

SPECIFICATION FOR APPROVAL

<p>CUSTOMER'S APPROVAL CHOP</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. : _____ **EP13-545** _____

VERSION: _____ **A** _____

DATE: _____ **2019/10/6** _____

- Attachments:**
- Product Specification
 - Sample Qty. :
 - Test Data

Prepared By	Checked By	Approved By
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Revision Record

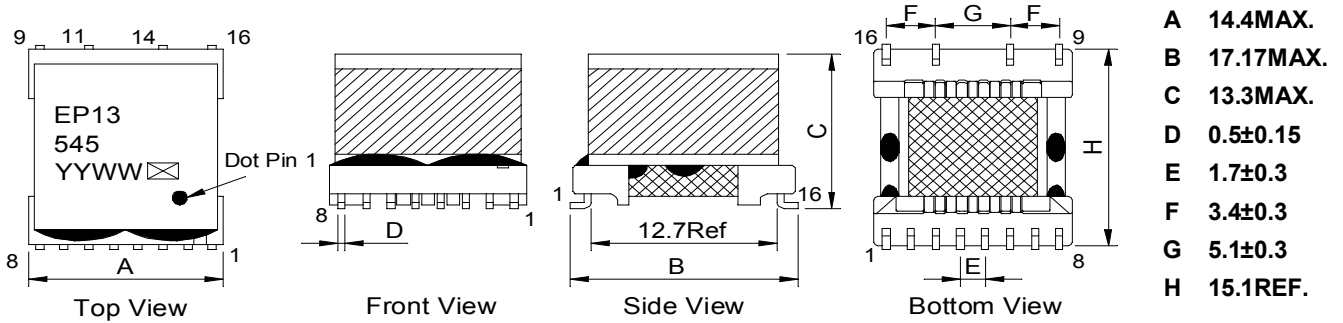
Version	Revision Date	Revision For Items	Revision For Items
A	2019/10/6	New Revision	-

Semitel'S MODEL NO. :	EP13-545	CUSTOMER'S MODEL NO. :	
VERSION:	A	CUSTOMER'S PART NO. :	
DATE:	2019/10/6		

Semitel International Ltd.,

Product Specification

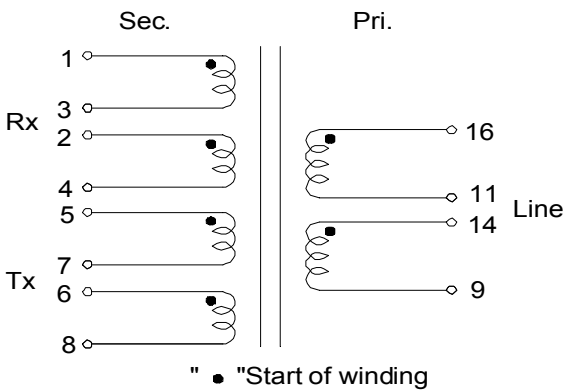
1. Physical Dimensions (Unit:mm)



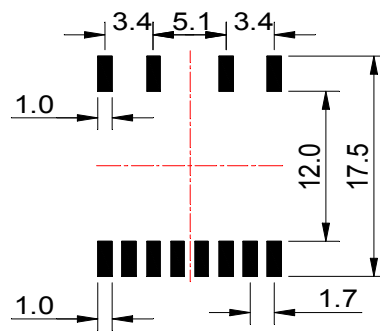
Notes:

- *Marking type is laser printing, Dot indicates the location of pin#1.
- *YY: Year Code; WW: Week Code
- * :When making samples, S is used to represent the product is a sample.
- * :Use different letters or numbers to represent the products are produced from different production lines .
- *Size B not including soldering tags
- *Coplanarity Requirement: Less than 0.15mm

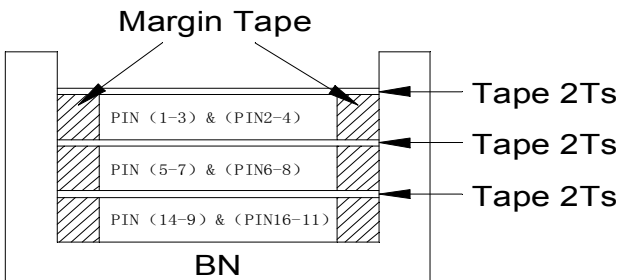
2. Connection



3. Recommended Pad Layout (Unit:mm)



4. Structure of Products



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Product Specification

5. Electrical Characteristics

*Electrical specifications @ 25°C unless otherwise noted:

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

Item	Winding	Specifications	Test Conditions
Inductance	L(16-9)Tie (11-14)	400uH±10%	at 10kHz,0.05Vrms
LK-Inductance	LK(16-9) Tie (1-2-3-4-5-6-7-8;11-14)	20uH MAX.	at 100kHz,0.05Vrms
DCR	R(1-4) Tie (2-3)	1.95Ω MAX.	at 25°C
	R(5-8) Tie (6-7)	555mΩ MAX.	
	R(16-9) Tie (11-14)	2.1Ω MAX.	
Interwinding Capacitance	C(1-16) Tie (2-3;11-14)	20pF MAX.	at 1kHz,0.05Vrms
THD	(1-4) to (16-9) Tie (2-3;11-14)	-90dB MAX.	at 30kHz,3Vrms
	(5-8) to (16-9) Tie (6-7;11-14)	-90dB MAX.	at 30kHz,3Vrms
Turns Ratio	(16-9):(1-4) Tie (11-14;2-3)	1:1;±3%	at 100kHz,0.1Vrms
	(16-9):(5-8) Tie (11-14;6-7)	4.25:1;±3%	at 100kHz,0.1Vrms
Hi-pot	Pri. To Sec.	1875VAC	1mA 2Sec
	Win. To Core	800VAC	1mA 2Sec

6. Bill of Material

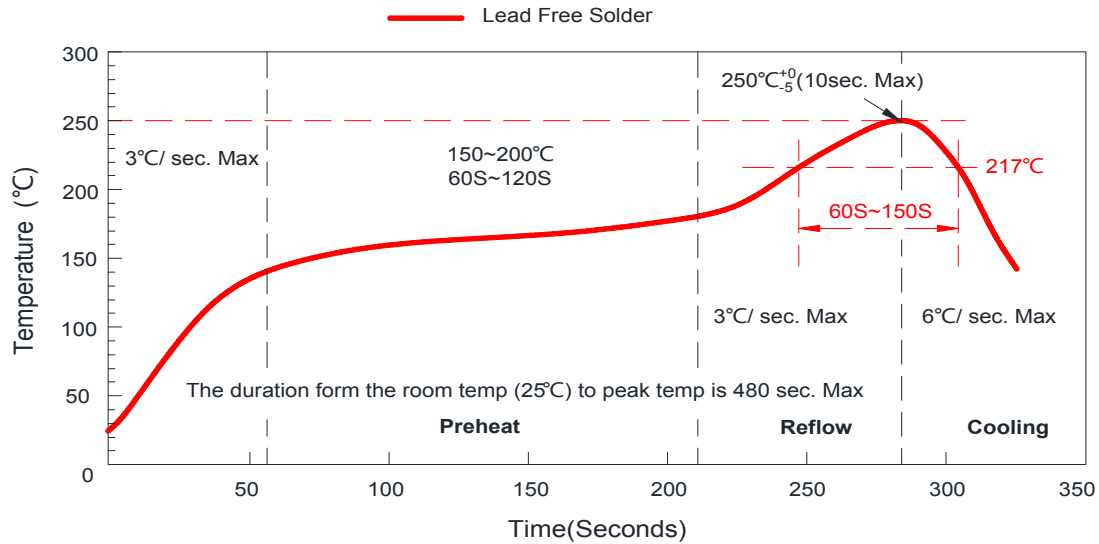
No	Items	Material Name	Manufacturer	UL File No	SGS File No
1	Core	FERRITE CORE JCP-95	FCRI or Equivalent	NIL	CANEC1913430901
2	Bobbin	PM-9630	SUMITOMO (SumiDurez) or Equivalent	E41429	SHAEC1904476901
3	Copper Wire	Polyurethane bare wire (Cu) Polysol 180	ELEKTRISOLA or Equivalent	E258243	CE/2019/37143
4	Polyimide Tape	Brown adhesive plastic HN NC 0.025mm V-0	RUNSEA (RAYITEK) or Equivalent	E339977	SZXEC1900617511
5	Margin Tape	NON-WOVEN CLOTH MARGIN TAPE WF* (c) (h)	YAHUA or Equivalent	E165111	CANEC1906625602
6	EPOXY	EB-360	CHANGFENG or Equivalent	NIL	SHAEC1826217301
7	EPOXY	TH320	TIANHUAN or Equivalent	E257593	CANEC1821553805
8	Solder	Lead free solder	HONGTAIZHOU or Equivalent	NIL	CANEC1911577101

