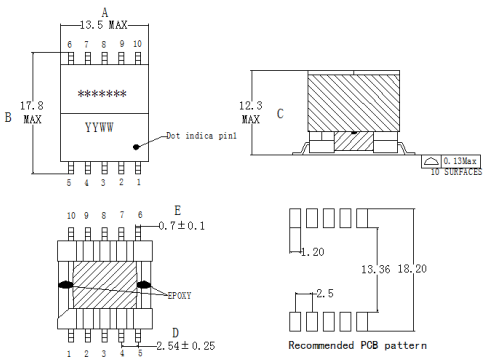
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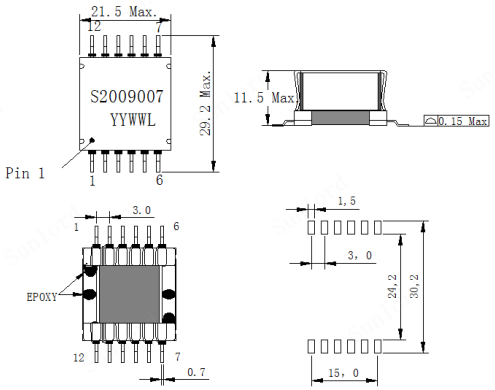
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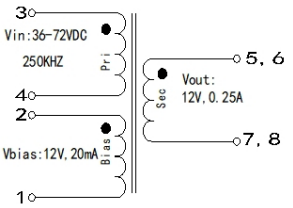
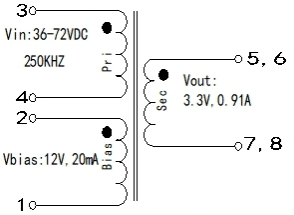
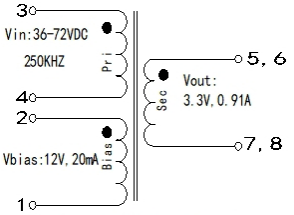
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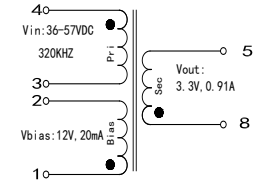
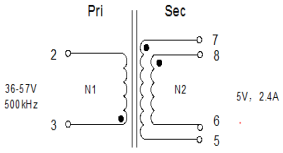
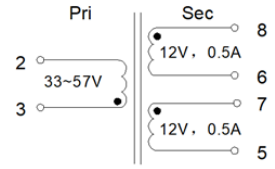
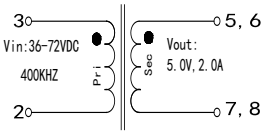
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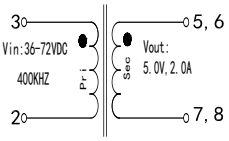
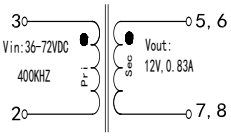
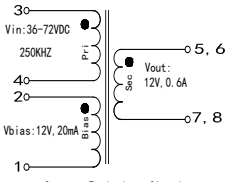
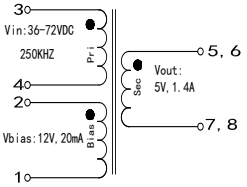
SPECIFICATIONS

Part No.	Test Item	Test Terminal	Test Condition	Specification	Schematic
TWPEP090711B308T Marking:(S1612015)	L	Pin(3-4)	250kHz, 0.1V	310μH±10%	
	L_K	Pin(3-4) (short 1+2,5~8)	250kHz, 0.1V	4.25μH Max.	
	DCR	Pin(3-4)	25±5℃	1040mΩ Max.	
		Pin(5,6-7,8)		700mΩ Max.	
		Pin(2-1)		2010mΩ Max.	
	Isat	Pin(3-4)	250kHz, 0.1V @L≥90%	0.3A Min.	
	Turns Raito	Pri: Sec: Bias	15.75kHz, 1V	1:0.7:0.7±3%	
	Hi-Pot	Pri&Bias to Sec	50Hz, 3.0mA 1S	1500V	
		Winding to Core	50Hz, 3.0mA 1S	500V	
TWPEP090711B309T Marking:(S1612016)	L	Pin(3-4)	250kHz, 0.1V	310μH±10%	
	L_K	Pin(3-4) (short 1+2,5~8)	250kHz, 0.1V	4.75μH Max.	
	DCR	Pin(3-4)	25±5℃	1020mΩ Max.	
		Pin(5,6-7,8)		66mΩ Max.	
		Pin(2-1)		2010mΩ Max.	
	Isat	Pin(3-4)	250kHz,0.1V @L≥90%	0.3A Min.	
	Turns Raito	Pri:Sec:Bias	15.75kHz, 1V	1:0.19:0.7±3%	
	Hi-Pot	Pri&Bias to Sec	50Hz, 3.0mA 1S	1500V	
		Winding to Core	50Hz, 3.0mA 1S	500V	
TWPEP090711B310T Marking:(S1612017)	L	Pin(3-4)	250kHz, 0.1V	310μH±10%	
	L_K	Pin(3-4) (short 1+2,5~8)	250kHz, 0.1V	4.50μH Max.	
	DCR	Pin(3-4)	25±5℃	1020mΩ Max.	
		Pin(5,6-7,8)		118mΩ Max.	
		Pin(2-1)		2010mΩ Max.	
	Isat	Pin(3-4)	250kHz, 0.1V @L≥90%	0.3A Min.	
	Turns Raito	Pri: Sec: Bias	15.75kHz, 1V	1:0.28:0.7±3%	
	Hi-Pot	Pri&Bias to Sec	50Hz, 3.0mA 1S	1500V	
		Winding to Core	50Hz, 3.0mA 1S	500V	

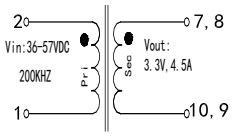
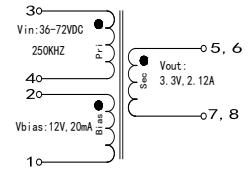
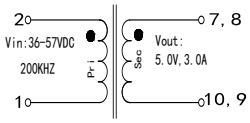
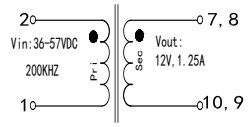
SPECIFICATIONS

