

## SPECIFICATION FOR APPROVAL

<p><b>CUSTOMER'S APPROVAL CHOP</b></p>  <p>Approval's condition: _____</p> <p>Approved date: _____</p>
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KINDLY RETURN A SET WITH YOUR COMPANY'S OFFICIAL  
STAMP ON APPROVAL OF THIS ITEM

**CUSTOMER'S NAME:** \_\_\_\_\_

**CUSTOMER'S MODEL NO. :** \_\_\_\_\_

**CUSTOMER'S PART NO. :** \_\_\_\_\_

**DESCRIPTION:** \_\_\_\_\_

**EP13**

**Semitel'S MODEL NO. :** \_\_\_\_\_

**EP13-302**

**VERSION:** \_\_\_\_\_

**A**

**DATE:** \_\_\_\_\_

**2017-3-31**

**Attachments:**

- Product specification
- Sample Qty.:
- Test data

Prepared By	Checked By	Approved By
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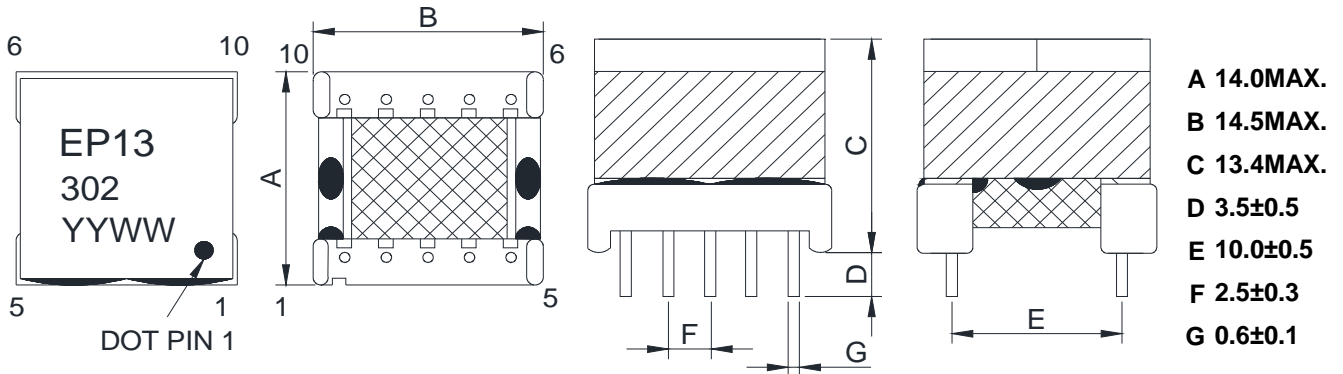
### Revision Record

Version	Revision Date	Revision For Items	Reason For Revision
A	2017-3-31	New Revision	-

<b>Semitel'S MODEL NO. :</b>	<b>EP13-302</b>	<b>CUSTOMER'S MODEL NO.:</b>	
<b>VERSION :</b>	<b>A</b>	<b>CUSTOMER'S PART NO. :</b>	
<b>DATE :</b>	<b>2017-3-31</b>		

# Product Specification

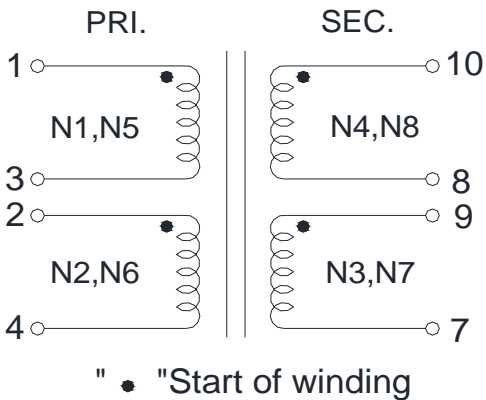
## 1. Physical Dimensions (Unit:mm)



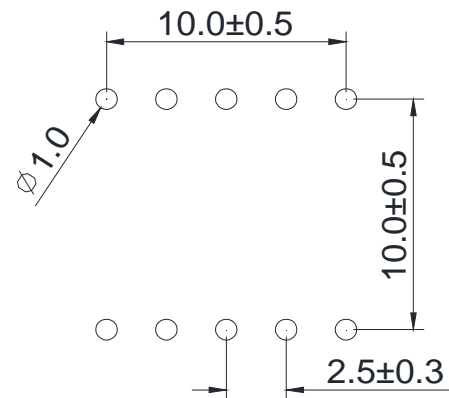
### Notes:

- \*Marking type is laser printing, The dot for PIN 1 is print together with the markings.
- \*YY: Year Code; WW: Week Code
- \*Size D not including soldering tags
- \*ITDSC Model:SF13AD