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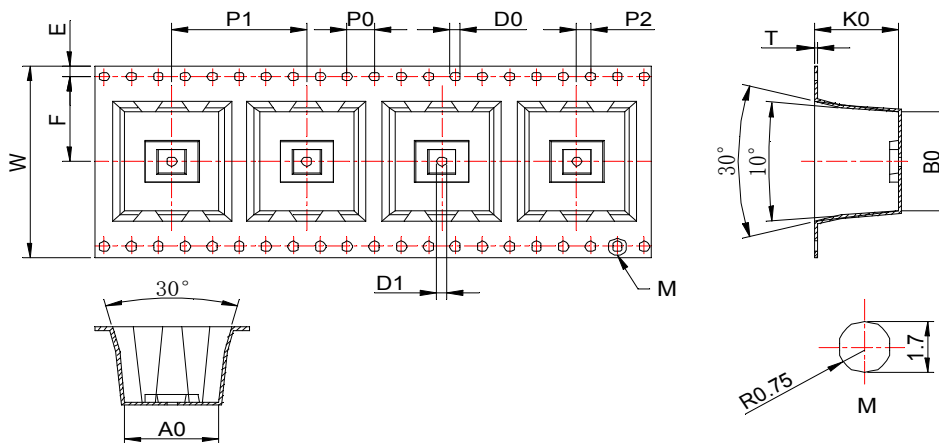
Product Specification

7.Recommended Temperature Conditions of Air Reflow Soldering

Test Solderability Temperature Profile



8.Tape Dimensions (Unit:mm)



symbol	A0	B0	K0	P0	P1	P2
Spec	14.0±0.3	16.5±0.3	12.5±0.3	4.0±0.1	20.0±0.15	2.0±0.1
symbol	W	T	E	F	D0	D1
Spec	32.0±0.3	0.5±0.05	1.75±0.1	14.2±0.1	∅ 1.5 ^{+0.1} ₀	∅ 2.0±0.1

