

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. : _____ **EP13-687** _____

VERSION: _____ **A** _____

DATE: _____ **2020/11/27** _____

Attachments:

- Product Specification
- Sample Qty. :
- Test Data

Prepared By	Checked By	Approved By
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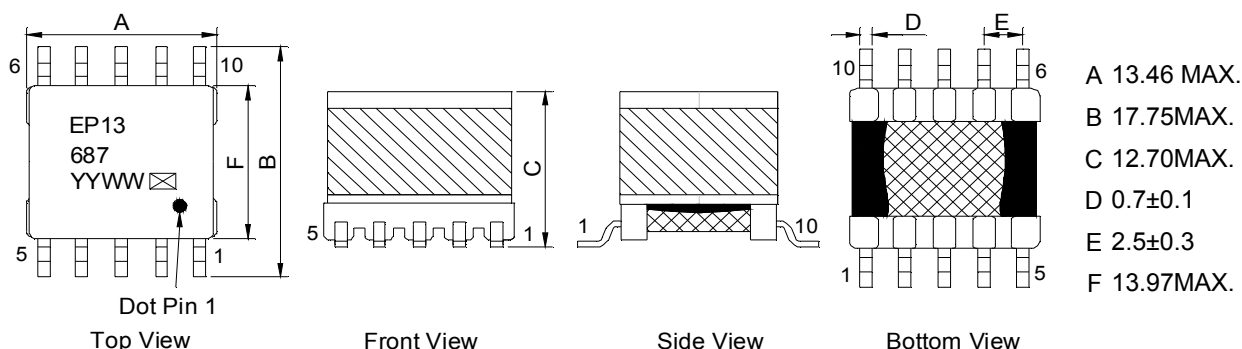
Revision Record

Version	Revision Date	Revision For Items	Revision For Items
A	2020/11/27	New product for 12V 1.125A 13.5W	-

Semitel'S MODEL NO. :	EP13-687	CUSTOMER'S MODEL NO. :	
VERSION:	A	CUSTOMER'S PART NO. :	
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Product Specification

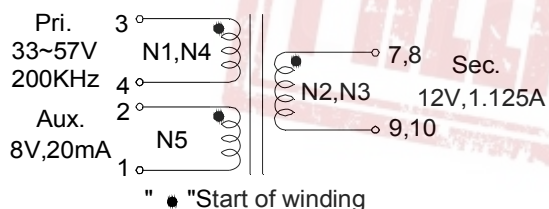
1. Physical Dimensions (Unit:mm)



Notes:

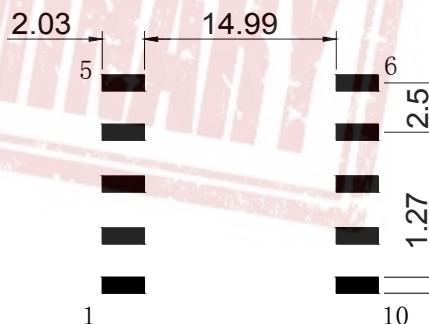
- *Marking type is laser printing, Dot indicates the location of pin#1.
- *YY: Year Code; WW: Week Code
- * :When making samples, S is used to represent the product is a sample.
- * :Use different letters or numbers to represent the products are produced from different production lines .
- *Size B not including soldering tags
- *Coplanarity requirement: Less than 0.10mm

2.Connection

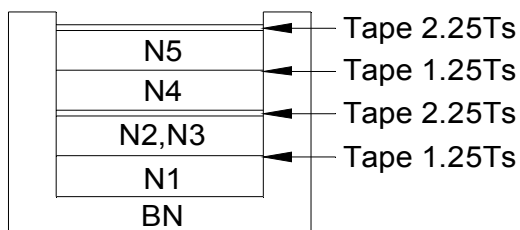


- " • "Start of winding
- *Customer to tie terminals 7&8 and 9&10 on PC board.
- *Application of the transformer allows for the leadwires between terminals 7&8 and 9&10 to solder bridge.