Part No.	Test Item	Test Terminal	Test Condition	Specification	Schematic
TWPEP090711B312T Marking:(S1611005)	L	Pin(4-3)	320kHz, 0.1V	310μH±10%	
	L_K	Pin(4-3) (short 1+2,5-8)	100kHz, 0.1V	4.75μH Max.	
	Cp	Pin(1-8) (short 2+3)	100kHz, 0.1V	100pF Max.	
	DCR	Pin(4-3)	25±5°C	1040mΩ Max.	
		Pin(8-5)		75mΩ Max.	
		Pin(1-2)		1.5Ω Max.	
	Isat	Pin(4-3)	320kHz, 0.1V @L≥90%	0.35A Min.	
	Turns Raito	Pri: Sec: Bias	15.75kHz, 1V	1:0.196:0.725±3%	
	Hi-Pot	Pri&Bias to Sec	50Hz, 3.0mA 1S	1500V	
	Hi-Pot	Winding to Core	50Hz, 3.0mA 1S	500V	
TWPEP090711B328T Marking:(S2110005)	L	Pin(3-2)	500kHz, 0.1V	55μH±10%	
	L_K	Pin(3-2) (short 8,7-5,6)	500kHz, 0.1V	0.8μH Max.	
	DCR	Pin(3-2)	25±5°C	180mΩ Max.	
		Pin(8,7-5,6)		12mΩ Max.	
	Turns Raito	Pin(3-2): Pin(8,7-5,6)	500kHz, 0.1V	24:5±0.5Ts	
	Hi-Pot	Pri&Bias to Sec	50Hz, 3.0mA 1S	1500	
		Winding to Core	50Hz, 3.0mA 1S	500	
TWPEP090909B300T Marking:(S21104006)	L	Pin(3-2)	500kHz, 0.1V	55μH±10%	
	L_K	Pin(3-2) (short 8-6,5-7)	500kHz, 0.1V	0.8μH Max.	
	DCR	Pin(3-2)	25±5°C	180mΩ Max.	
		Pin(8-6)		80mΩ Max.	
		Pin(7-5)		100mΩ Max.	
	Turns Raito	Pin(3-2): Pin(8-6): Pin(7-5)	500kHz, 0.1V	24:12:12±0.5Ts	
	Hi-Pot	Pri&Bias to Sec	50Hz, 3.0mA 1S	1500	
		Winding to Core	50Hz, 3.0mA 1S	500	
TWPEP121112B201T Marking:(S1612018)	L	Pin(3-2)	400kHz, 0.4V	40μH±10%	
	L_K	Pin(3-2) (short 5~8)	400kHz, 0.4V	0.6μH Max.	
	DCR	Pin(3-2)	25±5°C	98mΩ Max.	
		Pin(5,6-7,8)		62mΩ Max.	
	Isat	Pin(3-2)	400kHz, 0.4V @L≥90%	1.3A Min.	
	Turns Raito	Pri: Sec	15.75kHz, 1V	1:0.3±3%	
	Hi-Pot	Pri to Sec	50Hz, 3.0mA 1S	1500V	
		Winding to Core	50Hz, 3.0mA 1S	500V	

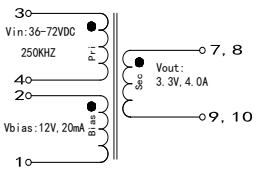
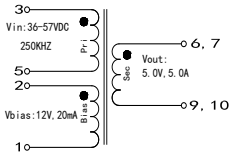
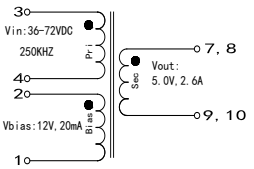
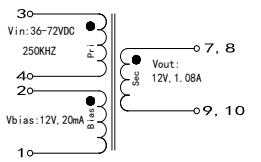
SPECIFICATIONS

Part No.	Test Item	Test Terminal	Test Condition	Specification	Schematic
TWPEP121112B202T Marking:(S1612019)	L	Pin(3-2)	400kHz, 0.4V	40μH±10%	
	L_K	Pin(3-2) (short 5~8)	400kHz, 0.4V	0.6μH Max.	
	DCR	Pin(3-2)	25±5℃	98mΩ Max.	
		Pin(5,6-7,8)		45mΩ Max.	
	Isat	Pin(3-2)	400kHz, 0.4V @L≥90%	1.3A Min.	
	Turns Raito	Pri:Sec	15.75kHz, 1V	1:0.4±3%	
	Hi-Pot	Pri to Sec	50Hz, 3.0mA 1S	1500V	
		Winding to Core	50Hz, 3.0mA 1S	500V	
TWPEP121112B203T Marking:(S1612020)	L	Pin(3-2)	400kHz, 0.4V	40μH±10%	
	L_K	Pin(3-2) (short 5~8)	400kHz, 0.4V	0.6μH Max.	
	DCR	Pin(3-2)	25±5℃	98mΩ Max.	
		Pin(5,6-7,8)		156mΩ Max.	
	Isat	Pin(3-2)	400kHz, 0.4V @L≥90%	1.3A Min.	
	Turns Raito	Pri: Sec	15.75kHz, 1V	1:1±3%	
	Hi-Pot	Pri to Sec	50Hz, 3.0mA 1S	1500V	
		Winding to Core	50Hz, 3.0mA 1S	500V	
TWPEP121112B303T Marking:(S1607009)	L	Pin(3-4)	250kHz, 0.1V	155μH±10%	
	L_K	Pin(3-4) (short 1+2,5~8)	250kHz, 0.1V	3.25μH Max.	
	DCR	Pin(3-4)	25±5℃	414mΩ Max.	
		Pin(5,6-7,8)		343mΩ Max.	
		Pin(2-1)		844mΩ Max.	
	Isat	Pin(3-4)	250kHz, 0.1V @L≥90%	0.65A Min.	
	Turns Raito	Pri: Sec: Bias	15.75kHz, 1V	1:0.667:0.667 ±3%	
	Hi-Pot	Pri&Bias to Sec	50Hz, 3.0mA 1S	1500V	
		Winding to Core	50Hz, 3.0mA 1S	500V	
TWPEP121112B304T Marking:(S1608011)	L	Pin(3-4)	250kHz, 0.1V	155μH±10%	
	L_K	Pin(3-4) (short 1+2,5~8)	250kHz, 0.1V	3.6μH Max.	
	DCR	Pin(3-4)	25±5℃	414mΩ Max.	
		Pin(5,6-7,8)		60mΩ Max.	
		Pin(2-1)		822mΩ Max.	
	Isat	Pin(3-4)	250kHz, 0.1V @L≥90%	0.65A Min.	
	Turns Raito	Pri: Sec: Bias	15.75kHz, 1V	1:0.262:0.667 ±3%	
	Hi-Pot	Pri&Bias to Sec	50Hz, 3.0mA 1S	1500V	
		Winding to Core	50Hz, 3.0mA 1S	500V	