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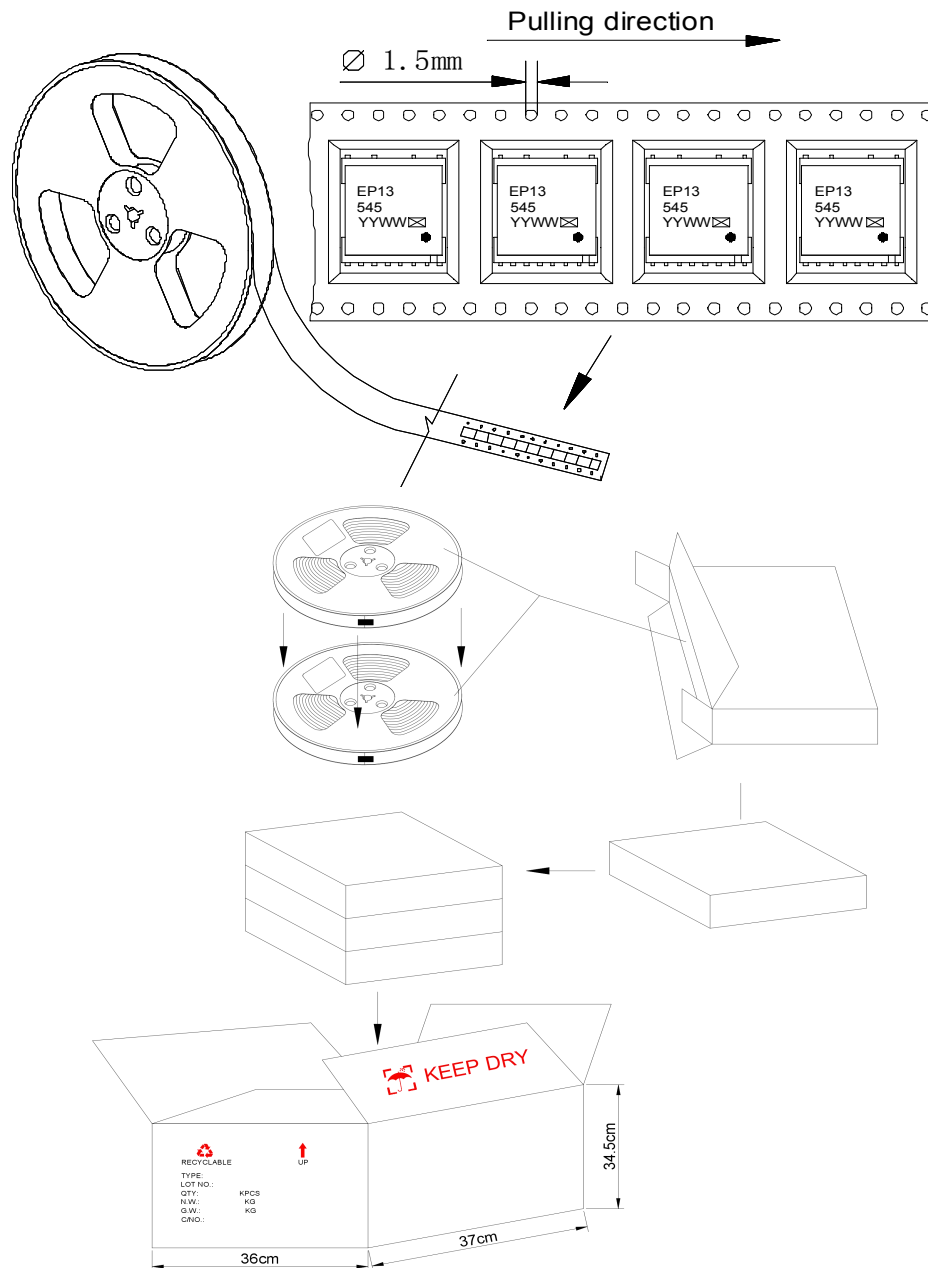
Product Specification

9.Packing Request

*Every roll of the carrier tape can contain 200pcs products.

*Every small packing box contains two rolls of carrier tape. Total quantity: 400pcs.

*Every carton box contains 3 small packing boxes. Total quantity: 1200pcs.



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Test Report

NO	Test Instruments											
	HP4284A	HP4284A	DCR METER 131			HP4284A	SYS2702A		HP4284A	CS2670A		
	Inductance	LK-Inductance	DCR			Interwinding Capacitance	THD		Turns Ratio		Hi-pot	
	at 10kHz,0.05 Vrms	at 100kHz,0.05 Vrms	at 25°C	at 25°C	at 25°C	at 1kHz,0.05Vrms	at 30kHz,3Vrms	at 30kHz,3Vrms	at 100kHz,0.1Vrms		1mA 2Sec	
	L(16-9)Tie (11-14)	LK(16-9) Tie (1-2-3-4-5-6-7-8;11-14)	R(1-4) Tie (2-3)	R(5-8) Tie (6-7)	R(16-9) Tie (11-14)	16)Tie (2-3;11-14)	(1-4) to (16-9) Tie (2-3;11-14)	(5-8) to (16-9) Tie (6-7;11-14)	(16-9):(1-4) Tie (11-14;2-3)	(16-9):(5-8) Tie (11-14;6-7)	Pri. To Sec.	Win. To Core
	400uH±10%	20uH MAX.	1.95Ω MAX.	555mΩ MAX.	2.1Ω MAX.	20pF MAX.	-90dB MAX.	-90dB MAX.	1:1;±3%	4.25:1;±3%	1875VAC	800VAC
1												
2												
3												
4												
5												
MIN.	0.00	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	0.00				
AVG.	#DIV/0!	#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	Passed	Passed

Overall Dimensions Test

Measurement Tools: Caliper (Unit:mm)

NO	A	B	C	D	E	F	G	H				
		14.4MAX.	17.17MAX.	13.3MAX.	0.5±0.15	1.7±0.3	3.4±0.3	5.1±0.3	15.1REF.			
1												
2												
3												
4												
5												
MIN.	0.00	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	0.00				
AVG.	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!				
Result	Passed	Passed	Passed	Passed	Passed	Passed	Passed	Passed				

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