3.Recommended Pad Layout (Unit:mm)



4.Structure of Products



5. No of Turns & Wire Spec

No	No of Pin	Turns	Wire Spec
N1	3--4	24 TS	ø0.26 mm* 1P P180
N2,N3	7,8--9,10	7 TS	ø0.23 mm* 4P P180
N4	3--4	24 TS	ø0.26 mm* 1P P180
N5	2--1	5 TS	ø0.23 mm* 1P P180

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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(3-4)	127uH±10%	at 200KHz,0.1Vrms
LK-Inductance	LK(3-4) Tie 1,2,7,8,9,10	7.5uH MAX.	at 200KHz,0.1Vrms
DCR	R(3-4)	460mΩ MAX.	at 25°C
	R(2-1)	94mΩ MAX.	
	R(7,8-9,10)	55mΩ MAX.	
Turns Ratio	(3-4):(7,8-9,10):(2-1)	24:7:5;±3%	at 200KHz,0.1Vrms
Hi-Pot	Pri. to Sec.	1500VAC	1mA. 1SEC.
	Win. to CORE	500VAC	1mA. 1SEC.

7. Bill of Material

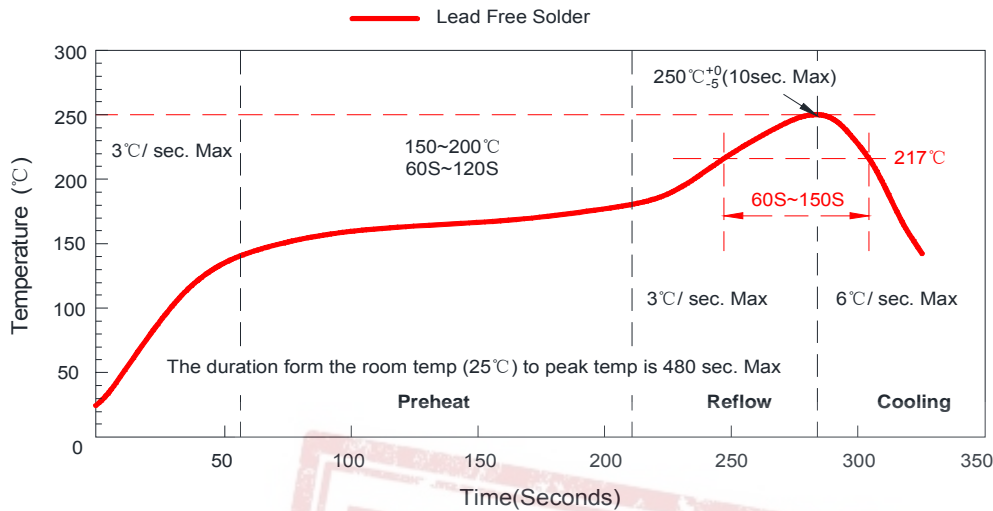
No	Items	Material Name	Manufacturer	UL File No	SGS File No
1	Core	FERRITE CORE JCP-95	FCRI or Equivalent	NIL	A2200234874101001R1
2	Bobbin	PM-9630	SUMITOMO (SumiDurez) or Equivalent	E41429	SHAEC2002442505
3	Copper Wire	Polyurethane bare wire (Cu) Polysol 180	ELEKTRISOLA or Equivalent	E258243	CE/2020/34972
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	SZXEC2000536905
5	EPOXY	TH320	TIAN HUAN or Equivalent	E257593	SZXEC1902353001
6	EPOXY	EB-360	CHANGFENG or Equivalent	NIL	SHAEC1925290501
7	Varnish	8562*	HANG CHEUNG or Equivalent	E200154	CANEC1900008105
8	Solder	Lead free solder	HONGTAIZHOU or Equivalent	NIL	SZXEC2001415205