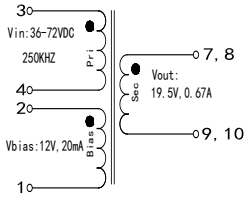
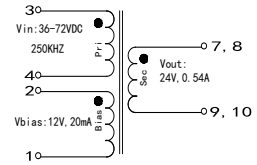
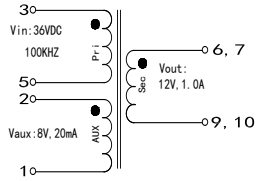
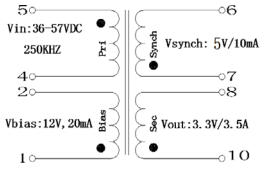
SPECIFICATIONS

Part No.	Test Item	Test Terminal	Test Condition	Specification	Schematic
TWPEP131313B204T Marking:(S1612022)	L	Pin(2-1)	200kHz, 0.2V	40μH±10%	
	L_K	Pin(2-1) (short 7~10)	250kHz, 0.1V	0.66μH Max.	
	DCR	Pin(2-1)	25±5°C	100mΩ Max.	
		Pin(7,8-9,10)		25mΩ Max.	
	Isat	Pin(2-1)	200kHz, 0.2V @L≥90%	2.0A Min.	
	Turns Raito	Pri:Sec	15.75kHz, 1V	1:0.3±3%	
	Hi-Pot	Pri to Sec	50Hz, 3.0mA 1S	1500V	
		Winding to Core	50Hz, 3.0mA 1S	500V	
TWPEP121112B305T Marking:(S1612021)	L	Pin(3-4)	250kHz, 0.1V	155μH±10%	
	L_K	Pin(3-4) (short 1+2,5~8)	250kHz, 0.1V	4.0μH Max.	
	DCR	Pin(3-4)	25±5°C	414mΩ Max.	
		Pin(5,6-7,8)		36mΩ Max.	
		Pin(2-1)		822mΩ Max.	
	Isat	Pin(3-4)	250kHz, 0.1V @L≥90%	0.65A Min.	
	Turns Raito	Pri: Sec: Bias	15.75kHz, 1V	1:0.19:0.667 ±3%	
	Hi-Pot	Pri&Bias to Sec	50Hz, 3.0mA 1S	1500V	
		Winding to Core	50Hz, 3.0mA 1S	500V	
TWPEP131313B205T Marking:(S1612023)	L	Pin(2-1)	200kHz, 0.2V	40μH±10%	
	L_K	Pin(2-1) (short 7~10)	250kHz, 0.1V	0.621μH Max.	
	DCR	Pin(2-1)	25±5°C	100mΩ Max.	
		Pin(7,8-9,10)		40mΩ Max.	
	Isat	Pin(2-1)	200kHz, 0.2V @L≥90%	2.0A Min.	
	Turns Raito	Pri: Sec	15.75kHz, 1V	1:0.4±3%	
	Hi-Pot	Pri to Sec	50Hz, 3.0mA 1S	1500V	
		Winding to Core	50Hz, 3.0mA 1S	500V	
TWPEP131313B206T Marking:(S1612024)	L	Pin(2-1)	200kHz, 0.2V	40μH±10%	
	L_K	Pin(2-1) (short 7~10)	250kHz, 0.1V	0.566μH Max.	
	DCR	Pin(2-1)	25±5°C	100mΩ Max.	
		Pin(7,8-9,10)		155mΩ Max.	
	Isat	Pin(2-1)	200kHz, 0.2V @L≥90%	2.0A Min.	
	Turns Raito	Pri: Sec	15.75kHz, 1V	1:1±3%	
	Hi-Pot	Pri to Sec	50Hz, 3.0mA 1S	1500V	
		Winding to Core	50Hz, 3.0mA 1S	500V	

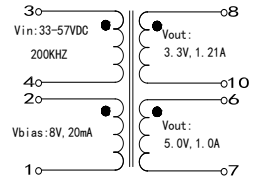
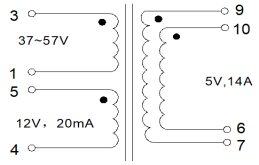
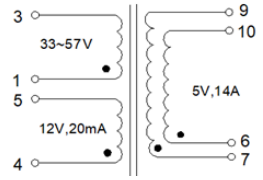
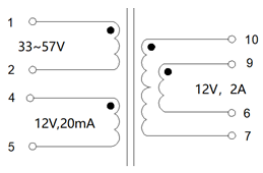
SPECIFICATIONS

Part No.	Test Item	Test Terminal	Test Condition	Specification	Schematic
TWPEP131313B301T Marking:(S1612025)	L	Pin(3-4)	250kHz, 0.1V	127μH±10%	
	L_K	Pin(3-4) (short 1+2,7~10)	250kHz, 0.1V	1.25μH Max.	
	DCR	Pin(3-4)	25±5°C	255mΩ Max.	
		Pin(7,8-9,10)		24mΩ Max.	
		Pin(2-1)		310mΩ Max.	
	Isat	Pin(3-4)	250kHz, 0.1V @L≥90%	1.0A Min.	
	Turns Raito	Pri: Sec: Bias	15.75kHz, 1V	1:0.167:0.5±3%	
	Hi-Pot	Pri&Bias to Sec	50Hz, 3.0mA 1S	1500V	
		Winding to Core	50Hz, 3.0mA 1S	500V	
TWPEP131313B303T Marking:(S1608025)	L	Pin(3-5)	200kHz, 0.1V	37μH±10%	
	L_K	Pin(3-5) (short 1+2,6~10)	200kHz, 0.1V	1.0μH Max.	
	DCR	Pin(3-5)	25±5°C	89mΩ Max.	
		Pin(6,7-9,10)		7.5mΩ Max.	
		Pin(2-1)		84mΩ Max.	
	Isat	Pin(3-4)	200kHz, 0.1V @L≥90%	2.0A Min.	
	Turns Raito	Pri: Sec: Bias	15.75kHz,1V	1:0.2:0.5±3%	
	Hi-Pot	Pri & Bias to Sec	50Hz, 3.0mA 1S	1500V	
		Winding to Core	50Hz, 3.0mA 1S	500V	
TWPEP131313B304T Marking:(S1612026)	L	Pin(3-4)	250kHz, 0.1V	127μH±10%	
	L_K	Pin(3-4) (short 1+2,7~10)	250kHz, 0.1V	0.95μH Max.	
	DCR	Pin(3-4)	25±5°C	222mΩ Max.	
		Pin(7,8-9,10)		39mΩ Max.	
		Pin(2-1)		348mΩ Max.	
	Isat	Pin(3-4)	250kHz, 0.1V @L≥90%	1.0A Min.	
	Turns Raito	Pri: Sec: Bias	15.75kHz, 1V	1:0.25:0.5±3%	
	Hi-Pot	Pri&Bias to Sec	50Hz, 3.0mA 1S	1500V	
		Winding to Core	50Hz, 3.0mA 1S	500V	
TWPEP131313B305T Marking:(S1612027)	L	Pin(3-4)	250kHz, 0.1V	127μH±10%	
	L_K	Pin(3-4) (short 1+2,7~10)	250kHz, 0.1V	0.95μH Max.	
	DCR	Pin(3-4)	25±5°C	199mΩ Max.	
		Pin(7,8-9,10)		65mΩ Max.	
		Pin(2-1)		348mΩ Max.	
	Isat	Pin(3-4)	250kHz, 0.1V @L≥90%	1.0A Min.	
	Turns Raito	Pri: Sec: Bias	15.75kHz, 1V	1:0.5:0.5±3%	
	Hi-Pot	Pri&Bias to Sec	50Hz, 3.0mA 1S	1500V	
		Winding to Core	50Hz, 3.0mA 1S	500V	
		Winding to Core	50Hz, 3.0mA 1S	500V	

