

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. : _____ **EP13-733** _____

VERSION: _____ **A** _____

DATE: _____ **2021/3/25** _____

Attachments:

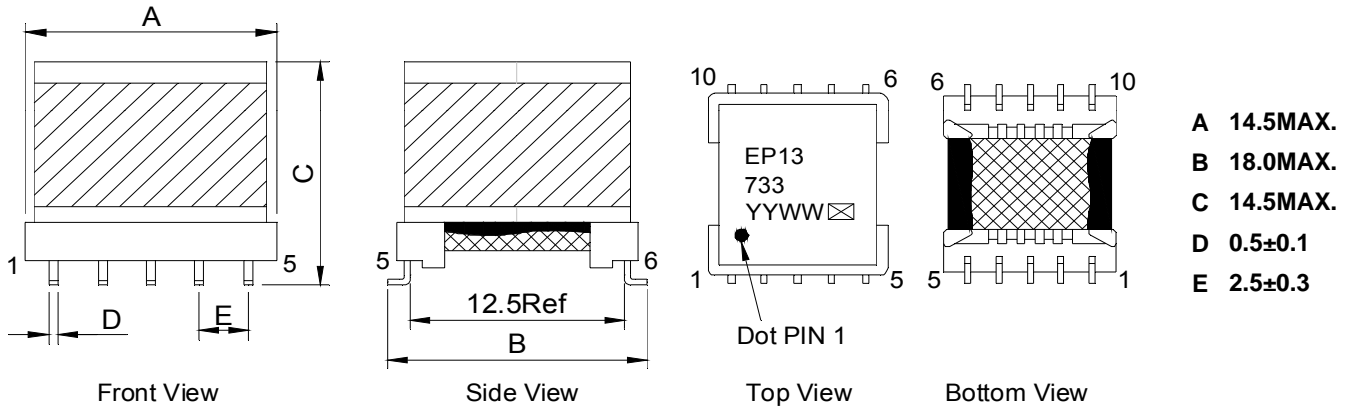
- Product Specification
- Sample Qty. :
- Test Data

Prepared By	Checked By	Approved By
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Product Specification

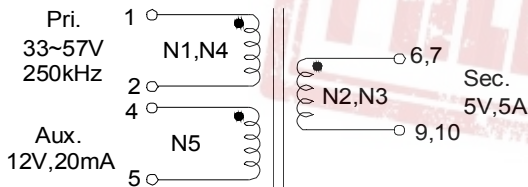
1. Physical Dimensions (Unit:mm)



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

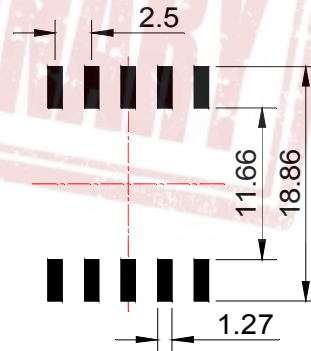


" • "Start of winding

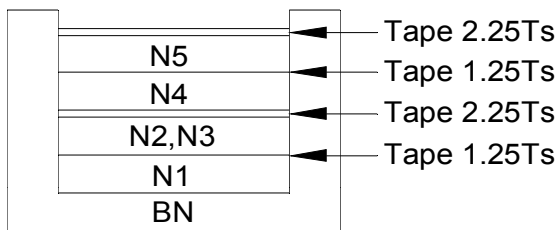
*Customer to tie terminals 6&7 and 9&10 on PC board.

*Application of the transformer allows for the leadwires between terminals 6&7 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	1--2	20 TS	∅0.25 mm* 1P P180
N2,N3	6,7--9,10	5 TS	∅0.28 mm* 10P P180
N4	1--2	20 TS	∅0.25 mm* 1P P180
N5	4--5	11 TS	∅0.20 mm* 2P P180

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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(1-2)	100uH±10%	at 100kHz,0.1V
LK-Inductance	LK(1-2) Tie 4-5,6-7-9-10	0.55uH MAX.	at 100kHz,0.1V
DCR	R(1-2)	114mΩ MAX.	at 25°C
	R(4-5)	163mΩ MAX.	
	R(6,7-9,10)	6mΩ MAX.	
Turns Ratio	(1-2):(4-5):(6,7-9,10)	20:11:5;±3%	at 20kHz,1V
Hi-Pot	Pri. To Sec.	1500VAC	1mA.2SEC.
	Win. To Core	500VAC	1mA.2SEC.

