

## SPECIFICATION FOR APPROVAL

<p><b>CUSTOMER'S APPROVAL CHOP</b></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:** \_\_\_\_\_  
**EP10**

**Semitel'S MODEL NO. :** \_\_\_\_\_  
**EP10-638**

**VERSION:** \_\_\_\_\_  
**A**

**DATE:** \_\_\_\_\_  
**2020/5/15**

**Attachments:**

- Product Specification
- Sample Qty. :
- Test Data

Prepared By	Checked By	Approved By
Hebe Deng 2020/5/15	Liang Wang 2020/5/15	Alan Wong 2020/5/15

Semitel International Ltd.,	TEL: 886-2-86922121      FAX: 886-2-26483379
www.semitelint.com	12F, No.183, Sec.1, Datong Rd., Xizhi Dist., New Taipei City 22145, Taiwan

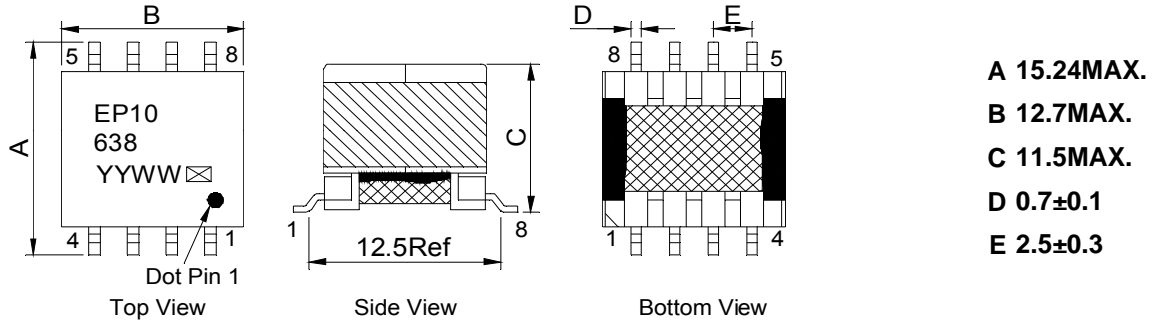
## Revision Record

Version	Revision Date	Revision For Items	Revision For Items
A	2020/5/15	New Revision	-

Semitel'S MODEL NO. :	EP10-638	CUSTOMER'S MODEL NO. :	
VERSION:	A	CUSTOMER'S PART NO. :	
DATE:	2020/5/15		

# Product Specification

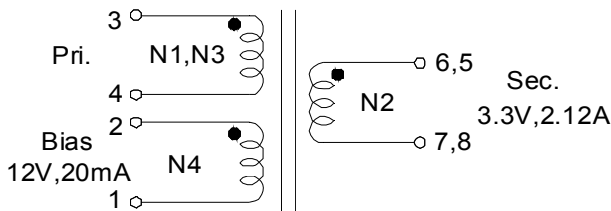
## 1.Physical Dimensions (Unit:mm)



### 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 A not including soldering tags
- (6).Coplanarity Requirement: Less than 0.10mm

## 2.Connection

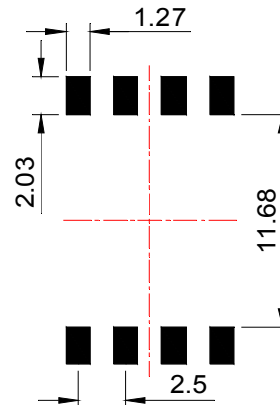


" "Start of winding

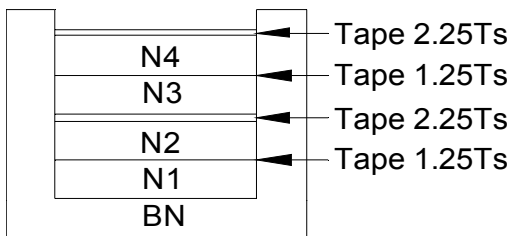
\*Customer to tie terminals 5&6 and 7&8 on PC board.

\*Application of the transformer allows for the leadwires between terminals 5&6 and 7&8 to solder bridge.

