

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. : _____
EP13-629

VERSION: _____
B

DATE: _____
2020/5/7

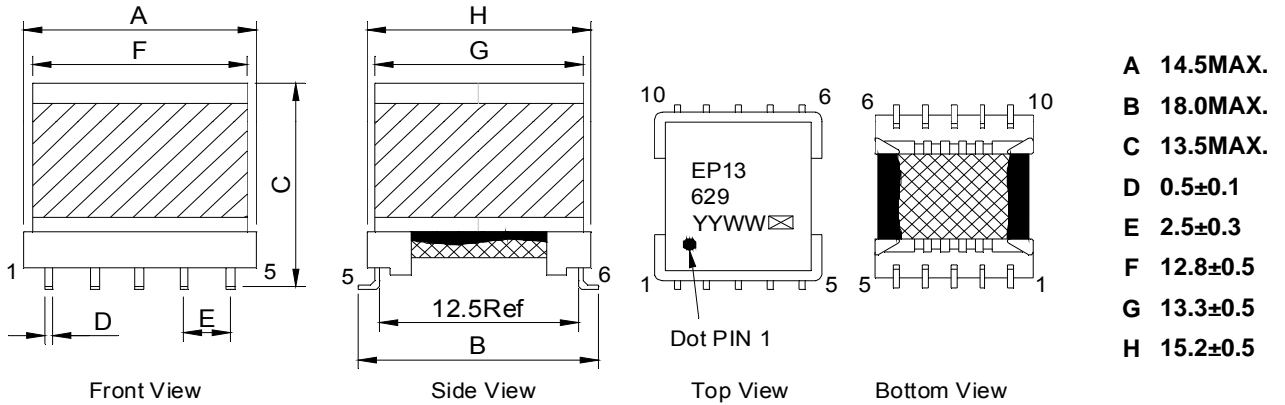
- Attachments:**
- Product Specification
 - Sample Qty. :
 - Test Data

Prepared By	Checked By	Approved By
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Product Specification

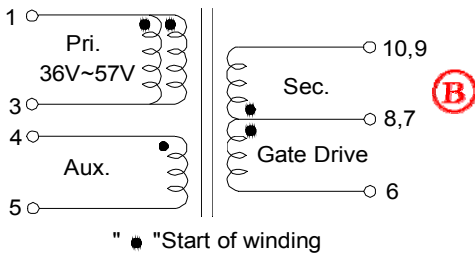
1. Physical Dimensions (Unit:mm)



Notes:

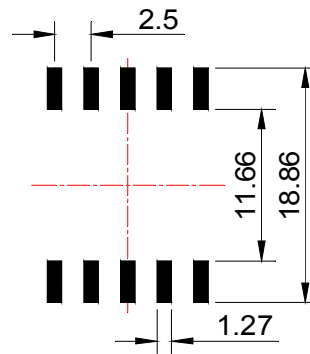
- (1). Marking type is laser printing
- (2). YY: Year Code; WW: Week Code
- (3). ☒ :When making samples, S is used to represent the product is a sample.
- (4). ☒ :Use different letters or numbers to represent the products are produced from different production lines .
- (5). Size B not including soldering tags
- (6). Coplanarity Requirement: Less than 0.15mm

2. Connection

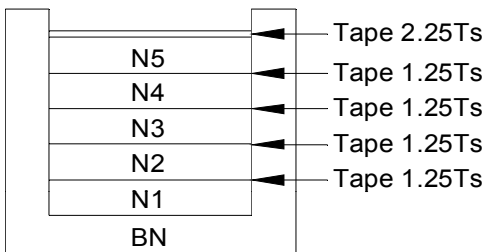


" • "Start of winding
 *Customer to tie terminals 7&8 and 9&10 on PC board.
 *Application of the transformer allows for the leadwires between terminals 7&8 and 9&10 to solder bridge.