7. Bill of Material

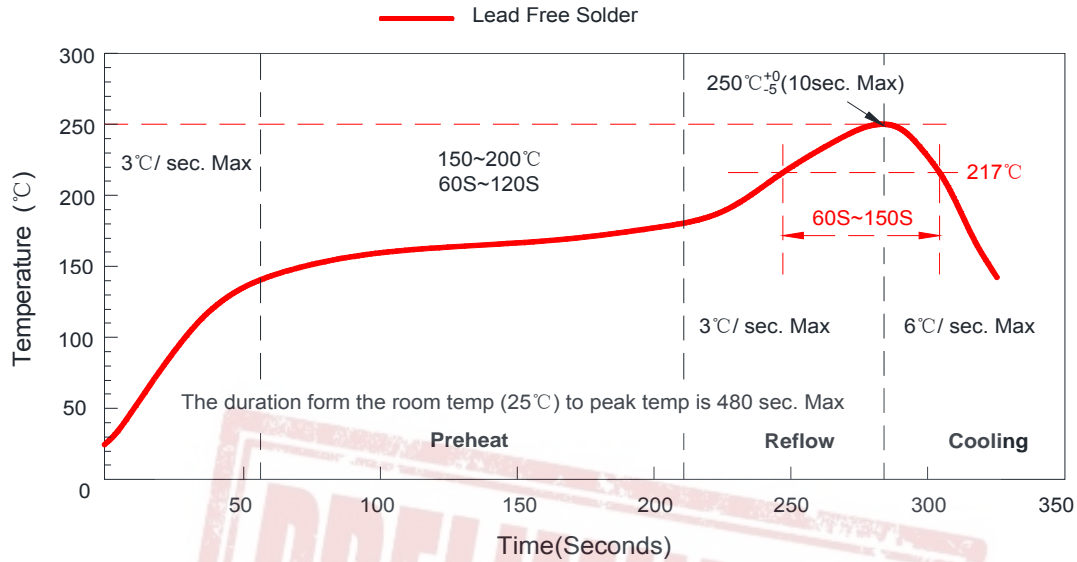
No	Item	Material Name	Manufacturer	UL File No	SGS File No
1	Core	MnZn ferrite core JCP-95	FCRI or Equivalent	NIL	A2200234874101001R1
2	Bobbin	PM-9630	SUMITOMO or Equivalent	E41429	SHAEC2002442505
3	Copper Wire	Polyurethane bare wire (Cu) Polysol 180	ELEKTRISOLA or Equivalent	E258243	CE/2020/34972
OR	Copper Wire	Polyurethane wire UEWH/U	PACIFIC or Equivalent	E201757	A220035992510301E
4	Polyimide Tape	Polyimide Adhesive Tape PF-301	YAHUA or Equivalent	E165111	CANEC2008940301
5	EPOXY	EB-360	CHANGFENG or Equivalent	NIL	SHAEC2022446003
6	Varnish	8562*	HANG CHEUNG or Equivalent	E200154	CANEC2000055005
7	Solder	Lead free solder	HONGTAIZHOU or Equivalent	NIL	SZXEC2001415205

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8.Recommended Temperature Conditions of Air Reflow Soldering