## 3.Recommended Pad Layout (Unit:mm)



## 4.Structure of Products



## 5. No of Turns & Wire Spec

No	No of Pin	Turns	Wire Spec
N1	3--4	42 TS	ø0.16mm*1P P180
N2	6,5--7,8	8 TS	ø0.22mm*4P P180
N3	3--4	42 TS	ø0.16mm*1P P180
N4	2--1	28 TS	ø0.16mm*1P P180

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## Product Specification

### 6. Electrical Characteristics

\*RoHS Compliance Product

\*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)	155uH±10%	at 250KHz,0.1Vrms
Inductance	L(3-4)	139.5uH MIN.	at 250KHz,0.1Vrms @ 0.65A
LK-Inductance	LK(3-4) Tie other	4.0uH MAX.	at 250KHz,0.1Vrms
DCR	R(3-4)	414mΩ MAX.	at 25°C
	R(6,5-7,8)	36mΩ MAX.	
	R(2-1)	822mΩ MAX.	
Turns Ratio	(3-4):(2-1):(6,5-7,8)	42:28:8;±3%	at 20KHz,1Vrms
Hi-Pot	Pri. TO Sec.	1500VDC	1mA.2SEC.
	Win. TO Core	500VDC	1mA.2SEC.

### 7. Bill of Material

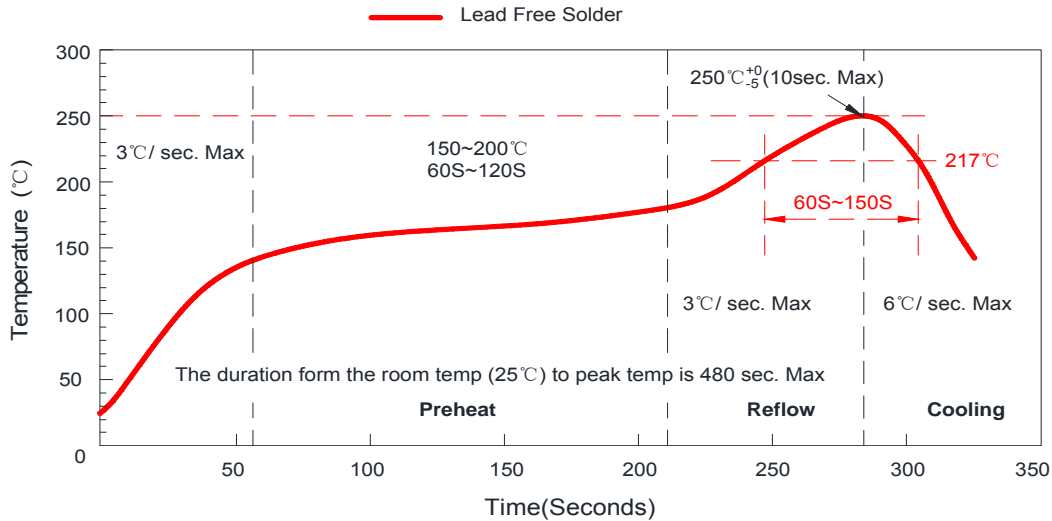
No	Item	Material Name	Manufacturer	UL File No	SGS File No
1	Core	MnZn ferrite core JCP-95	FCRI or Equivalent	NIL	CANEC1913430901
2	Bobbin	PM-9630	SUMITOMO (SumiDurez) or Equivalent	E41429	10454584(2)
3	Copper Wire	Polyurethane bare wire (Cu) Polysol 180	ELEKTRISOLA or Equivalent	E258243	CE/2019/37143
4	Polyimide Tape	Brown adhesive plastic HN NC 0.025mm V-0	RUNSEA (RAYITEK) or Equivalent	E339977	SZXEC1900617511
5	EPOXY	EB-360	CHANGFENG or Equivalent	NIL	SHAEC1826217301
6	EPOXY	TH320	TIANHUAN or Equivalent	E257593	CANEC1821553805
7	Varnish	8562*	HANG CHEUNG or Equivalent	E200154	CANEC1900008105
8	Solder	Lead free solder	HONGTAIZHOU or Equivalent	NIL	CANEC1911577101

