

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:

EP10A Power Transformer

Semitel'S MODEL NO. :

EP10A-1064

VERSION:

A3-2 (Preliminary)

DATE:

2025/12/23

Attachments:

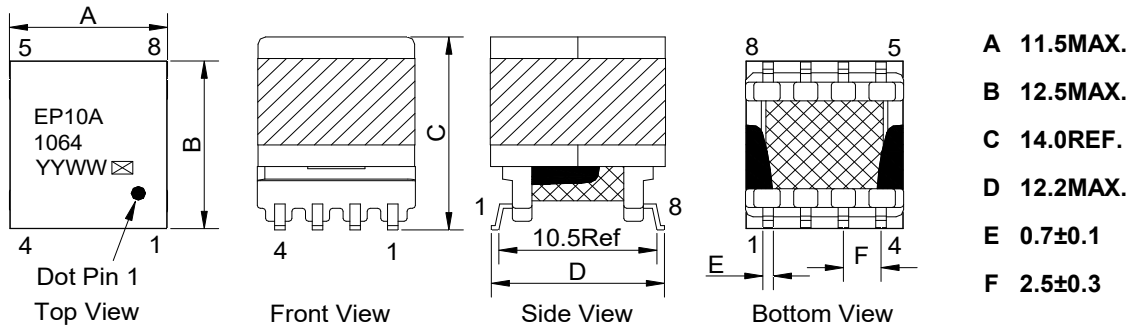
- Product Specification
- Sample Qty. :
- Test Data

Prepared By	Checked By	Approved By
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Semitel International Ltd.,	TEL: 886-2-86922121 FAX: 886-2-26483379
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Product Specification

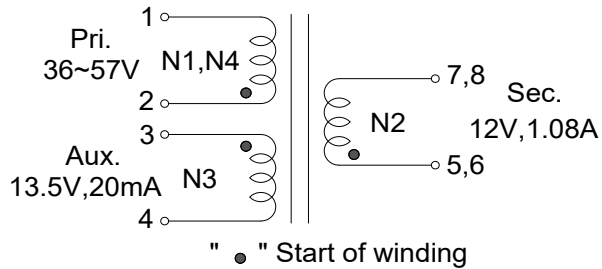
1. Physical Dimensions (Unit:mm)



Notes:

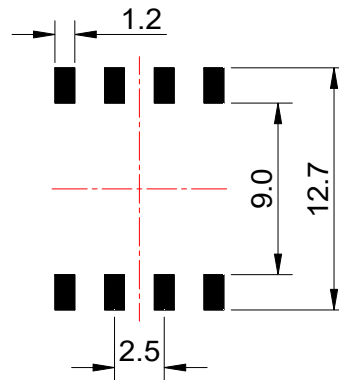
- (1). Marking type is laser printing
- (2). YY: Year Code; WW: Week Code
- (3). ☒ :When making samples, S is used to represent the product is a sample
- (4). ☒ :Use different letters or numbers to represent the products are produced from different production lines
- (5). Size D does not include solder tips
- (6). Coplanarity requirement: Less than 0.15mm
- (7). Add epoxy to the center column of the cores

2. Connection



- *Customer to tie terminals 5&6 and 7&8 on PC board.
- *Application of the transformer allows for the leadwires between terminals 5&6 and 7&8 to solder bridge.

3. Recommended Pad Layout (Unit:mm)



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6. Electrical Characteristics

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

*Storage temperature component: -40°C to +125°C

Tape and reel packaging: -40°C to +80°C

Items	Winding	Specifications	Test Conditions
Inductance	L(2-1)	150uH±7%	at 100kHz,0.1V
LK-Inductance	LK(2-1) Tie others	1.3uH MAX. A3-2	at 100kHz,0.1V
DCR	R(2-1)	387mΩ MAX.	at 25°C
	R(5,6-7,8)	57mΩ MAX. A3-2	
	R(3-4)	385mΩ MAX.	
Turns Ratio	(2-1):(5,6-7,8):(3-4)	34:13:15;±3% A3-2	at 100kHz,0.1V
Hi-Pot	Pri. To Sec.	1500VAC	5mA.3S
	Win. To Core	500VAC	5mA.3S

