

SPECIFICATION FOR APPROVAL

CUSTOMER'S APPROVAL CHOP

Approval's condition: _____

Approved date: _____

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. : _____

EP13-665

VERSION: _____

C

DATE: _____

2021/2/24

Attachments:

- Product Specification
- Sample Qty. :
- Test Data

Prepared By	Checked By	Approved By
Hebe Deng 2021/2/24	Liang Wong 2021/2/24	Alan Wong 2021/2/24

Semitel International Ltd.,	TEL: 886-2-86922121 FAX: 886-2-26483379
www.semitelint.com	12F, No.183, Sec.1, Datong Rd., Xizhi Dist., New Taipei City 22145, Taiwan

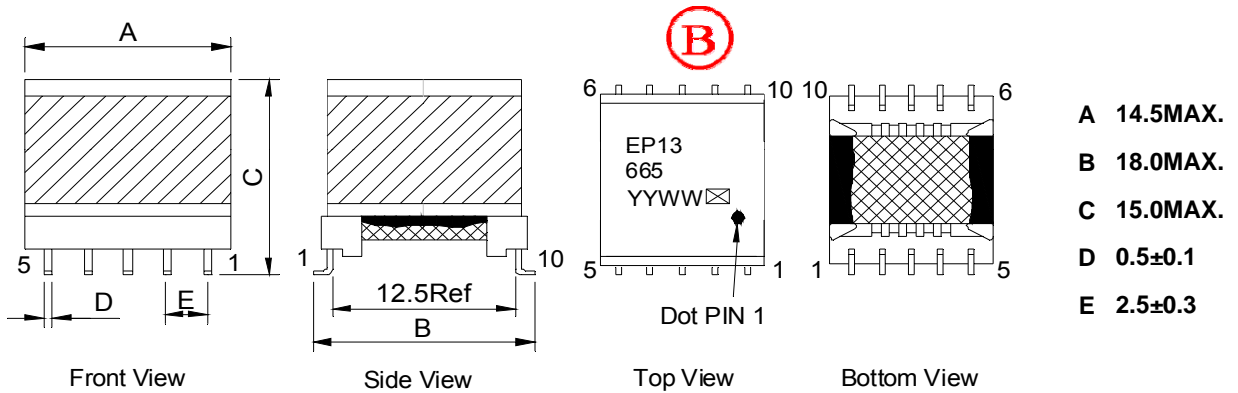
Revision Record

Version	Revision Date	Revision For Items	Reason For Revision
A	2020/8/24	New Revision	-
B	2020/9/5	Redesign the transformer	Customer Request
C	2021/2/24	Re-design to meet EVM SI34071 12V 6A and Compatible with LDT1057-50R	Customer Request

Semitel'S MODEL NO. :	EP13-665	CUSTOMER'S MODEL NO. :	
VERSION:	C	CUSTOMER'S PART NO. :	
DATE:	2021/2/24		

Product Specification

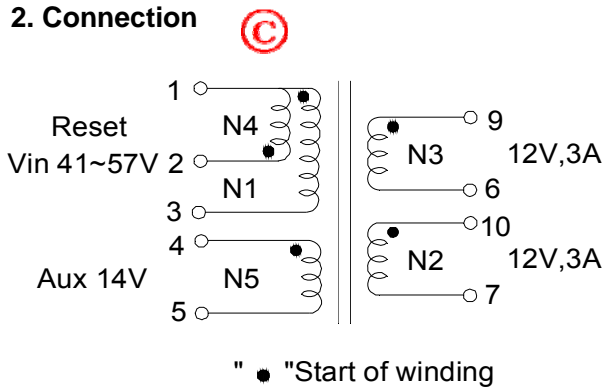
1. Physical Dimensions (Unit:mm)



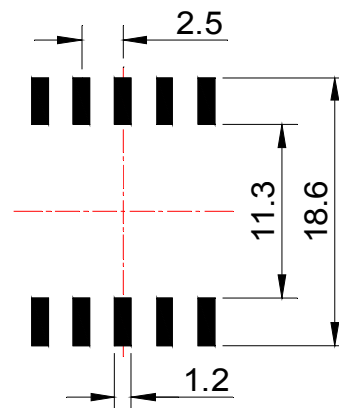
Notes:

- (1). Marking type is laser printing
- (2). YY: Year Code; WW: Week Code
- (3). :When making samples, S is used to represent the product is a sample.
- (4). :Use different letters or numbers to represent the products are produced from different production lines .
- (5). Size B not including soldering tags
- (6). Coplanarity Requirement: Less than 0.10mm

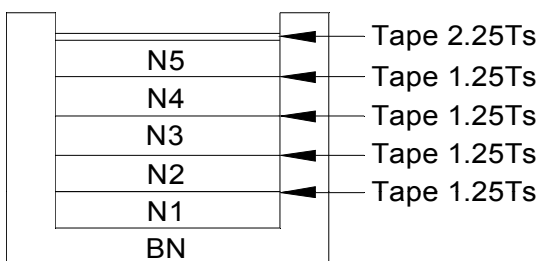
2. Connection



3. Recommended Pad Layout (Unit:mm)



4. Structure of Products



5. No of Turns & Wire Spec

No	No of Pin	Turns	Wire Spec
N1	1--3	12 TS	ø0.30 mm* 2P P180 G1
N2	10--7	8 TS	ø0.28 mm* 3P P180 G1
N3	9--6	8 TS	ø0.28 mm* 3P P180 G1
N4	2--1	12 TS	ø0.18 mm* 2P P180 G1
N5	4--5	9 TS	ø0.18 mm* 2P P180 G1

Semitel'S MODEL NO. :	EP13-665	CUSTOMER'S MODEL NO. :	
VERSION:	C	CUSTOMER'S PART NO. :	
DATE:	2021/2/24		

Product Specification

6. Electrical Characteristics

*Operating temperature range: -40°C to +125°C .

*Storage temperature range: -40°C to +125°C .

Items	Winding	Specifications	Test Conditions
Inductance	L(1-3)	100uH MIN.	at 200kHz, 1Vrms
LK-Inductance	LK(1-3) Tie 4,5,6,7,9,10	0.5uH MAX.	at 200kHz, 1Vrms
DCR ©	R(1-3)	49mΩ MAX.	at 25°C
	R(2-1)	240mΩ MAX.	
	R(4-5)	302mΩ MAX.	
	R(9-6)	36mΩ MAX.	
	R(10-7)	34mΩ MAX.	
Turns Ratio ©	(1-3):(2-1):(4-5):(9-6):(10-7)	1:1:0.75:0.67:0.67;±3%	at 200kHz, 1Vrms
Hi-Pot	PRI. To SEC.	1500VAC	1mA.2 SEC.
	WIN. To CORE	500VAC	1mA.2 SEC.

7. Bill of Material

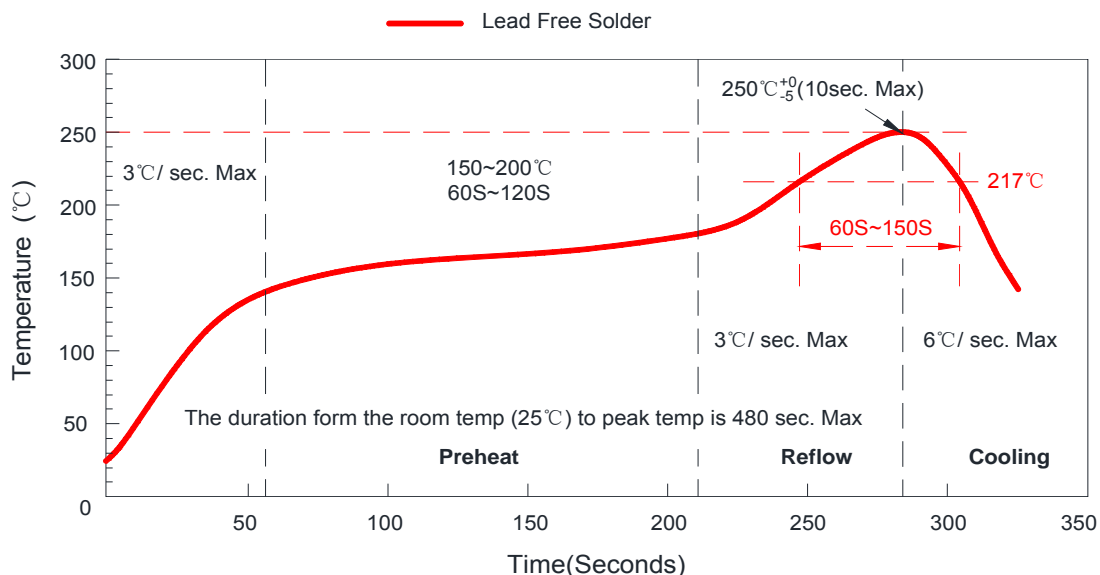
No	Item	Material Name	Manufacturer	UL File No	SGS File No
1	Core	MnZn ferrite core DP95	DA WHA or Equivalent	NIL	A2190003462101001
2	Bobbin	PM-9630	SUMITOMO (SumiDurez) or Equivalent	E41429	SHAEC2002442505
3	Copper Wire	Polyurethane bare wire (Cu) Polysol 180	ELEKTRISOLA or Equivalent	E258243	CE/2020/34972
OR	Copper Wire	Polyurethane wire UEWH/U	PACIFIC or Equivalent	E201757	A219029024010101E
4	Polyimide Tape	Brown adhesive plastic HN NC 0.025mm V-0	RUNSEA (RAYITEK) or Equivalent	E339977	SZXEC1900617511
5	EPOXY	EB-360	CHANGFENG or Equivalent	NIL	SHAEC1925290501
6	Varnish	8562*	HANG CHEUNG or Equivalent	E200154	CANEC1900008105
7	Solder	Lead free solder	HONGTAIZHOU or Equivalent	NIL	CANEC1911577101