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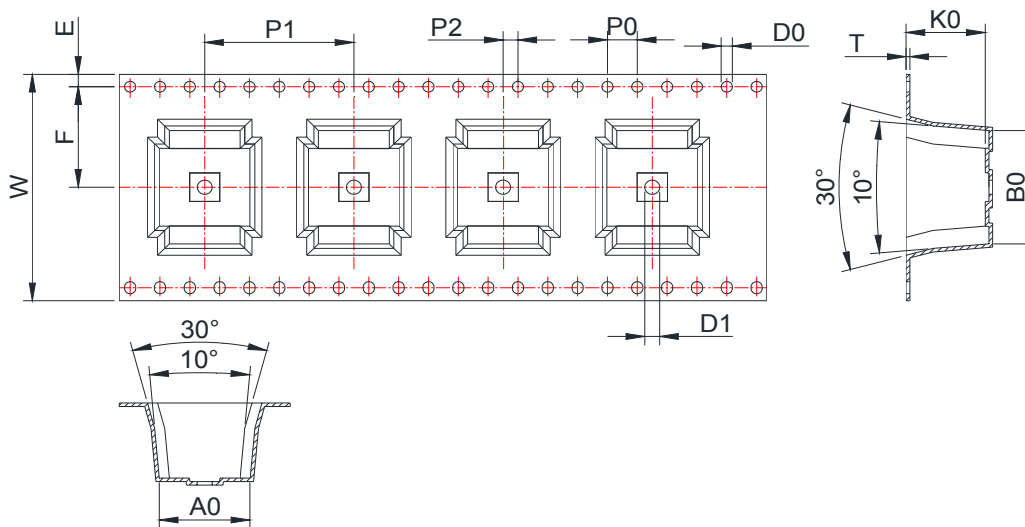
# Product Specification