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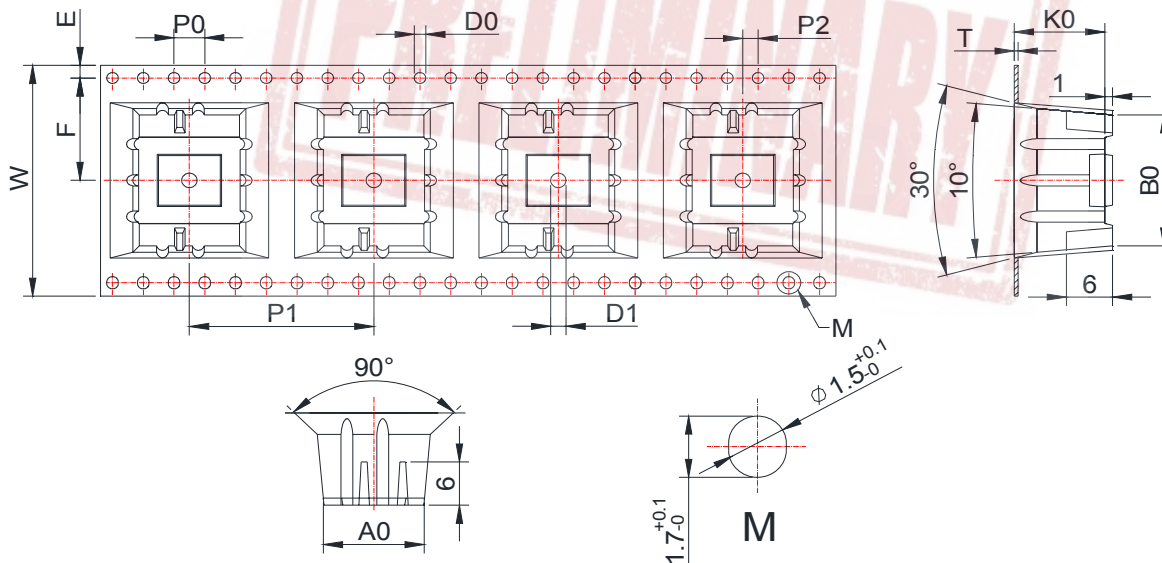
Product Specification

8.Recommended Temperature Conditions of Air Reflow Soldering

Test Solderability Temperature Profile



9.Tape Dimensions (Unit:mm)



symbol	A0	B0	K0	P0	P1	P2
spec	13.0±0.3	18.2±0.3	11.8±0.3	4.0±0.1	24.0±0.15	2±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	φ 1.5 ^{+0.1} ₀	φ 2.0±0.1