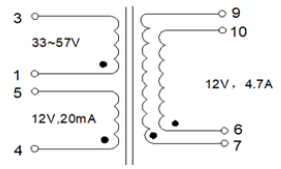
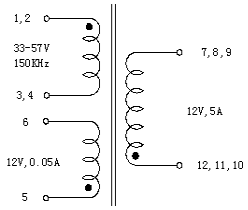
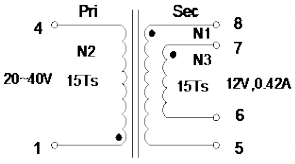
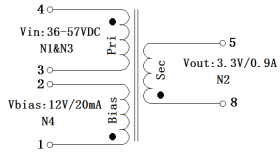
SPECIFICATIONS

Part No.	Test Item	Test Terminal	Test Condition	Specification	Schematic
TWPEP131313B306T Marking:(S1612028)	L	Pin(3-4)	250kHz, 0.1V	127μH±10%	
	L_K	Pin(3-4) (short 1+2,7~10)	250kHz, 0.1V	0.8μH Max.	
	DCR	Pin(3-4)	25±5°C	290mΩ Max.	
		Pin(7,8-9,10)		66mΩ Max.	
		Pin(2-1)		355mΩ Max.	
	Isat	Pin(3-4)	250kHz, 0.1V @L≥90%	1.0A Min.	
	Turns Raito	Pri: Sec: Bias	15.75kHz, 1V	1:0.567:0.5±3%	
	Hi-Pot	Pri&Bias to Sec	50Hz, 3.0mA 1S	1500V	
		Winding to Core	50Hz, 3.0mA 1S	500V	
TWPEP131313B307T Marking:(S1612029)	L	Pin(3-4)	250kHz, 0.1V	127μH±10%	
	L_K	Pin(3-4) (short 1+2,7~10)	250kHz, 0.1V	0.6μH Max.	
	DCR	Pin(3-4)	25±5°C	290mΩ Max.	
		Pin(7,8-9,10)		67mΩ Max.	
		Pin(2-1)		355mΩ Max.	
	Isat	Pin(3-4)	250kHz, 0.1V @L≥90%	1.0A Min.	
	Turns Raito	Pri: Sec: Bias	15.75kHz,1V	1:0.667:0.5±3%	
	Hi-Pot	Pri & Bias to Sec	50Hz, 3.0mA 1S	1500V	
		Winding to Core	50Hz, 3.0mA 1S	500V	
TWPEP131313B324T Marking:(S1701001)	L	Pin(3-4)	10kHz, 0.1V	100μH±10%	
	L_K	Pin(3-5) (short 1+2,6~10)	100kHz, 0.1V	1.5μH Max.	
	DCR	Pin(3-5)	25±5°C	185mΩ Max.	
		Pin(6,7-9,10)		31mΩ Max.	
		Pin(2-1)		190mΩ Max.	
	Isat	Pin(3-5)	10kHz, 0.1V @L≥90%	2.0A Min.	
	Turns Raito	Pri: Sec: Bias	15.75kHz, 1V	1:0.33:0.22±3%	
	Hi-Pot	Pri&Bias to Sec	50Hz, 3.0mA 1S	1875 V	
		Winding to Core	50Hz, 3.0mA 1S	625 V	
TWPEP131313B408T Marking:(S1610013)	L	Pin(5-4)	100kHz, 0.1V	127μH±10%	
	L_K	Pin(5-4) (short 1+2,6~10)	100kHz, 0.1V	1.0μH Max.	
	DCR	Pin(5-4)	25±5°C	200mΩ Max.	
		Pin(10-8)		16.5mΩ Max.	
		Pin(1-2)		400mΩ Max.	
		Pin(7-6)		400mΩ Max.	
	Isat	Pin(3-5)	100kHz, 0.1V @L≥90%	1.0A Min.	
	Turns Raito	Pri: Sec: Bias	15.75kHz, 1V	1:0.167:0.611: 0.25±3%	
	Hi-Pot	Pri&Bias to Sec	50Hz, 3.0mA 1S	1500V	
		Winding to Core	50Hz, 3.0mA 1S	500V	

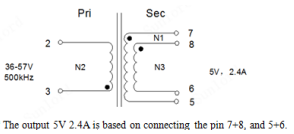
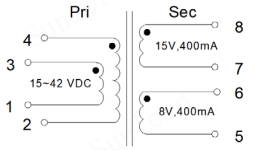
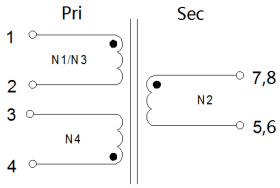
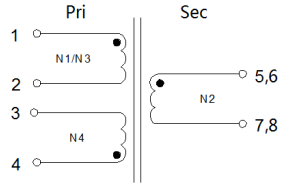
SPECIFICATIONS