7. Bill of Material

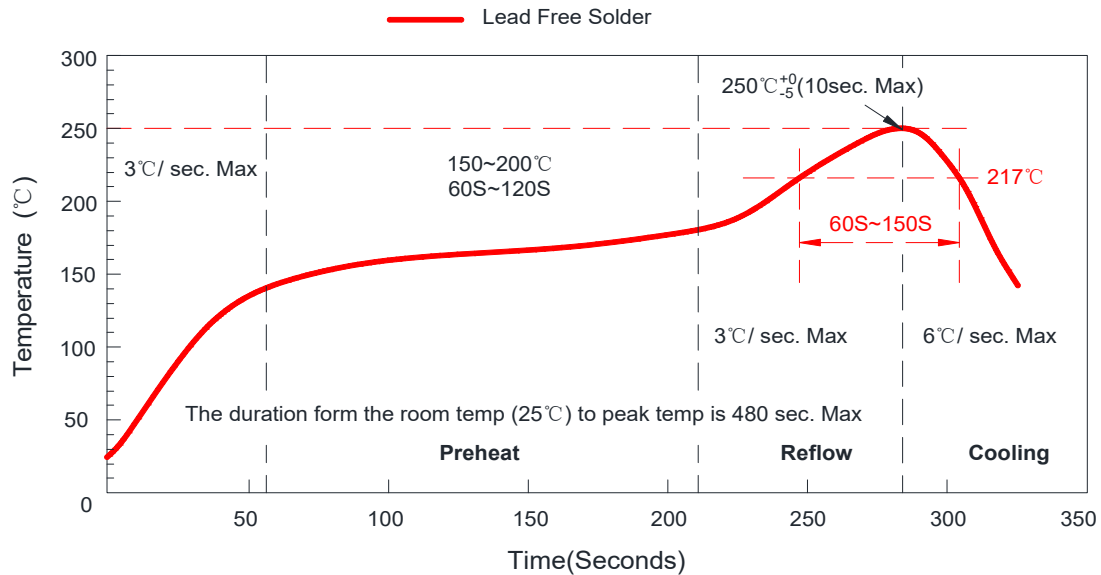
No	Items	Material Name	Manufacturer	UL File No	SGS File No
1	Core	Soft ferrite cores HM95	HAN MAGNETIC or Equivalent	NIL	CANEC24017343901
2	Bobbin	PM-9630	SUMITOMO or Equivalent	E41429	SHAEC23020708503
3	Copper Wire	Polyurethane bare wire (Cu) Polysol 180	ELEKTRISOLA or Equivalent	E258243	ETR24301048
OR	Copper Wire	Polyurethane wire UEWH/U	PACIFIC or Equivalent	E201757	A2230419474101001E
4	Polyimide Tape	Polyimide Adhesive Tape PF*(d)(g)	YAHUA or Equivalent	E165111	CANEC24022685505
5	Epoxy	H907-HF	HUA CHUANG or Equivalent	E304477	A2240456108101003
6	Solder	Lead free solder	BAIMU or Equivalent	NIL	CANEC24011150903

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8.Recommended Temperature Conditions of Air Reflow Soldering

Test Solderability Temperature Profile



Profile Feature	Pb-Free Assembly
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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Test Report

Test Instruments								
	HP4284A	HP4284A	VR131			HP4284A	CS2670A	
	Inductance	LK-Inductance	DCR			Turns Ratio	Hi-Pot	
	at 100kHz,0.1V	at 100kHz,0.1V	at 25°C			at 100kHz,0.1V	5mA.3S	
No	L(2-1)	LK(2-1) Tie others	R(2-1)	R(5,6-7,8)	R(3-4)	(2-1):(5,6-7,8):(3-4)	Pri. To Sec.	Win. To Core
	150uH±7%	1.3uH MAX.	387mΩ MAX.	57mΩ MAX.	385mΩ MAX.	34:13:15;±3%	1500VAC	500VAC
1	151.98	0.97	329.70	47.82	329.10	Passed	Passed	Passed
2	153.79	0.95	326.30	47.80	323.10	Passed	Passed	Passed
3								
4								
5								
MIN.	151.98	0.95	326.30	47.80	323.10			
MAX.	153.79	0.97	329.70	47.82	329.10			
AVG.	152.89	0.96	328.00	47.81	326.10			
Result	Passed	Passed	Passed	Passed	Passed	Passed	Passed	Passed
Overall Dimensions Test						Measurement Tools: Caliper (Unit:mm)		
No	A	B	C	D	E	F		
	11.5MAX.	12.5MAX.	14.0REF.	12.2MAX.	0.7±0.1	2.5±0.3		
1	10.74	11.71	14.29	10.82	0.70	2.53		
2	10.73	11.71	14.20	10.79	0.70	2.53		
3								
4								
5								
MIN.	10.73	11.71	14.20	10.79	0.70	2.53		
MAX.	10.74	11.71	14.29	10.82	0.70	2.53		
AVG.	10.74	11.71	14.25	10.81	0.70	2.53		
Result	Passed	Passed	Passed	Passed	Passed	Passed		

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