

SPECIFICATION FOR APPROVAL

CUSTOMER'S APPROVAL CHOP

Approval's condition: _____

Approved date: _____

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. : _____

EP13-188

VERSION: _____

A

DATE: _____

2015/9/21

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

Prepared By	Checked By	Approved By
Hebe Deng 2015/9/21	Liang Wong 2015/9/21	Alan Wong 2015/9/21

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

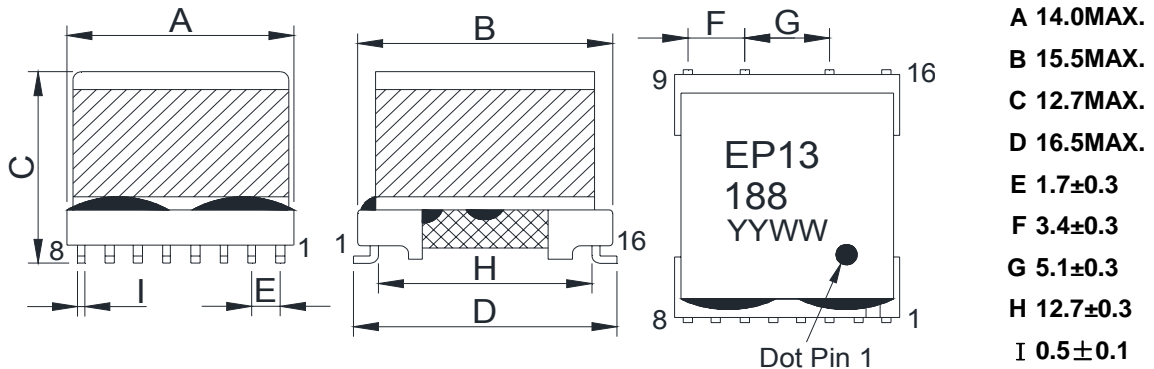
Version	Revision Date	Revision For Items	Reason For Revision
A	2015/9/21	New Revision	/

Semitel'S MODEL NO. :	EP13-188	CUSTOMER'S MODEL NO.:	
VERSION :	A	CUSTOMER'S PART NO. :	
DATE :	2015/9/21		

Semitel International Ltd.,

Product Specification

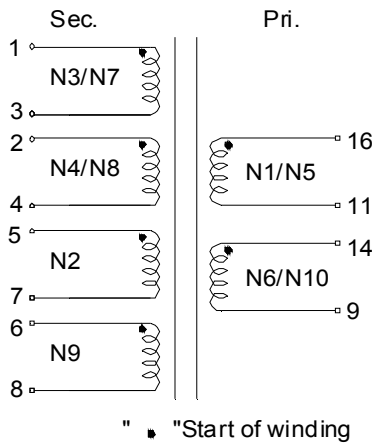
1. Physical Dimensions (Unit:mm)



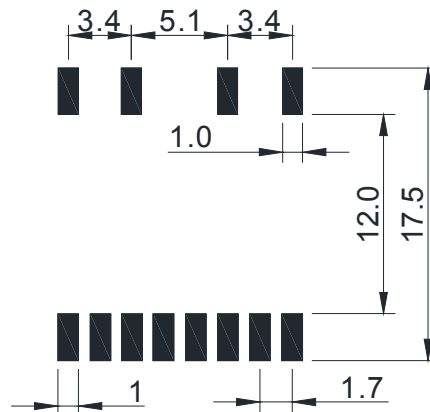
Notes:

- *Marking type is laser printing
- *Size D Not including soldering tags
- *YY: Year Code; WW: Week Code
- *Dot indicates the location of pin#1.
- *Coplanarity Requirement: Less than 0.15mm
- *ITDSC Model:SF13AE