3. Recommended Pad Layout (Unit:mm)



4. Structure of Products



5. No of Turns & Wire Spec

No	No of Pin	Turns	Wire Spec
N1	1--3	30 TS	∅0.20mm*1P P180
N2	8,7-10,9 B	6 TS	∅0.24mm*6P P180
N3	1--3	30 TS	∅0.20mm*1P P180
N4	4--5	6 TS	∅0.20mm*2P P180
N5	7--6	6 TS	∅0.20mm*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(1-3)	150uH±10%	at 200kHz,0.1Vrms
LK-Inductance	LK(1-3) Tie4,5,6,7,8,9,10	1.0uH MAX.	at 200kHz,0.1Vrms
DCR	R(1-3)	200mΩ MAX.	at 25°C
	R(8,7-10,9)	15mΩ MAX.	
	R(4-5)	120mΩ MAX.	
	R(7-6)	120mΩ MAX.	
Turns Ratio	(1-3):(8,7-10,9):(4-5):(7-6)	30:6:6:6;±2%	at 30kHz,0.5Vrms
Hi-Pot	PRI. To SEC.	1500VAC	5mA.3 SEC.
	WIN. To CORE	500VAC	5mA.3 SEC.

7. Bill of Material

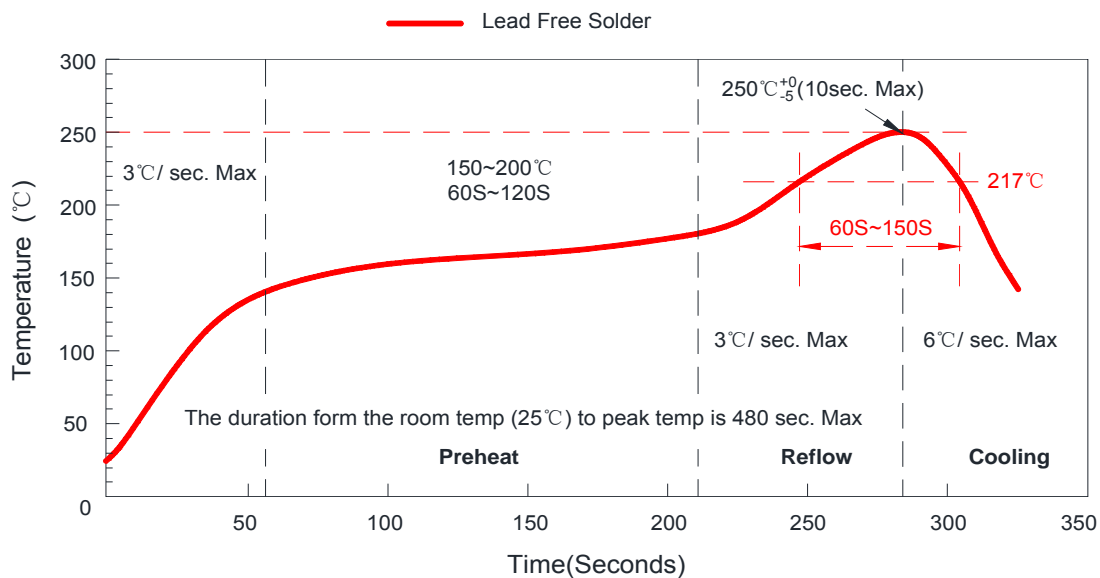
No	Item	Material Name	Manufacturer	UL File No	SGS File No
1	Core	MnZn ferrite core JCP-95	FCRI or Equivalent	NIL	CANEC1913430901
2	Bobbin	PM-9630	SUMITOMO (SumiDurez) or Equivalent	E41429	SHAEC2002442505
3	Copper Wire	Polyurethane bare wire (Cu) Polysol 180	ELEKTRISOLA or Equivalent	E258243	CE/2020/34972
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	EPOXY	TH320	TIAN HUAN or Equivalent	E257593	SZXEC1902353001
7	Varnish	8562*	HANG CHEUNG or Equivalent	E200154	CANEC1900008105
8	Solder	Lead free solder	HONGTAIZHOU or Equivalent	NIL	CANEC1911577101

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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.