## 8.Recommended Temperature Conditions of Air Reflow Soldering

Test Solderability Temperature Profile



## 9.Tape Dimensions (Unit:mm)



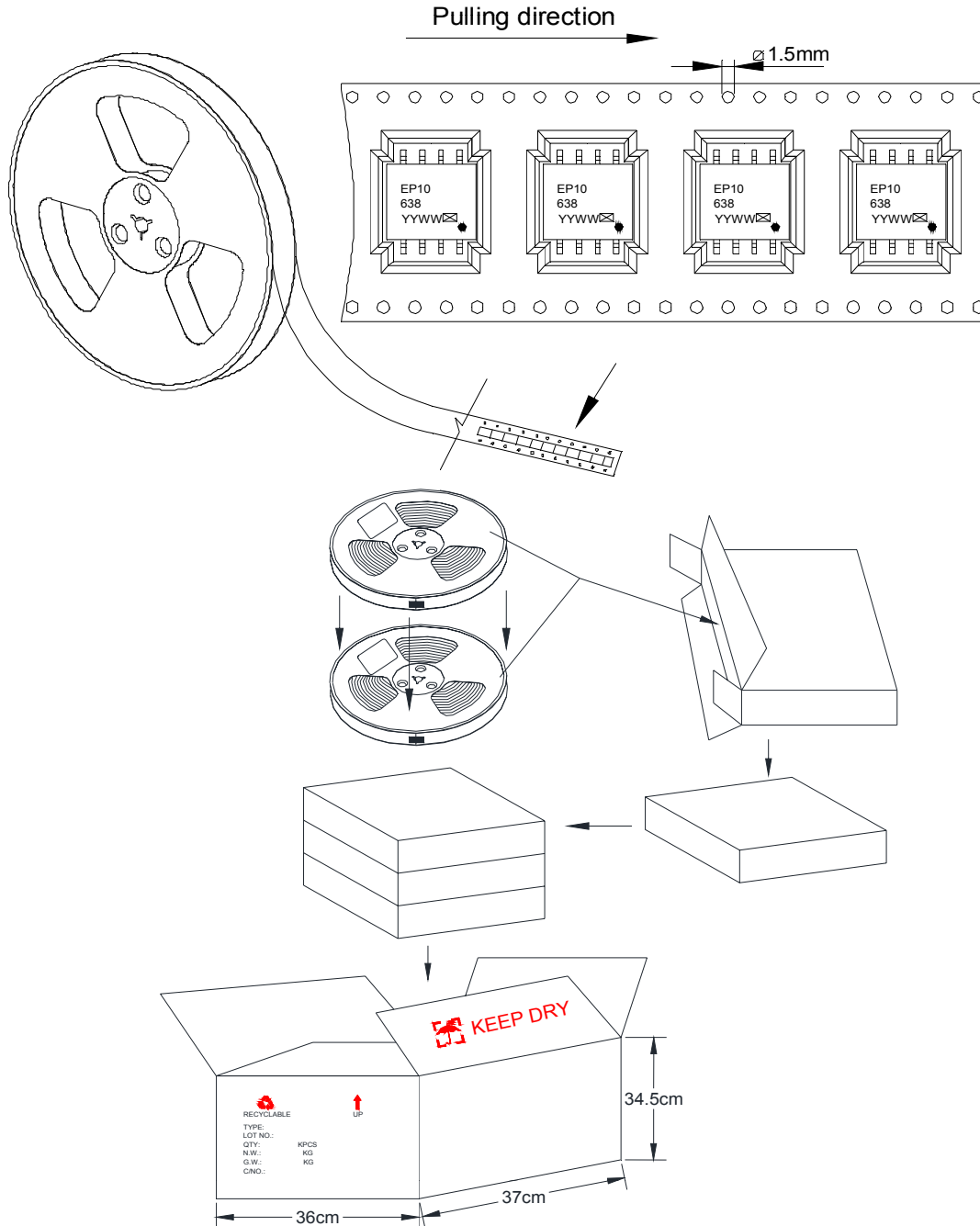
symbol	A0	B0	K0	P0	P1	P2
spec	12.0±0.1	16.5±0.1	10.6±0.1	4.0±0.1	20.0±0.1	2.0±0.1
symbol	W	T	E	F	D0	D1
spec	32.0±0.3	0.5±0.05	1.75±0.1	14.2±0.1	∅1.5 <sup>+0.1</sup> / <sub>0</sub>	∅2.0 <sup>+0.1</sup> / <sub>0</sub>

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# Product Specification

## 10.Packing Request

- \*Every roll of the carrier tape can contain 270pcs products.
- \*Every small packing box contains two rolls of carrier tape. Total quantity: 540pcs.
- \*Every carton box contains 3 small packing boxes. Total quantity: 1620pcs.



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<b>DATE:</b>	<b>2020/5/15</b>		

## Test Report

NO	Test Instruments								
	HP4284A	HP4284A	HP4284A	VR131			HP4284A	CS2670A	
	Inductance	Inductance	LK-Inductance	DCR			Turns Ratio	Hi-Pot	
	L(3-4)	L(3-4)	LK(3-4) Tie other	R(3-4)	R(6,5-7,8)	R(2-1)	(3-4):(2-1):(6,5-7,8)	Pri. TO Sec.	Win. TO Core
	at 250KHz,0.1Vrms	at 250KHz,0.1Vrms @ 0.65A	at 250KHz,0.1Vrms	at 25°C	at 25°C	at 25°C	at 20KHz,1Vrms	1mA.2SEC.	1mA.2SEC.
	155uH±10%	139.5uH MIN.	4.0uH MAX.	414mΩ MAX.	36mΩ MAX.	822mΩ MAX.	42:28:8;±3%	1500VDC	1500VDC
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!			
<b>Result</b>	<b>Passed</b>	<b>Passed</b>	<b>Passed</b>	<b>Passed</b>	<b>Passed</b>	<b>Passed</b>	<b>Passed</b>	<b>Passed</b>	<b>Passed</b>

### Overall Dimensions Test

Measurement Tools: Caliper (Unit:mm)

NO	A	B	C	D	E				
	15.24MAX.	12.7MAX.	11.5MAX.	0.7±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!				
<b>Result</b>	<b>Passed</b>	<b>Passed</b>	<b>Passed</b>	<b>Passed</b>	<b>Passed</b>				

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