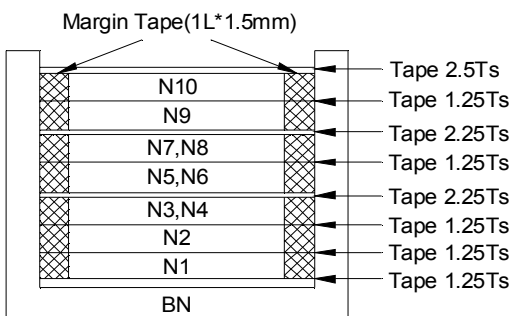
2. Connection



3. Recommended Pad Layout (Unit:mm)



4. Structure of Products



Semitel'S MODEL NO. :	EP13-188	CUSTOMER'S MODEL NO. :	
VERSION:	A	CUSTOMER'S PART NO. :	
DATE:	2015/9/21		

Product Specification

5. Electrical Characteristics

*Electrical specifications @ 25°C unless otherwise noted:

*Operating temperature range: -40°C to +85°C .

*Storage temperature range: -40°C to +85°C .

Items	Winding	Specifications	Test conditions
Inductance	L(16-9)	400uH±10%	at 10KHz,0.1Vrms
LK-Inductance	L(16-9)	2.2uH MAX.	at 100KHz,0.1Vrms
	L(16-9)	1.5uH MAX.	
DCR	R(16-9)	3.0Ω MAX.	at 25°C
	R(1-4)	0.3Ω MAX.	
	R(5-8)	4.4Ω MAX.	
THD		-85dB MAX.	at 30KHz,3Vrms
LB		45dB MIN.	at 2.2MHz
Turns Ratio	(16-11):(1-3)=(16-11):(2-4)	1:0.464;±3.57%	at 20kHz,1Vrms
	(16-11):(5-7)=(16-11):(6-8)=(16-11):(14-9)	1:1;±3.57%	
Hi-pot	PRI. To SEC.	1875 VAC	at 1mA,2Sec.

6. Bill of Material

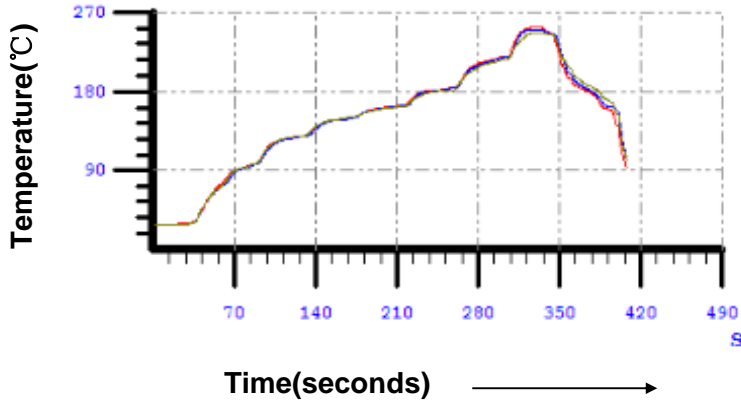
No	Items	Material Name	Manufacturer	UL File No	SGS File No
1	Core	FERRITE CORE A101	ACME or Equivalent	NIL	CE/2015/B2410A
2	Bobbin	PM-9630	SUMITOMO (SumiDurez) or Equivalent	E41429	10363385(2)
3	Copper Wire	Polyurethane bare wire (Cu) Polysol 180	ELEKTRISOLA or Equivalent	E258243	CE/2016/43022
4	Polyimide Tape	Brown adhesive plastic HN NC 0.025mm V-0	RUNSEA (RAYITEK) or Equivalent	E339977	CANEC1607925701
5	Insulation tape	Polyester Mylar Tape (Yellow) CT* (c) (g)	YAHUA or Equivalent	E165111	CANEC1612052101
6	Margin Tape	NON-WOVEN CLOTH MARGIN TAPE WF* (c) (h)	YAHUA or Equivalent	E165111	CANEC1520472201
7	Epoxy	TH320	TIANHUAN or Equivalent	E257593	CANEC1417094801
8	Epoxy	EB-360	CHANGFENG or Equivalent	NIL	SHAEC1423099403
9	Solder	Lead free solder	HONGTAIZHOU or Equivalent	NIL	CANEC1510999213