Part No.	Test Item	Test Terminal	Test Condition	Specification	Schematic
TWPEP131313B411T Marking:(S1612030)	L	Pin(3-4)	200kHz, 0.1V	480μH±10%	
	L_K	Pin(3-4) (short 1+2,6~10)	200kHz, 0.1V	10.0μH Max.	
	DCR	Pin(3-4)	AT 25±5℃	570mΩ Max.	
		Pin(8-10)		15mΩ Max.	
		Pin(6-7)		40mΩ Max.	
		Pin(2-1)		325mΩ Max.	
	Isat	Pin(3-5)	200kHz, 0.1V @L≥90%	0.5A Min.	
	Turns Raito	(3-4):(8-10): (6-7):(2-1)	15.75kHz,1V	1:0.083:0.125: 0.23±3%	
	Hi-Pot	Pri&Bias to Sec	50Hz, 3.0mA 1S	1500V	
		Winding to Core	50Hz, 3.0mA 1S	500V	
TWPEP131313B437T Marking:(S2109007)	L	Pin(3-1)	100kHz, 0.1V	100μH±10%	
	L_K	Pin(3-1) (shorted other pins)	100kHz, 0.1V	1.0μH Max.	
	DCR	Pin(3-1)	AT 25±5℃	65.0mΩ Max.	
		Pin(9,10-7,6)		8.0mΩ Max.	
		Pin(5-4)		210.0mΩ Max.	
	Turns Raito	Pin(3-1): Pin(9,10-7,6): Pin(5-4)	15.75kHz, 1V	16:4:8±0.5Ts	
	Hi-Pot	Pri&Bias to Sec	50Hz, 3.0mA 1S	1500V	
		Winding to Core	50Hz, 3.0mA 1S	500V	
TWPEP131313B439T Marking:(S2111002)	L	Pin(1-3)	100kHz, 0.1V	100μH±10%	
	L_K	Pin(1-3) (shorted other pins)	100kHz, 0.1V	1.0μH Max.	
	DCR	Pin(1-3)	AT 25±5℃	38.5mΩ Max.	
		Pin(4-5)		155.0mΩ Max.	
		Pin(7,6-9,10)		14.0mΩ Max.	
	Turns Raito	Pin(1-3): Pin(7,6-9,10): Pin(4-5)	100kHz, 0.1V	12:7:6±0.5Ts	
	Hi-Pot	Pri&Bias to Sec	50Hz, 3.0mA 1S	1500V	
		Winding to Core	50Hz, 3.0mA 1S	500V	
TWPEP131313B440T Marking:(S2111013)	L	Pin(1-2)	100kHz, 0.1V	42μH±10%	
	L_K	Pin(1-2) (shorted other pins)	100kHz, 0.1V	2.0μH Max.	
	DCR	Pin(1-2)	AT 25±5℃	85mΩ Max.	
		Pin(4-5)		820mΩ Max.	
		Pin(9-6)		40mΩ Max.	
		Pin(10-7)		55mΩ Max.	
	Turns Raito	Pin(1-2):Pin(9-6): Pin(10-7): Pin(4-5)	10kHz, 0.1V	20:10:10:10±0.5Ts	
	Hi-Pot	Pri&Bias to Sec	50Hz, 5.0mA 1S	2000V	
		Winding to Core	50Hz, 3.0mA 1S	500V	

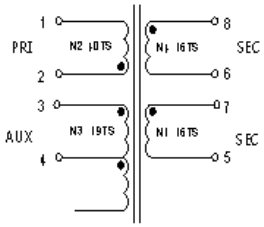
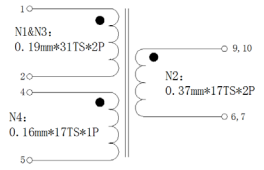
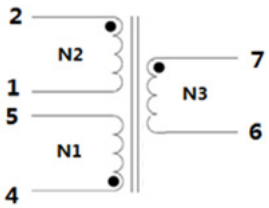
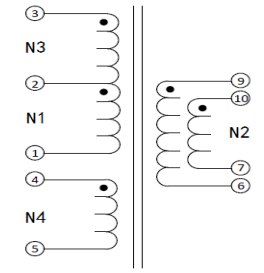
SPECIFICATIONS

Part No.	Test Item	Test Terminal	Test Condition	Specification	Schematic
TWPEP131313B355T Marking:(S2110006)	L	Pin(3-1)	100kHz, 0.1V	100μH±10%	
	L_K	Pin(3-1) (shorted other pins)	100kHz, 0.1V	1.0μH Max.	
	DCR	Pin(3-1)	AT 25±5°C	75mΩ Max.	
		Pin(9,10-7,6)		40mΩ Max.	
		Pin(5-4)		120mΩ Max.	
	Turns Raito	Pre:Sec:Aux	100kHz, 0.1V	20:10:8±0.5Ts	
	Hi-Pot	Pri&Bias to Sec	50Hz, 3.0mA 1S	1500V	
		Winding to Core	50Hz, 3.0mA 1S	500V	
TWPEE203113B403T Marking:(S2009007)	L	Pin(1,2,3,4)	100kHz, 0.1V	23.8μH±10%	
	L_K	Pin(1,2-3,4) (short other Pins)	100kHz, 0.1V	0.56μH Max.	
	DCR	Pin(1,2-3,4)	AT 25±5°C	82mΩ Max.	
		Pin(12,11,10-7,8,9)		18mΩ Max.	
		Pin(5,6)		143 Max.	
	Turns Raito	(1,2-3,4):(5,6) : (12,11,10-7,8,9)	15.75kHz, 1V	16:6:6	
	Hi-Pot	Pri to Sec	1500VAC/50Hz /1mA/3sec	1500V	
TWPEP090711B203T Marking:(S2203003)	L	Pin(1-4)	100kHz, 0.1V	16μH±10%	
	L_K	Pin(1-4) shorted other pins	100kHz, 0.1V	0.25μH Max.	
	DCR	Pin(1-4)	25±5°C	170mΩ Max.	
		Pin(8,7-5,6)		90mΩ Max.	
	Isat	Pin(1-4)	100kHz, 0.1V @L≥90%	2.8A Min.	
	Turns Raito	Pin(1-4):Pin(8,7-5,6)	100KHz, 0.1V	15:15±7%	
	Hi-Pot	Pri to Sec	50Hz, 2.0mA 1S	1500V	
TWPEP090711B325T Marking:(S1905001)	L	Pin(4-3)	320kHz, 0.1V	310μH±10%	
	L_K	Pin(4-3) shorted other pins	100kHz, 0.1V	5nH Max.	
	DCR	Pin (4-3)	25±5°C	1020mΩ Max.	
		Pin(8-5)		75mΩ Max.	
		Pin(2-1)		1.5Ω Max.	
	Isat	Pin(4-3)	320kHz,0.1V @L≥90%	0.35A Min.	
	Turns Raito	N1(N3):N2:N4	15.75kHz, 1V	1:0.196:0.725 ±3%	
	Hi-Pot	Pri to Sec	50Hz, 3.0mA 1S	1500V	
		Coil to Core	50Hz, 3.0mA 1S	500V	

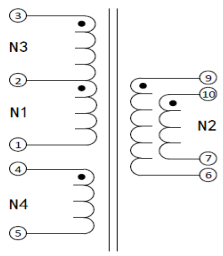
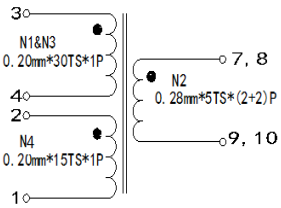
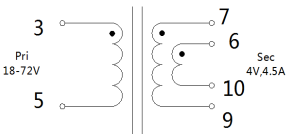
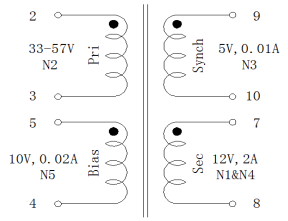
SPECIFICATIONS

