

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. : **EP13-689**

VERSION: **A**

DATE: **2020/9/22**

Attachments:

- Product Specification
- Sample Qty. :
- Test Data

Prepared By	Checked By	Approved By
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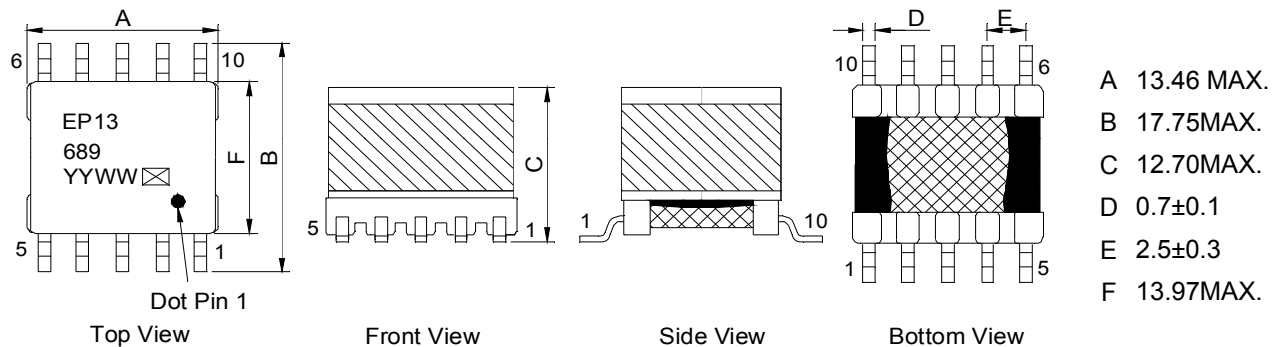
Revision Record

Version	Revision Date	Revision For Items	Reason For Revision
A	2020/9/22	New product for IC LT4276, LT4321 24V 1A	-

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Product Specification

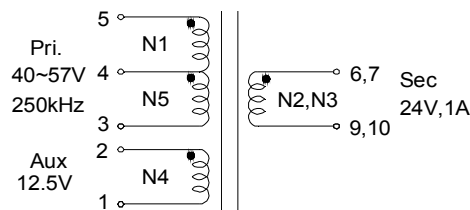
1. Physical Dimensions (Unit:mm)



Notes:

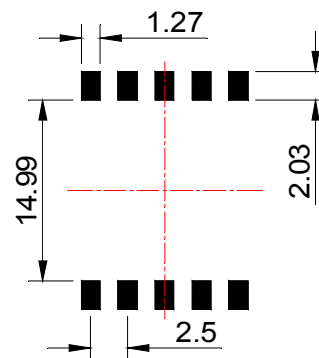
- *Marking type is laser printing, Dot indicates the location of pin#1.
- *YY: Year Code; WW: Week Code
- *: When making samples, S is used to represent the product is a sample.
- *: Use different letters or numbers to represent the products are produced from different production lines .
- *Size B not including soldering tags
- *Coplanarity requirement: Less than 0.10mm

2. Connection

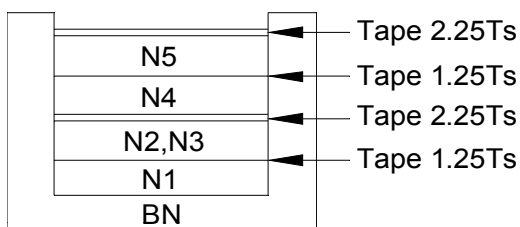


- " • "Start of winding
- *Customer to tie terminals 6&7 and 9&10 on PC board.
- *Application of the transformer allows for the leadwires between terminals 6&7 and 9&10 to solder bridge.

3. Recommended Pad Layout (Unit:mm)



4. Structure of Products



5. No of Turns & Wire Spec

No	No of Pin	Turns	Wire Spec
N1	5--4	9 Ts	ø0.27mm* 2P P180
N2.N3	6,7--9,10	18 Ts	ø0.24mm* 3P P180
N4	2--1	10 Ts	ø0.20mm* 2P P180
N5	4--3	9 Ts	ø0.27mm* 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 .

*Ambient temperature range: -40°C to +125°C .