Semitel'S MODEL NO. :	EP13-188	CUSTOMER'S MODEL NO. :	
VERSION:	A	CUSTOMER'S PART NO. :	
DATE:	2015/9/21		

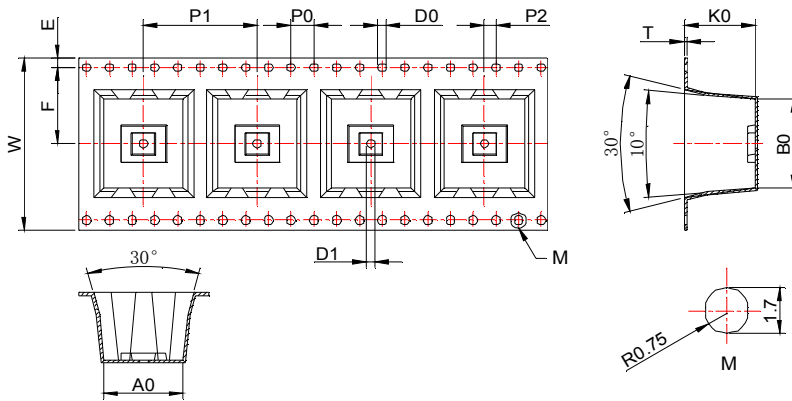
Product Specification

7.Recommended Temperature Conditions of Air Reflow Soldering

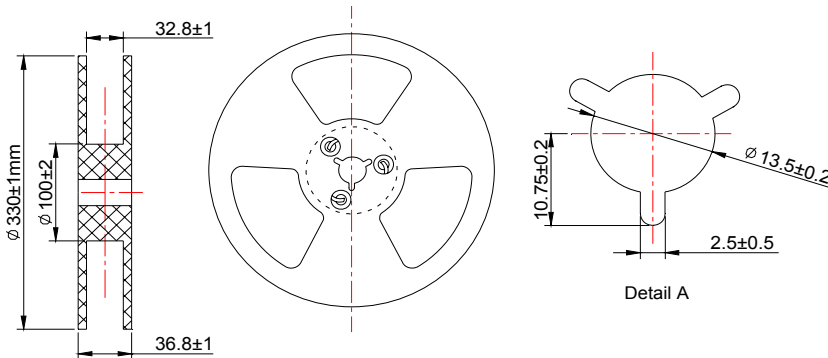
Welder Test Line



8.Tape and Reel Dimensions (Unit: mm)



symbol	A0	B0	K0	P0	P1	P2
Spec	14.0±0.3	16.5±0.3	12.5±0.3	4.0±0.1	20.0±0.15	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 ^{+0.1} ₀	∅ 2.0±0.1