Part No.	Test Item	Test Terminal	Test Condition	Specification	Schematic
TWPEP090711B327T Marking:(S2106009)	L	Pin(3-2)	500kHz, 0.1V	55μH±10%	 * The output 5V 2.4A is based on connecting the pin 7+8, and 5+6.
	L_K	Pin(3-2), shorted other pins	500kHz, 0.1V	0.8μH Max.	
	DCR	Pin(3-2)	25±5℃	180mΩ Max.	
		Pin(8,7-6,5)		12mΩ Max.	
	Turns Raito	Pin(3-2): Pin(8,7-6,5)	500kHz, 0.1V	24:5±3%	
	Hi-Pot	Pri to Sec Sec to Core	50Hz, 1.0mA, 3S	1500V	
		Pri to Core	50Hz, 1.0mA, 3S	500V	
TWPEP090711B330T Marking:(S2203006)	L	Pin(3,4-1,2)	10kHz, 0.01V	7μH±10%	
	L_K	Pin(3,4-1,2) shorted other pins	10kHz, 0.01V	150nH Max.	
	DCR	Pin(3,4-1,2)	25±5℃	49.2mΩ Max.	
		Pin(5-6)		77mΩ Max.	
		Pin(7-8)		126.5mΩ Max.	
	Isat	Pin(3,4-1,2)	10kHz, 0.01V @L≥80%	5.7A Min.	
	Turns Raito	Pin(3,4-1,2): Pin(6-5):Pin(8-7)	10kHz, 0.01V	10:8:15±3%	
	Hi-Pot	Pri to Sec	50Hz, 1.0mA 1S	500V	
		Pin5 to Pin8	50Hz, 1.0mA 1S	500V	
TWPEP121112B408T Marking:(S2011005)	L	Pin(2-1)	100kHz, 0.1V	116uH ±10%	
	L_K	Pin(2-1), shorted other pins	100kHz, 0.1V	3.0uH Max.	
	DCR	Pin(2-1)	25±5℃	350.0mΩ Max.	
		Pin(4-3)		300.0mΩ Max.	
		Pin(8-5)		75.0mΩ Max.	
	Turns Raito	Pin(1-2) : Pin(5,6-7,8): Pin(4-3)	100kHz, 0.1V	41:20:12±0.5Ts	
	Hi-Pot	Pri to Sec	50Hz, 1.0mA 3S	1000V	
		Coil to core	50Hz, 1.0mA 3S	500V	
TWPEP121112B409T Marking:(S2011006)	L	Pin(1-2)	10kHz, 0.1V	210uH ±10%	
	L_K	Pin(1-2), shorted other pins	100kHz, 0.1V	3.0uH Max.	
	DCR	Pin(1-2)	25±5℃	500.0mΩ Max.	
		Pin(4-3)		650.0mΩ Max.	
		Pin(5,6-7,8)		150.0mΩ Max.	
	Turns Raito	Pin(1-2) :Pin(4-3) : Pin(5,6-7,8)	10kHz, 0.1V	50:24:22±0.5Ts	
	Hi-Pot	Pri to Sec	50Hz, 1.0mA 3S	500V	
		Coil to Core	50Hz, 1.0mA 3S	500V	

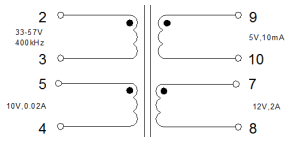
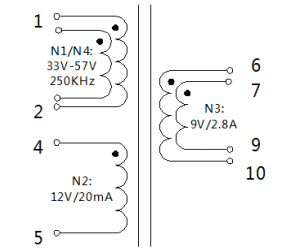
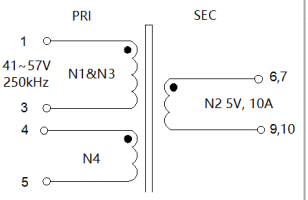
SPECIFICATIONS

Part No.	Test Item	Test Terminal	Test Condition	Specification	Schematic
TWPEP121112B442T Marking:(S2112012)	L	Pin(1-2)	10kHz, 0.1V	160.0uH±5%	
	L_K	Pin(1-2), shorted other pins	10kHz, 0.1V	4.8uH Max.	
	DCR	Pin(1-2)	25±5°C	290.0mΩ Max.	
		Pin(4-3)		1320.0mΩ Max.	
		Pin(5-7)		90.0mΩ Max.	
		Pin(6-8)		150.0mΩ Max.	
	Turns Raito	Pri:Sec:Aux	10kHz, 0.1V	40:16:19±0.5Ts	
	Hi-Pot	Pri & Aux to Sec	50Hz, 5.0mA, 60S	1000V	
TWPEP131313B320T Marking:(S1609017)	L	Pin(1-2)	100kHz, 0.1V	100uH±10%	
	L_K	Pin(1-2), shorted all other pins	100kHz, 0.1V	1.0uH Max.	
	DCR	Pin(1-2)	25±5°C	150m Ω Max.	
		Pin(6,7~9,10)		50mΩ Max.	
		Pin(4-5)		625mΩ Max.	
	Turns Raito	N1(N3):N2:N4	100kHz, 0.1V	1:0.55:0.55±3%	
	Hi-Pot	N1&N3&N4 to N2	50Hz, 3.0mA 1S	1500V	
		All winding to core	50Hz, 3.0mA 1S	500V	
TWPEP131313B322T Marking:(S1611028)	L	Pin(4-5)	100kHz, 0.1V	530uH±10%	
	L_K	Pin(4-5), shorted pin1,2,6,7	100kHz, 0.1V	20.0uH Max.	
	DCR	Pin(4-5)	25±5°C	1.90Ω Max.	
		Pin(2-1)		68mΩ Max.	
		Pin(7-6)		400mΩ Max.	
	Turns Raito	N1:N2:N3	100kHz, 0.1V	78:10:20±0.5Ts	
	Hi-Pot	Pri&Aux to Sec	50Hz, 1.0mA, 60S	4500V	
		Coil to Core	50Hz, 1.0mA, 60S	2500V	
TWPEP131313B329T Marking:(S1705010)	L	Pin(1-3)	400kHz, 1.0V	306uH Min	
	L_K	Pin(1-3), shorted other pins	400kHz, 1.0V	3.0uH Max.	
	DCR	Pin(1-3)	25±5°C	200±20%mΩ	
		Pin(10,9-7,6)		4.0±20%mΩ	
		Pin(4-5)		170±20%mΩ	
	Turns Raito	Pin(1-3): Pin(6,7-9,10): Pin(5,4)	400kHz, 1.0V	1:0.187:0.689 ±3%	
	Hi-Pot	Pin(1,2,3,4) to Pin(7,8,9,10)	50Hz, 3.0mA, 1S	1500V	
		All winding to core	50Hz, 3.0mA, 1S	600V	