Semitel'S MODEL NO. :	EP13-665	CUSTOMER'S MODEL NO. :	
VERSION:	C	CUSTOMER'S PART NO. :	
DATE:	2021/2/24		

Product Specification

8.Recommended Temperature Conditions of Air Reflow Soldering

Test Solderability Temperature Profile



Profile Feature	
Average Ramp-Up Rate (T _{smax} to T _p)	3°C/Second Max.
Preheat	
-Temperature Min. (T _{smin})	150°C
-Temperature Max. (T _{smax})	200°C
-Time (T _{smin} to T _{smax})	60-120 Seconds
Time maintained above:	
-Temperature (T _L)	217°C
-Time (T _L)	60-150 Seconds
Peak/Classification Temperature (T _p)	250°C
Time within 5°C of actual PeakTemperature (T _p)	10 Seconds Max.
Ramp-Down Rate	6°C/Second Max.
Time 25°C to Peak Temperature	8 Minutes Max.

Semitel'S MODEL NO. :	EP13-665	CUSTOMER'S MODEL NO. :	
VERSION:	C	CUSTOMER'S PART NO. :	
DATE:	2021/2/24		

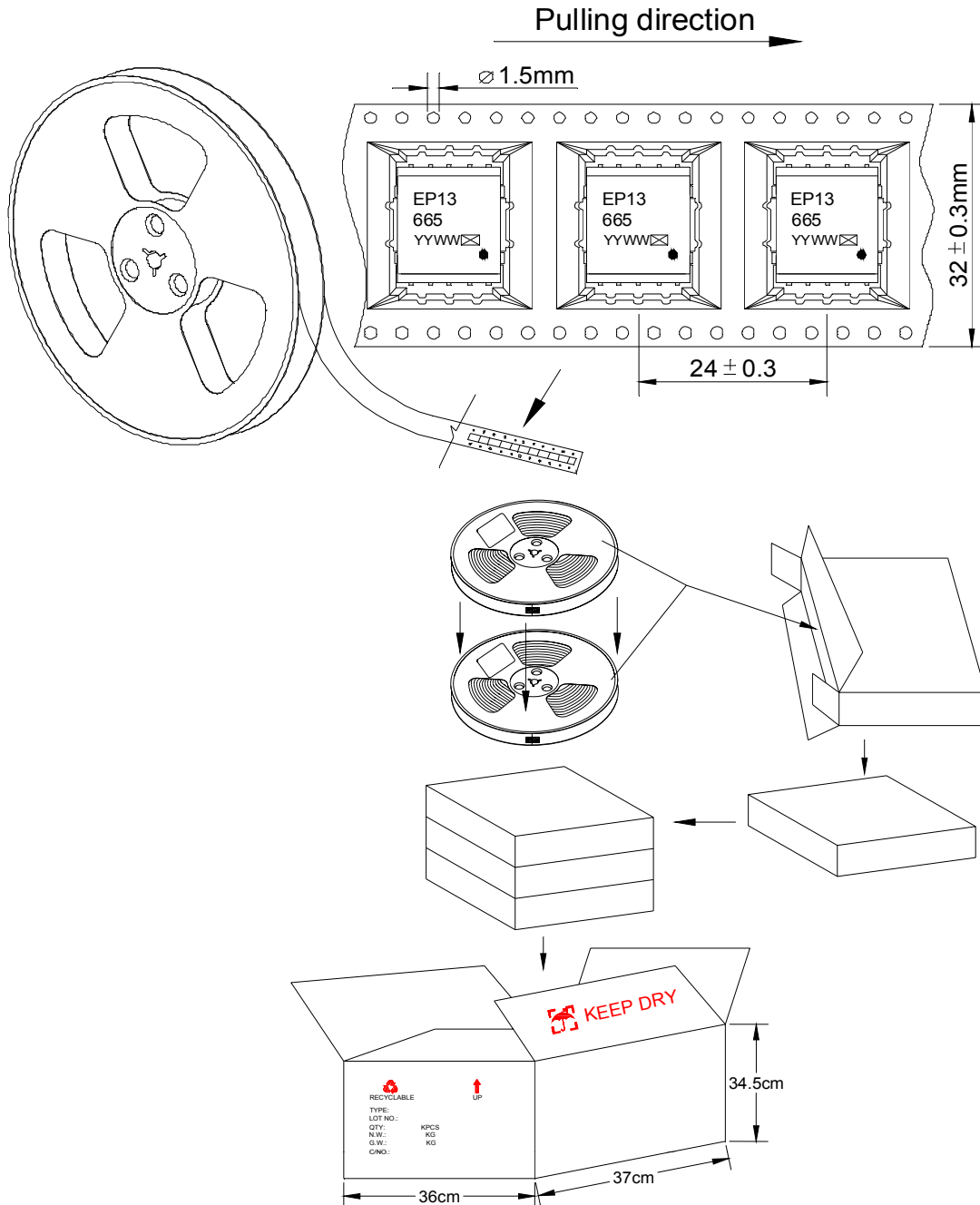
Product Specification

9.Packing Request

*Every roll of the carrier tape can contain 160pcs products.

*Every small packing box contains two rolls of carrier tape. Total quantity: 320pcs.

*Every cartoon box contains 3 small packing boxes. Total quantity: 960pcs.



Semitel'S MODEL NO. :	EP13-665	CUSTOMER'S MODEL NO. :	
VERSION:	C	CUSTOMER'S PART NO. :	
DATE:	2021/2/24		

Test Report