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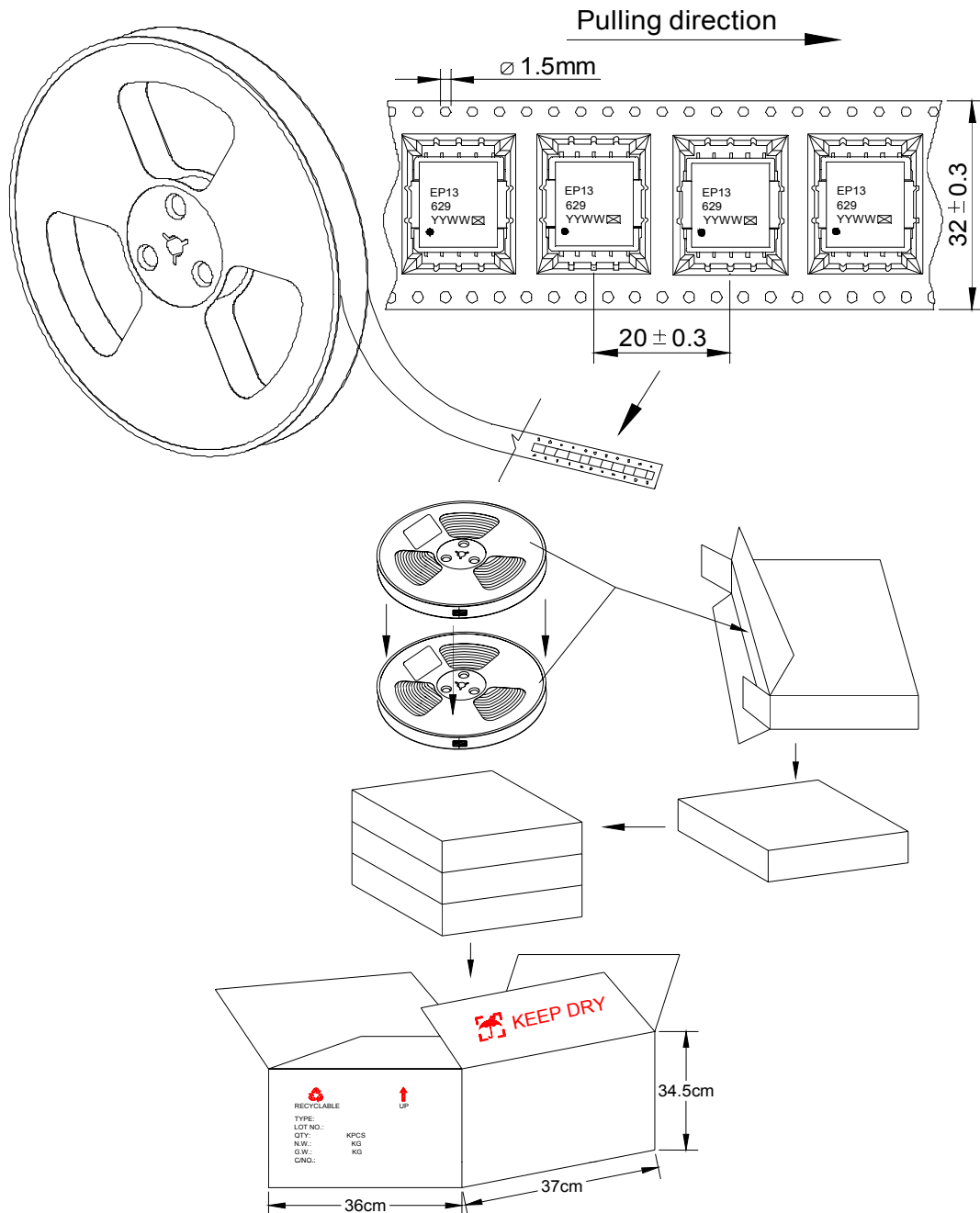
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9.Packing Request

*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 cartoon 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 200kHz,0.1Vrms	LK(1-3) Tie4,5,6,7,8,9,10	at 25°C				at 30kHz,0.5Vrms	5mA.3 SEC.		
L(1-3)	LK(1-3) Tie4,5,6,7,8,9,10	R(1-3)	R(8,7-10,9)	R(4-5)	R(7-6)	(1-3):(8,7-10,9):(4-5):(7-6)	PRI. To SEC.	WIN. To CORE	
150uH±10%	1.0uH MAX.	200mΩ MAX.	15mΩ MAX.	120mΩ MAX.	120mΩ MAX.	30:6:6:6;±2%	1500VAC	500VAC	
1									
2									
3									
4									
5									
MIN.	0.00	0.0000	0.00	0.00	0.00	0.00			
MAX.	0.00	0.0000	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	Passed	Passed	Passed
Overall Dimensions Test					Measurement Tools: Caliper (Unit:mm)				
NO	A	B	C	D	E	F	G	H	
	14.5MAX.	18.0MAX.	13.5MAX.	0.5±0.1	2.5±0.3	12.8±0.5	13.3±0.5	15.2±0.5	
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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