SPECIFICATIONS

Part No.	Test Item	Test Terminal	Test Condition	Specification	Schematic
TWPEP131313B338T Marking:(S1803006)	L	Pin(1-3)	400kHz, 1.0V	306uH Min	
	L_K	Pin(1-3), shorted other pins	400kHz, 1.0V	3.0 uH Max.	
	DCR	Pin(1-3)	25±5°C	51±20%mΩ	
		Pin(10,9-7,6)		7.0±20%mΩ	
		Pin(4-5)		170±20%mΩ	
	Turns Raito	Pri:Sec:Aux	400kHz, 1.0V	1:0.31:0.689 ±3%	
	Hi-Pot	Pin(1,2,3,4) to Pin(7,8,9,10)	50Hz, 3.0mA 1S	1500V	
		All winding to core	50Hz, 3.0mA 1S	500V	
TWPEP131313B344T Marking:(S1912005)	L	Pin(3-4)	250kHz, 0.1V	127uH±10%	
	L_K	Pin(3-4), shorted other pins	250kHz, 0.1V	1.25uH Max.	
	DCR	Pin(3-4)	25±5°C	255.0mΩ Max.	
		Pin(2-1)		310.0mΩ Max.	
		Pin(7,8~9,10)		24.0mΩ Max.	
	Turns Raito	Pin(3-4):(7,8-9,10):(2-1)	250kHz, 0.1V	30:5:15± 3%	
	Hi-Pot	Pri to Sec	50Hz, 1.0mA, 3S	1500V	
		Coil to Core	50Hz, 1.0mA , 3S	500V	
TWPEP131313B345T Marking:(S2002001)	L	Pin(3~5)	10kHz, 0.1V	40.0uH±10%	
	L_K	Pin(3~5), Short other Pins	100kHz, 0.1V	1.15uH Max.	
	DCR	Pin(3~5)	25±5°C	0.100Ω Max.	
		Pin(6~10)		0.030Ω Max.	
		Pin(7~9)		0.030Ω Max.	
	Turns Raito	Pin (3-5): Pin (6-10): Pin (7-9)	10kHz, 0.1V	6:1:1±1%	
	Hi-Pot	Pri to Sec	50Hz, 1.0mA, 2S	1875V	
TWPEP131313B412T Marking:(S1707014)	L	Pin(2-3)	10kHz, 0.025V	90uH±10%	
	L_K	Pin(2-3), shorted other pins	100kHz, 0.025V	2.0uH Max.	
	DCR	Pin(2-3)	25±5°C	300mΩ Max.	
		Pin(5-4)		120mΩ Max.	
		Pin(7-8)		27mΩ Max.	
		Pin(9-10)		40mΩ Max.	
	Isat	Pin(2-3)	10kHz, 0.025V @L≥90%	1.9A Min.	
	Turns Raito	Pri : Bias: Sec: Synch	10kHz, 0.025V	1:0.25:0.3125:0.125 ±3%	
	Hi-Pot	P(2,3,4,5) to P(7,8,9,10)	50Hz, 1.0mA, 3S	1850V	
		P(2,3) to P(4,5)	50Hz, 1.0mA, 3S	600V	

SPECIFICATIONS

Part No.	Test Item	Test Terminal	Test Condition	Specification	Schematic
TWPEP131313B425T Marking:(S2006007)	L	Pin(2-3)	100kHz, 0.1V	90uH±10%	
	L_K	Pin(2-3), shorted other pins	100kHz, 0.1V	2.0uH Max.	
	DCR	Pin(2-3)	25±5°C	300.0mΩ Max.	
		Pin(5-4)		120.0mΩ Max.	
		Pin(7-8)		27.0mΩ Max.	
		Pin(9-10)		40.0mΩ Max.	
	Turns Raito	Pin(2-3) :Pin(5-4): Pin(7-8) :Pin(9-10)	100kHz, 0.1V	32:8:10:4±0.5Ts	
	Hi-Pot	Pri to Sec	50Hz, 1.0mA, 2S	1500V	
		Coil to Core	50Hz, 1.0mA, 2S	500V	
TWPEP131313B432T Marking:(S2104008)	L	Pin(1-2)	100kHz, 0.1V	100uH±10%	
	L_K	Pin(1-2), shorted others	100kHz, 0.1V	0.55uH Max.	
	DCR	Pin(1-2)	25±5°C	114.0mΩ Max.	
		Pin(4-5)		160.0mΩ Max.	
		Pin(6,7-9,10)		20.0mΩ Max.	
	Turns Raito	Pin(1-2) :Pin(4-5): Pin(6-10) :Pin(7-9)	100kHz, 0.1V	20:10:9:9±0.5Ts	
	Hi-Pot	Pri to Sec	50Hz, 1.0mA, 2S	1500V	
TWPEP131313B448T Marking:(S2205004)	L	Pin(1-3)	100kHz, 0.1V	100.0uH±10%	
	L_K	Pin(1-3), shorted other pins	100kHz, 0.1V	1.0uH Max.	
	DCR	Pin(1-3)	25±5°C	65.0mΩ Max.	
		Pin(6,7-9,10)		10.0mΩ Max.	
		Pin(4-5)		223.2mΩ Max.	
	Turns Raito	Pin(1-3): Pin(6,7-9,10): Pin(4-5)	100kHz, 0.1V	20:5:10±0.5Ts	
	Hi-Pot	Pri to Sec	50Hz, 2.0mA, 60S	1500V	

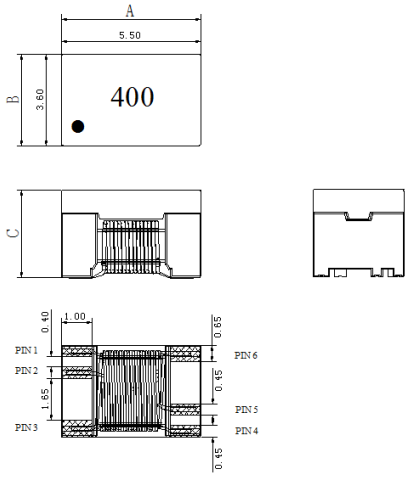
Chip LAN Transformer Reference Data

FEATURES AND APPLICATIONS

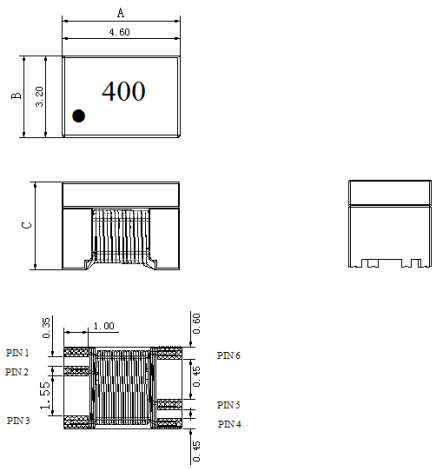
- ◆ Excellent high voltage isolation characteristics
- ◆ Low loss, excellent EMI suppression
- ◆ Widely used in routers, switches, IPC,