Items	Winding	Specifications	Test Conditions
Inductance	L(5-3)	37uH±10%	at 250kHz,0.2Vrms
LK-Inductance	LK(5-3) Tie 1,2,6,7,9,10	0.5uH MAX.	at 250kHz,0.2Vrms
DCR	R(5-3)	95mΩ MAX.	at 25°C
	R(6,7-9,10)	90mΩ MAX.	
	R(2-1)	116mΩ MAX.	
Turns Ratio	(5-3):(2-1):(6,7-9,10)	18:10:18;±3%	at 250kHz,0.2Vrms
Hi-Pot	Pri. to Sec.	1500VAC	1mA.2SEC
	Win. to Core.	500VAC	1mA.2SEC

7. Bill of Material

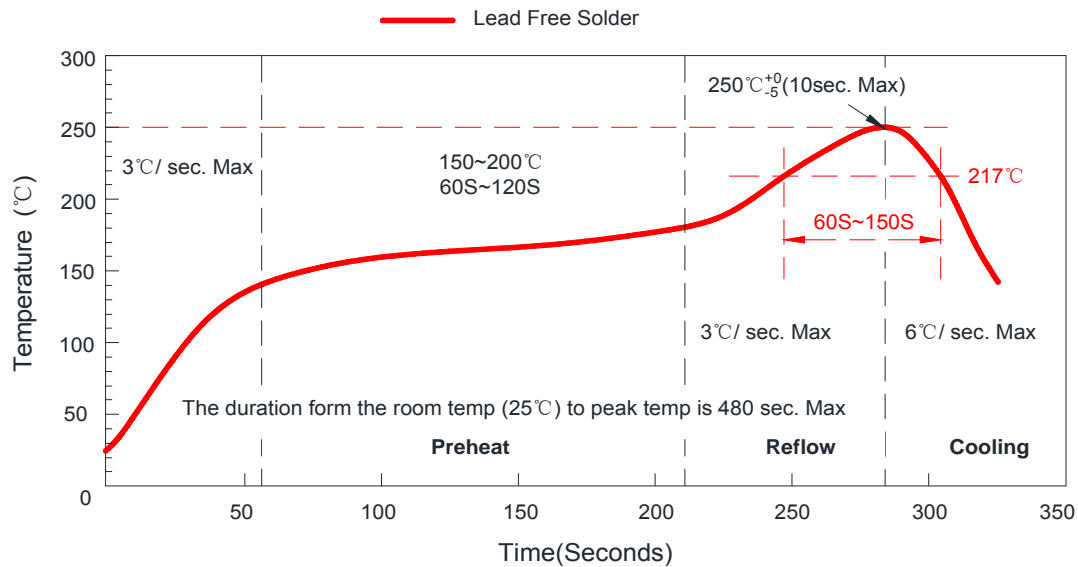
No	Items	Material Name	Manufacturer	UL File No	SGS File No
1	Core	FERRITE CORE JCP-95	FCRI or Equivalent	NIL	A2200234874101001R1
2	Bobbin	PM-9630	SUMITOMO (SumiDurez) or Equivalent	E41429	SHAEC2002442505
3	Copper Wire	Polyurethane bare wire (Cu) Polysol 180	ELEKTRISOLA or Equivalent	E258243	CE/2020/34972
OR	Copper Wire	Polyurethane wire UEWH/U	PACIFIC or Equivalent	E201757	A219029024010101E
4	Polyimide Tape	Brown adhesive plastic HN NC 0.025mm V-0	RUNSEA (RAYITEK) or Equivalent	E339977	SZXEC2000536905
5	EPOXY	TH320	TIAN HUAN or Equivalent	E257593	SZXEC1902353001
6	EPOXY	EB-360	CHANGFENG or Equivalent	NIL	SHAEC1925290501
7	Varnish	8562*	HANG CHEUNG or Equivalent	E200154	CANEC1900008105
8	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