Test Solderability Temperature Profile



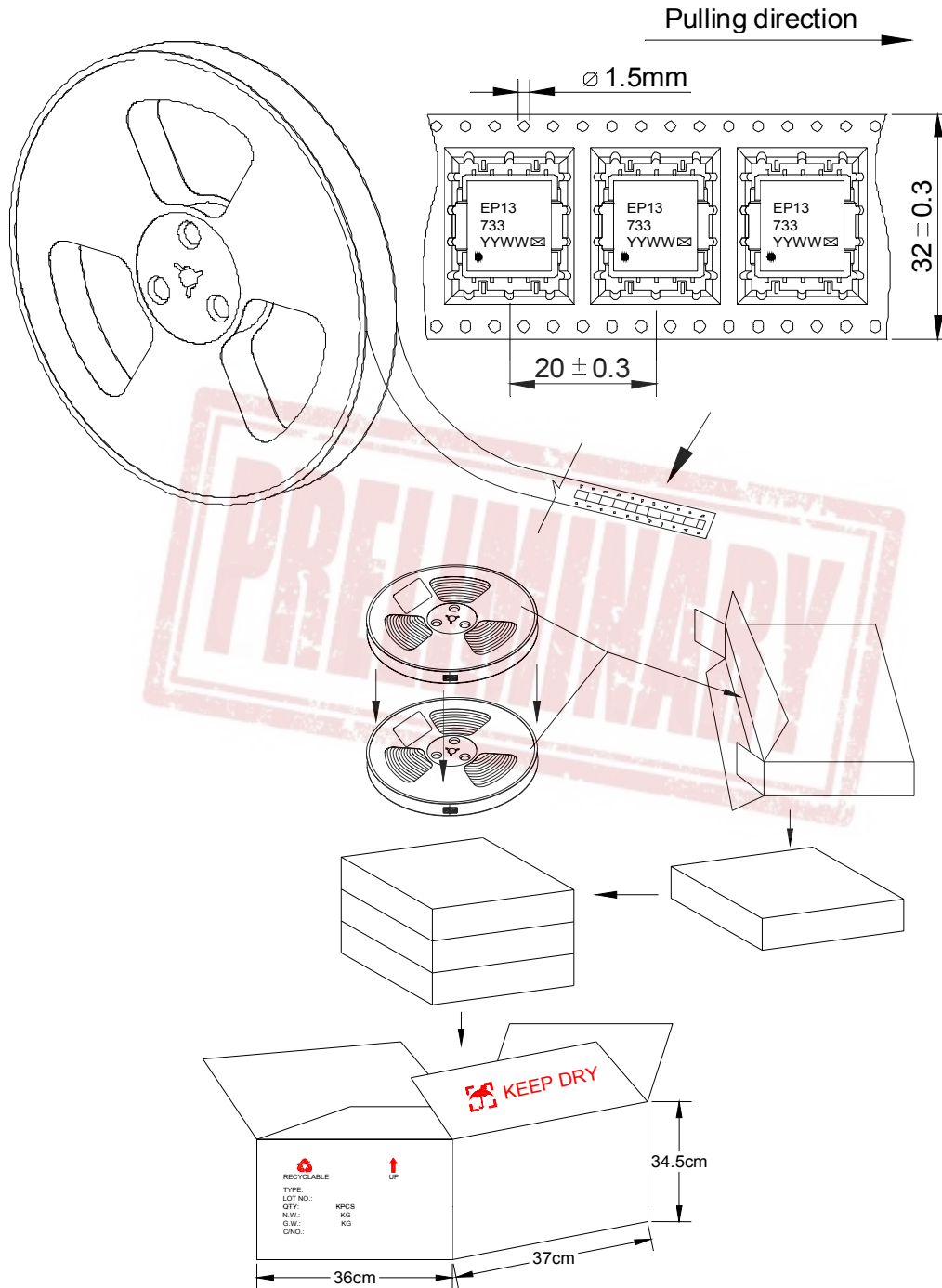
Profile Feature	
Average Ramp-Up Rate (T _{max} to T _p)	3°C/Second Max.
Preheat	
-Temperature Min. (T _{min})	150°C
-Temperature Max. (T _{max})	200°C
-Time (T _{min} to T _{max})	60-120 Seconds
Time maintained above:	
-Temperature (T _L)	217°C
-Time (T _L)	60-150 Seconds
Peak/Classification Temperature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

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9.Packing Request

- *Every roll of the carrier tape can contain 200 pcs products.
- *Every small packing box contains two rolls of carrier tape. Total quantity: 400 pcs.
- *Every carton box contains 3 small packing boxes. Total quantity: 1200 pcs.



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Test Report

Test Instruments								
HP4284A		VR131			HP4284A	CS2670A		
Inductance	LK-Inductance	DCR			Turns Ratio	Hi-Pot		
at 100kHz,0.1V	LK(1-2) Tie 4-5,6-7-9-10	at 25°C			at 20kHz,1V	1mA.2SEC.		
L(1-2)	LK(1-2) Tie 4-5,6-7-9-10	R(1-2)	R(4-5)	R(6,7-9,10)	(1-2):(4-5):(6,7-9,10)	Pri. To Sec.	Win. To Core	
100uH±10%	0.55uH MAX.	114mΩ MAX.	163mΩ MAX.	6mΩ MAX.	20:11:5;±3%	1500VAC	500VAC	
1	102.00	0.43	90.00	102.00	4.00	Passed	Passed	Passed
2								
3								
4								
5								
MIN.	102.00	0.43	90.00	102.00	4.00			
MAX.	102.00	0.43	90.00	102.00	4.00			
AVG.	102.00	0.43	90.00	102.00	4.00			
Result	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.	14.5MAX.	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			

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