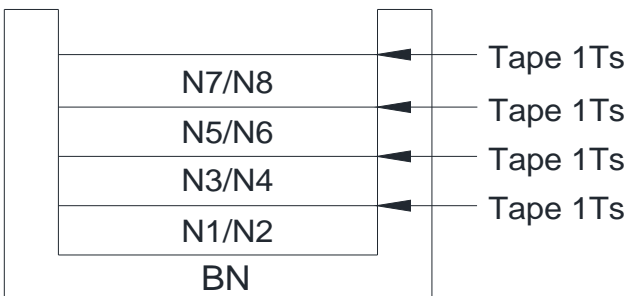
## 2.Connection



## 3.Recommended Pad Layout (Unit:mm)



## 4.Structure of Products



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### 5. Electrical Characteristics

\*Operating temperature -40°C to +85°C

\*Electrical specification at 25°C

Items	Winding	Specifications	Test conditions
Inductance	L(1-4) tie (2-3)	400uH ±7%	at 10KHz,0.1Vrms
LK-Inductance	LK(1-4) tie (2-3,7-8-9-10)	1.5uH MAX	at 100KHz,0.1Vrms
DCR	R(1-4) tie (2-3)	1.5Ω MAX	at 25°C
	R(10-7) tie (9-8)	1.0Ω MAX	
Interwinding Capacitance	(1-10) tie (1-2-3-4,7-8-9-10)	80pF MAX	at 100KHz,0.1Vrms
THD	(1-4):(10-7)	-80dB typ	at 20KHz,2Vrms Across (1-4) 100 ohm Input, 16 ohm load at (10-7),(tied 2+3, 8+9)
Turns Ratio	(1-4):(10-7)	2.5:1±2%	at 10KHz,0.1Vrms
Hi-Pot	(1-10) tie (2-3,9-8)	1875VAC	0.5mA.1Sec

### 6. Bill of Material

No	Items	Material Name	Manufacturer	UL File No	SGS File No
1	Core	FERRITE CORE A101	ACME or Equivalent	NIL	CE/2016/A4681B
2	Bobbin	PHENOLIC T375J	CHANG CHUN or Equivalent	E59481	CE/2016/60629
	OR(Bobbin)	PM-9820	SUMITOMO (SumiDurez) or Equivalent	E41429	SHAEC1605846701
3	Copper Wire	enamelled wire QPN 180	SUNTEK or Equivalent	E234867	SCL011010053006E
4	Wire	Single layer and multilayer insulated wire TIW-FXX	FLUO-TECH or Equivalent	E488352	CANML1602822509
OR	Wire	Single layer and multilayer insulated wire FIW-F*	Yusheng or Equivalent	E332529	SHAEC1512279501
5	Insulation tape	YELLOW COLOR 1350F-1(b)	3M or Equivalent	E17385	CE/2016/A2847
6	Polyimide Tape	Brown adhesive plastic 0.025mm RH-I2550 V-0	RUNSEA (RAYITEK)or Equivalent	E339977	CANEC1607925701
7	EPOXY	EB-360	CHANGFENG or Equivalent	NIL	SHAEC1600075606
8	EPOXY	TH320	TIANHUAN or Equivalent	E257593	CANEC1619173404
9	Solder	Lead free solder	HONGTAIZHOU or Equivalent	NIL	CANEC1610788406