SHAPE AND DIMENSIONS

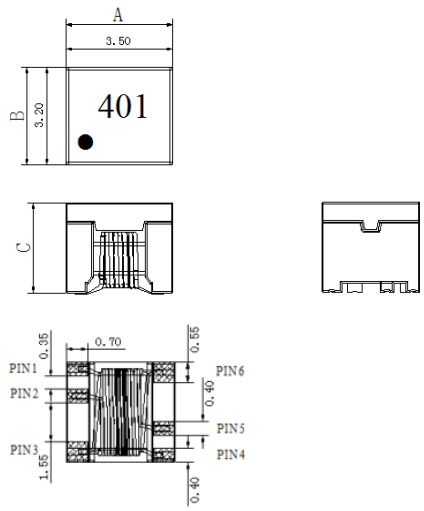
◆ **P/N: TWSHI050404B400T**



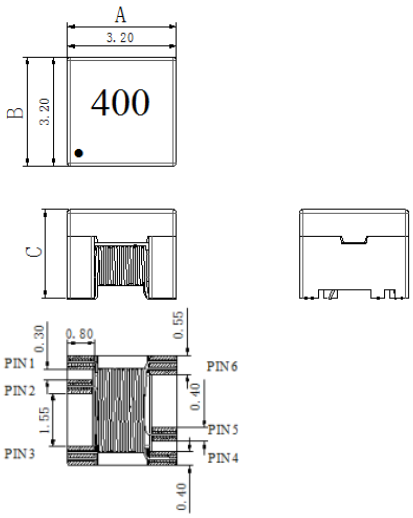
◆ **P/N: TWSHI040303B400T**



◆ **P/N: TWSHI030303B401T**



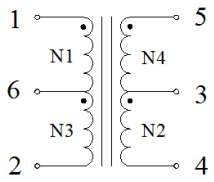
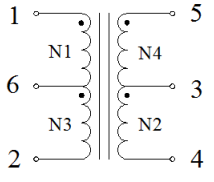
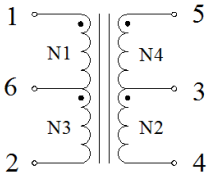
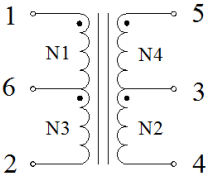
◆ **P/N: TWSHI030303B400T**



Unit: mm

ITEM	TWSHI050404B400T	TWSHI040303B400T	TWSHI030303B401T	TWSHI030303B400T
C	3.50±0.20	3.50±0.20	2.90±0.10	2.90 Max.

SPECIFICATIONS

Part No.	Test Item	Test Terminal	Test Condition	Specification	Schematic
TWSHI050404B400T Marking:(400)	L	Pin(1-2)	100kHz,0.1V	120uH Min.	
	L_K	Pin(1-2) (short 5-4)	100kHz,0.1V	0.5uH Max.	
	DCR	Pin(1-2)	25±5°C	1.0Ω Max.	
		Pin(5-4)		1.0Ω Max.	
	Turns Raito	Pri: Sec	15.75kHz,1V	1:1±0.5	
	Insertion Loss	Pin(1-2) to Pin(5-4)	1 MHz~400MHz	0.8dB Max.	
	Return Loss	Pin(1-2) to Pin(5-4)	1 MHz~40 MHz	23.0dB Min.	
			40 MHz~400 MHz	13.0dB Min.	
			400 MHz~500 MHz	10.0dB Min.	
	Hi-pot	Pri to Sec	50Hz, 1.0mA ,60s	1500V	
TWSHI040303B400T Marking:(400)	L	Pin(1-2)	100kHz,0.1V	150uH Min.	
	L_K	Pin(1-2) (short 5-4)	100kHz,0.1V	0.5uH Max.	
	DCR	Pin(1-2)	25±5°C	1.5Ω Max.	
		Pin(5-4)		1.5Ω Max.	
	Turns Raito	Pri: Sec	15.75kHz,1V	1:1±0.5	
	Insertion Loss	Pin(1-2) to Pin(5-4)	1 MHz~100MHz	0.8dB Max.	
			100MHz~200MHz	1.2dB Min.	
	Return Loss	Pin(1-2) to Pin(5-4)	1 MHz~40MHz	23.0dB Min.	
			40MHz~200MHz	16.0dB Min.	
	Hi-pot	Pri to Sec	50Hz, 1.0mA ,60s	1500V	
TWSHI030303B401T Marking:(401)	L	Pin(1-2)	100kHz, 0.1V	120uH Min.	
	L_K	Pin(1-2) (short 5-4)	100kHz, 0.1V	0.5uH Max.	
	DCR	Pin(1-2)	25±5°C	2.0Ω Max.	
		Pin(5-4)		2.0Ω Max.	
	Turns Raito	Pri: Sec	15.75kHz,1V	1:1±0.5	
	Insertion Loss	Pin(1-2) to Pin(5-4)	1MHz~100MHz	1.0dB Max.	
	Return Loss	Pin(1-2) to Pin(5-4)	30MHz~40MHz	18.0dB Min.	
			40MHz~50MHz	14.4dB Min.	
			50MHz~60MHz	13.1dB Min.	
			60MHz~80MHz	12.0dB Min.	
			80MHz~100MHz	10.0dB Min.	
	Hi-pot	Pri: Sec	50Hz, 1.0mA , 60s	1500V	
TWSHI030303B400T Marking:(400)	L	Pin(1-2)	100kHz, 0.1V	120uH Min.	
	L_K	Pin(1-2) (short 5-4)	100kHz, 0.1V	0.3uH Max.	
	DCR	Pin(1-2)	25±5°C	4.5Ω Max.	
		Pin(5-4)		4.5Ω Max.	
	Turns Raito	Pri: Sec	100kHz, 1V	1:1±0.5	
	Insertion Loss	Pin(1-2) to Pin(5-4)	1MHz~100MHz	2.5dB Max.	
	Return Loss	Pin(1-2) to Pin(5-4)	1MHz~100MHz	8.0dB Min.	
	Hi-pot	Pri to Sec	50Hz, 1.0mA, 60s	1500V	