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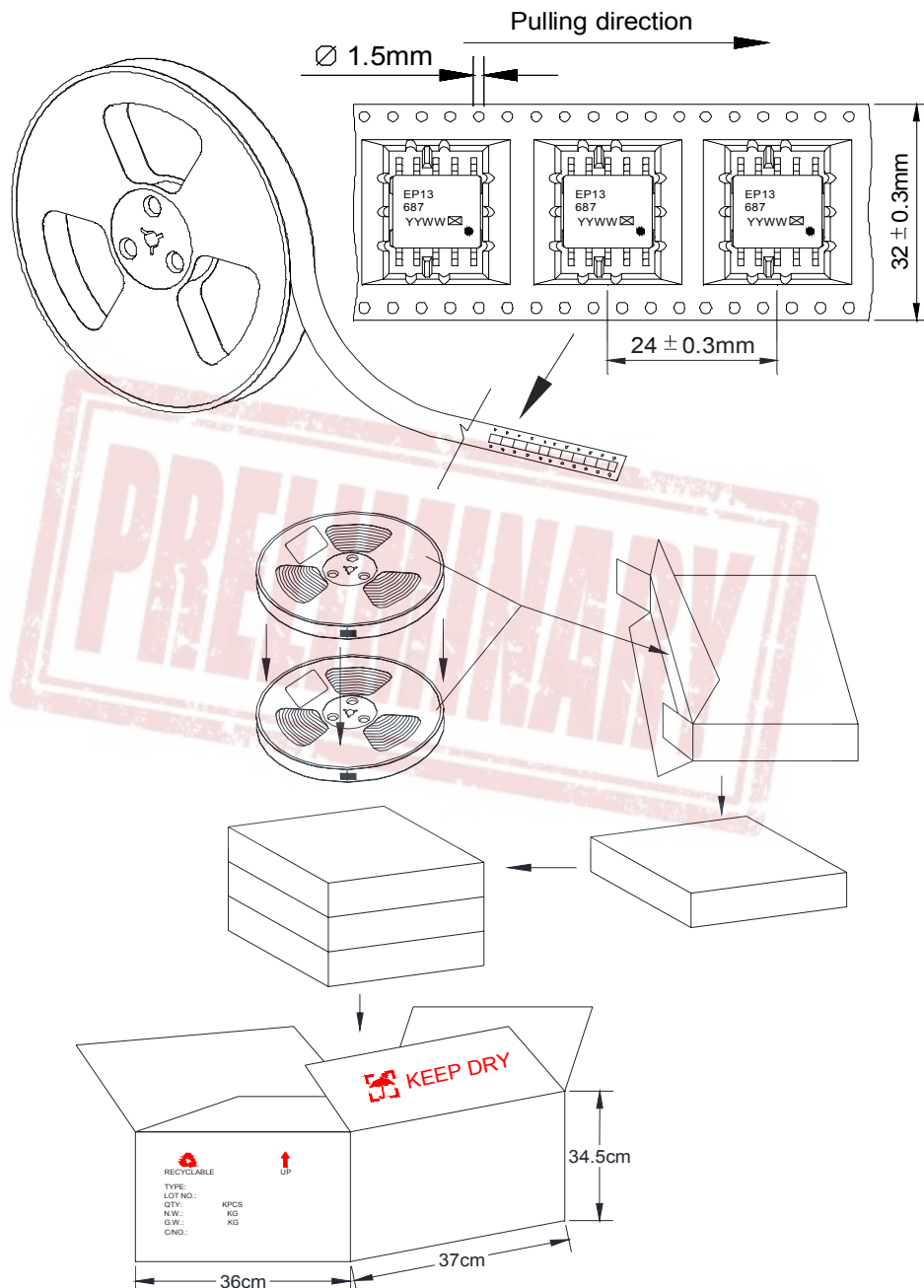
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10.Packing Request

*Every roll of the carrier tape can contain 180pcs products.

*Every small packing box contains two rolls of carrier tape. Total quantity: 360pcs.

*Every carton box contains 3 small packing boxes. Total quantity: 1080pcs.



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Test Report

Test Instruments								
	HP4284A	HP4284A	VR131			HP4284A	CS2670A	
NO	Inductance	LK-Inductance	DCR			Turns Ratio	Hi-Pot	
	at 200KHz,0.1Vrms	at 200KHz,0.1Vrms	at 25°C	at 25°C	at 25°C	at 200KHz,0.1Vrms	1mA. 1SEC.	1mA. 1SEC.
	L(3-4)	LK(3-4) Tie 1,2,7,8,9,10	R(3-4)	R(2-1)	R(7,8-9,10)	(3-4):(7,8-9,10):(2-1)	Pri. to Sec.	Win. to CORE
	127uH±10%	7.5uH MAX.	460mΩ MAX.	94mΩ MAX.	55mΩ MAX.	24:7:5;±3%	1500VAC	500VAC
1								
2								
3								
4								
5								
MIN.	0.00	0.000	0.00	0.00	0.00			
MAX.	0.00	0.000	0.00	0.00	0.00			
AVG.	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!			
Result	Passed	Passed	Passed	Passed	Passed	Passed	Passed	Passed
Overall Dimensions Test						Measurement Tools: Caliper (Unit:mm)		
NO	A	B	C	D	E	F		
	13.46 MAX.	17.75MAX.	12.70MAX.	0.7±0.1	2.5±0.3	13.97MAX.		
1								
2								
3								
4								
5								
MIN.	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		
AVG.	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
Result	Passed	Passed	Passed	Passed	Passed	Passed		

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