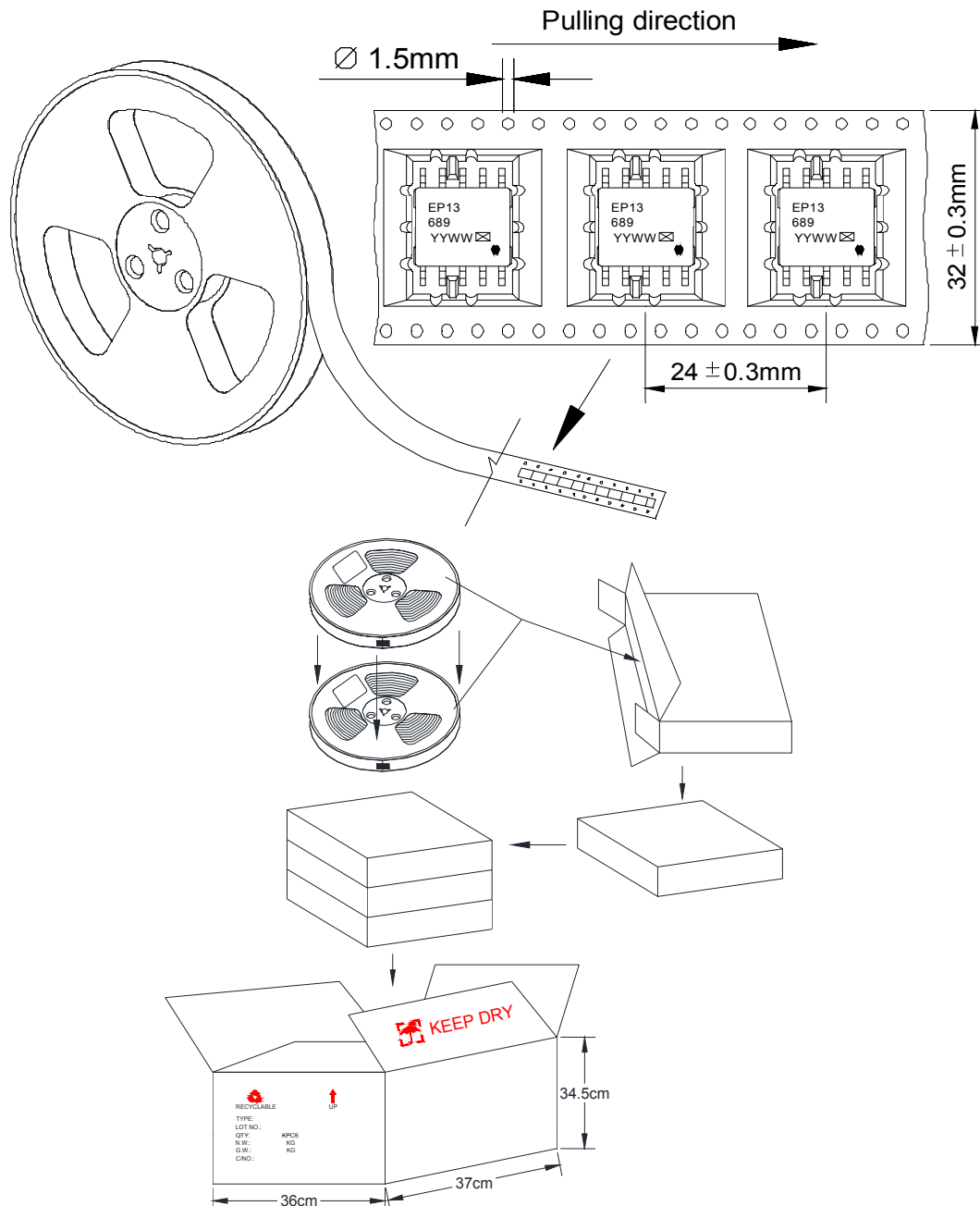
Profile Feature	
Average Ramp-Up Rate (Tsm _{ax} to T _p)	3°C/Second Max.
Preheat	
-Temperature Min. (T _{smin})	150°C
-Temperature Max. (T _{smax})	200°C
-Time (T _{smin} to T _{smax})	60-120 Seconds
Time maintained above:	
-Temperature (T _L)	217°C
-Time (T _L)	60-150 Seconds
Peak/Classification Temperature (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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9.Packing Request

- *Every roll of the carrier tape can contain 180pcs products.
- *Every small packing box contains two rolls of carrier tape. Total quantity: 360pcs.
- *Every carton box contains 3 small packing boxes. Total quantity: 1080pcs.



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Test Report

		Test Instruments							
		HP4284A	HP4284A	VR131			HP4284A	CS2670A	
NO	Inductance	LK-Inductance	DCR			Turns Ratio	Hi-Pot		
	at 250kHz,0.2Vrms	at 250kHz,0.2Vrms	at 25°C			at 250kHz,0.2Vrms	1mA.2SEC	1mA.2SEC	
	L(5-3)	LK(5-3) Tie 1,2,6,7,9,10	R(5-3)	R(6,7-9,10)	R(2-1)	(5-3):(2-1):(6,7-9,10)	Pri. to Sec.	Win. to Core.	
	37uH±10%	0.5uH MAX.	95mΩ MAX.	90mΩ MAX.	116mΩ MAX.	18:10:18;±3%	1500VAC	500VAC	
1	38.40	0.36	70.60	56.80	80.20	Passed	Passed	Passed	
2									
3									
4									
5									
MIN.	38.40	0.36	70.60	56.80	80.20				
MAX.	38.40	0.36	70.60	56.80	80.20				
AVG.	38.40	0.36	70.60	56.80	80.20				
Result	Passed	Passed	Passed	Passed	Passed	Passed	Passed	Passed	
Overall Dimensions Test							Measurement Tools: Caliper (Unit:mm)		
NO	A	B	C	D	E	F			
	13.46 MAX.	17.75MAX.	12.70MAX.	0.7±0.1	2.5±0.3	13.97MAX.			
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!			
Result	Passed	Passed	Passed	Passed	Passed	Passed			

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