Test Instruments										
HP4284A		VR131				HP4284A	CS2670A			
Inductance	LK-Inductance	DCR				Turns Ratio		Hi-Pot		
at 200kHz,1Vrms	at 200kHz,1Vrms	at 25°C				at 200kHz,1Vrms		1mA.2 SEC.		
NO.	L(1-3)	LK(1-3) Tie 4,5,6,7,9,10	R(1-3)	R(2-1)	R(4-5)	R(9-6)	R(10-7)	(1-3):(2-1):(4-5):(9-6):(10-7)	PRI. To SEC.	WIN. To CORE
	100uH MIN.	0.5uH MAX.	49mΩ MAX.	240mΩ MAX.	302mΩ MAX.	36mΩ MAX.	34mΩ MAX.	1:1:0.75:0.67:0.67;±3%	1500VAC	500VAC
1										
2										
3										
4										
5										
MIN.	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
MAX.	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
AVG.	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!			
Result	Passed	Passed	Passed	Passed	Passed	Passed	Passed	Passed	Passed	Passed
Overall Dimensions Test					Measurement Tools: Caliper (Unit:mm)					
NO	A	B	C	D	E					
	14.5MAX.	18.0MAX.	15.0MAX.	0.5±0.1	2.5±0.3					
1										
2										
3										
4										
5										
MIN.	0.00	0.00	0.00	0.00	0.00					
MAX.	0.00	0.00	0.00	0.00	0.00					
AVG.	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!					
Result	Passed	Passed	Passed	Passed	Passed					

Semitel'S MODEL NO. :	EP13-665	CUSTOMER'S MODEL NO. :	
VERSION:	C	CUSTOMER'S PART NO. :	
DATE:	2021/2/24		