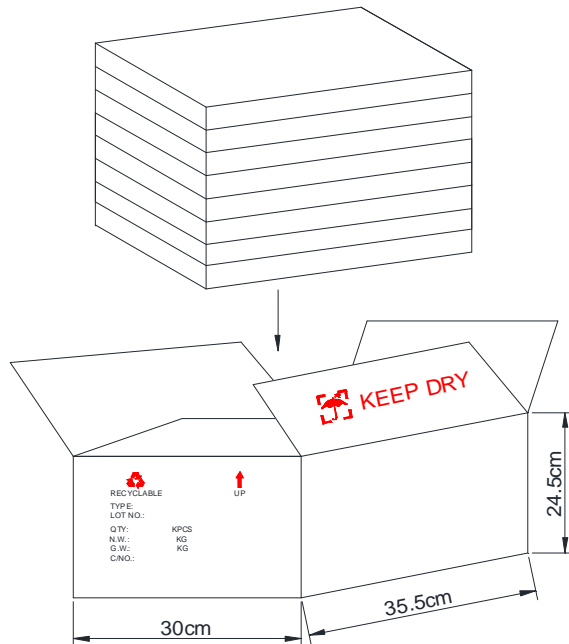
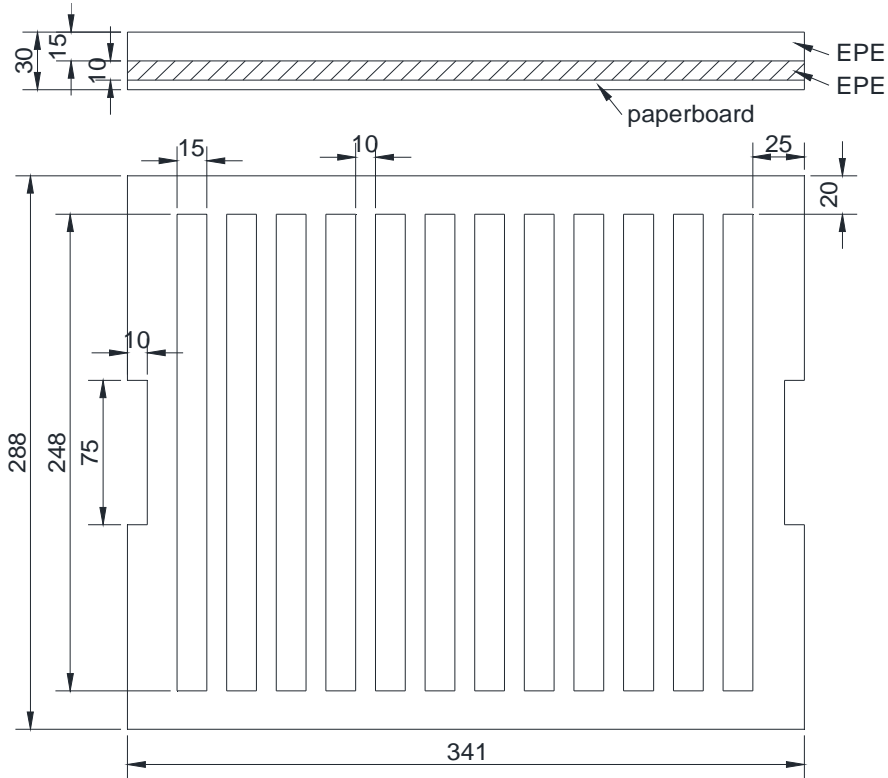
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### 7.Packing Request

\*Put in the EPE slot, each layer contains 216pcs products.

\*Every cartoon box contains 1728pcs products,with a total of 8 layers.



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## Test Report

Test Instruments								
	HP4284A	HP4284A	VR131		VR131	SYS2702A	HP4284A	CS2670A
	Inductance	LK-Inductance	DCR		DCR	THD	Turns Ratio	Hi-Pot
NO	L(1-4) tie (2-3)	LK(1-4) tie (2-3,7-8-9-10)	R(1-4) tie (2-3)	R(10-7) tie (9-8)	(1-10) tie (1-2-3-4,7-8-9-10)		(1-4):(10-7)	(1-10) tie (2-3,9-8)
	at 10KHz,0.1Vrms	at 100KHz,0.1Vrms	at 25°C	at 25°C	at 25°C	at 20KHz,2Vrms	at 10KHz,0.1Vrm	0.5mA.1Sec
	400uH ±7%	1.5uH MAX	1.5Ω MAX	1.0Ω MAX	80pF MAX	-80dB typ	2.5:1±2%	1875VAC
	1	405.6	0.98	0.554	0.24	47	-82.1	PASS
2	397.8	0.90	0.557	0.24	48	-83.1	PASS	PASS
3	407.7	0.96	0.556	0.24	50	-82.2	PASS	PASS
4	396.7	0.93	0.558	0.24	47	-83.5	PASS	PASS
5	407.7	0.97	0.557	0.24	48	-82.2	PASS	PASS

MIN.	396.7	0.90	0.554	0.24	47	-83.5		
MAX.	407.7	0.98	0.558	0.24	50	-82.1		
AVG.	403.1	0.95	0.556	0.24	48	-82.6		
<b>Result</b>	<b>Passed</b>	<b>Passed</b>	<b>Passed</b>	<b>Passed</b>	<b>Passed</b>	<b>Passed</b>	<b>Passed</b>	<b>Passed</b>

### Overall Dimensions Test

Measuring Tools:Callipers (Unit:mm)

NO	A	B	C	D	E	F	G		
	14.0MAX.	14.5MAX.	13.4MAX.	3.5±0.5	10.0±0.5	2.5±0.3	0.6±0.1		
1	13.49	13.54	12.55	3.47	10.23	2.48	0.57		
2	13.52	13.47	12.59	3.10	10.20	2.49	0.62		
3	13.51	13.52	12.65	3.19	10.10	2.49	0.57		
4	13.50	13.51	12.49	3.12	10.24	2.47	0.57		
5	13.55	13.50	12.62	3.11	10.27	2.49	0.57		

MIN.	13.24	13.47	12.49	3.06	10.10	2.47	0.57		
MAX.	13.55	13.57	12.73	3.47	10.27	2.57	0.62		
AVG.	13.35	13.52	12.65	3.13	10.17	2.52	0.58		
<b>Result</b>	<b>Passed</b>	<b>Passed</b>	<b>Passed</b>	<b>Passed</b>	<b>Passed</b>	<b>Passed</b>	<b>Passed</b>		

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