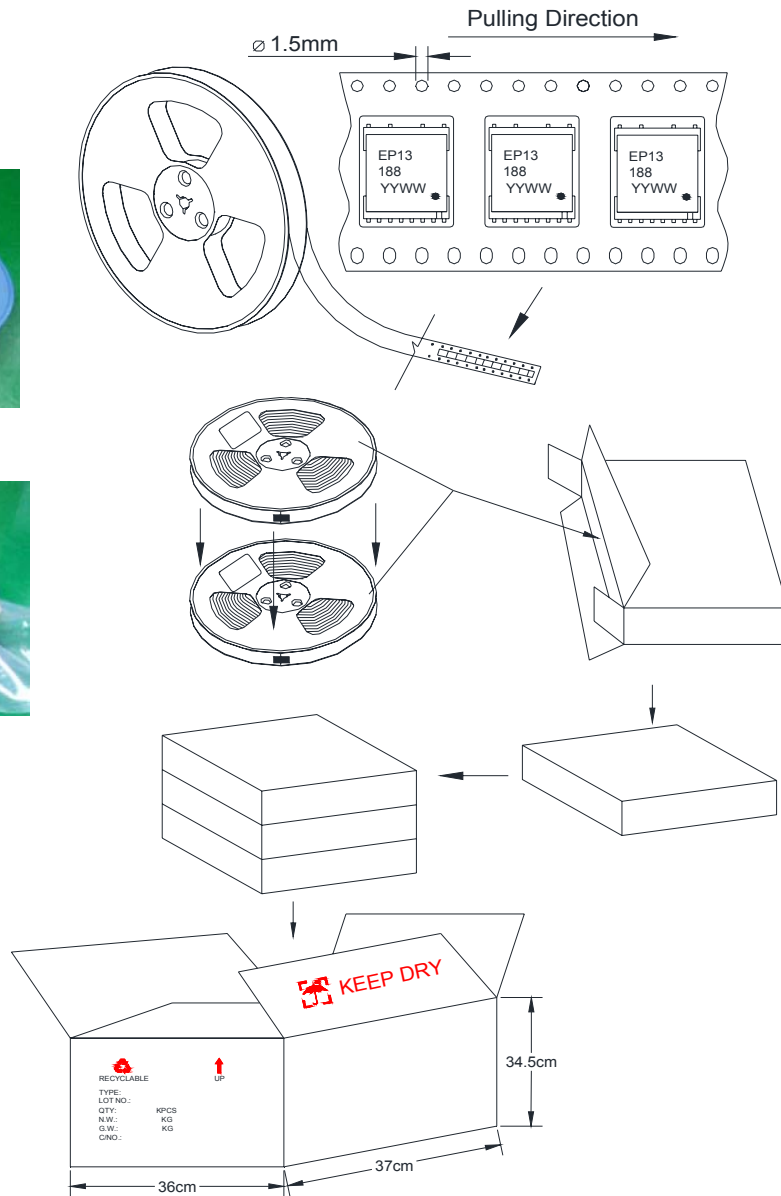


Semitel'S MODEL NO. :	EP13-188	CUSTOMER'S MODEL NO. :	
VERSION:	A	CUSTOMER'S PART NO. :	
DATE:	2015/9/21		

Product Specification

9.Packing Request

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



Semitel'S MODEL NO. :	EP13-188	CUSTOMER'S MODEL NO. :	
VERSION:	A	CUSTOMER'S PART NO. :	
DATE:	2015/9/21		

Test Report



Test Instruments											
	HP4284A	HP4284A	HP4284A	VR131	VR131	VR131	SYS2702 A	HP 87510A	HP4284A	CS2670A	
NO	Inductance	LK-Inductance	LK-Inductance	DCR	DCR	DCR	THD	LB	Turns Ratio	Hi-pot	
	at 10KHz,0.1Vrms	at 100KHz,0.1Vrms	at 100KHz,0.1Vrms	at 25°C	at 25°C	at 25°C	at 30KHz,3Vrms	at 2.2MHz	at 20kHz,1Vrms	at 1mA,2Sec.	
	L(16-9) tie(11-14)	L(16-9) tie(11-14,1-2-3-4)	L(16-9) tie(11-14,5-6-7-8)	R(16-9) tie(11-14)	R(1-4) tie(1-2,3-4)	R(5-8) tie(6-7)			(16-11):(1-3)=(16-11):(2-4)	(16-11):(5-7)=(16-11):(6-8)=(16-11):(14-9)	PRI. To SEC.
	400uH±10%	2.2uH MAX.	1.5uH MAX.	3.0Ω MAX.	0.3Ω MAX.	4.4Ω MAX.	-85dB MAX.	45dB MIN.	1:0.464;±3.57%	1:1;±3.57%	1875 VAC
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	Passed	Passed

Overall Dimensions test Measuring tools:callipers (Unit:mm)

NO	A	B	C	D	E	F	G	H	I			
	14.0MAX.	15.5MAX.	12.7MAX.	16.5MAX.	1.7±0.3	3.4±0.3	5.1±0.3	12.7±0.3	0.5±0.1			
1												
2												
3												
4												
5												

MIN.	0.00	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	0.00		
AVG.	#DIV/0!	#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	Passed		

Semitel'S MODEL NO. :	EP13-188	CUSTOMER'S MODEL NO. :	
VERSION:	A	CUSTOMER'S PART NO. :	
DATE:	2015/9/21		