

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: _____
EFD25

Semitel'S MODEL NO. : _____
EFD25-337

VERSION: _____
B

DATE: _____
2020/10/13

Attachments:

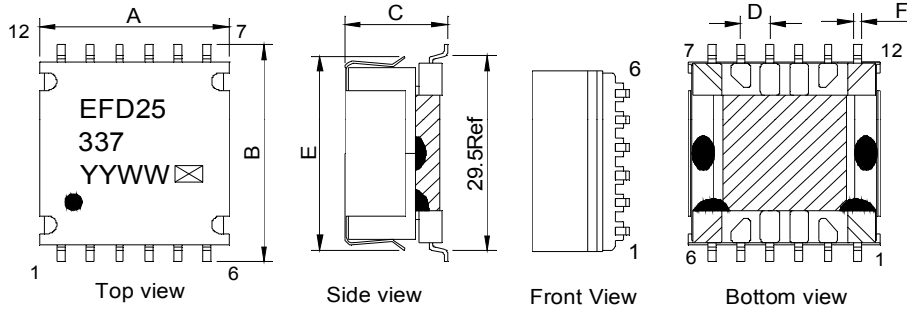
- Product specification
- Sample Qty.:
- Test data

Prepared By	Checked By	Approved By
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Product Specification

1. Physical Dimensions (Unit:mm)

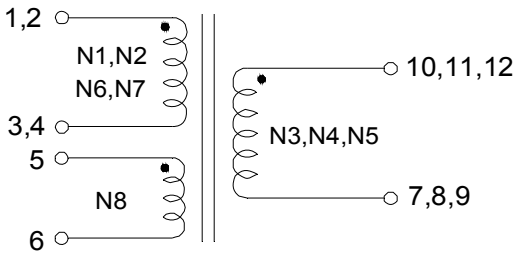


- A 27.5MAX.
- B 33.0MAX.
- C 15.5MAX.
- D 3.75±0.3
- E 29.0REF
- F 1.0±0.1

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

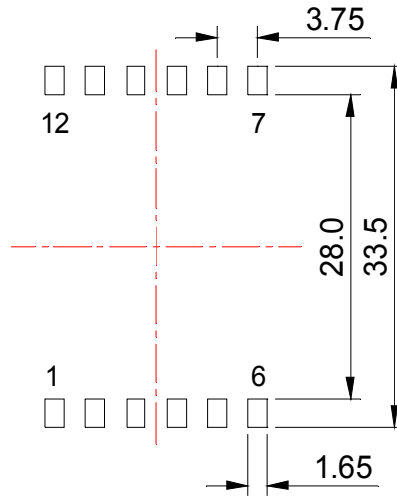
2. Connection



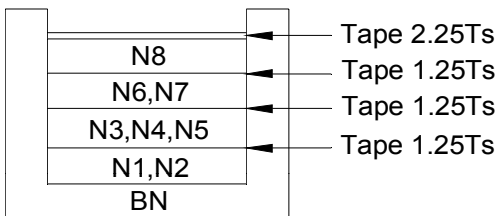
" • "Start of winding

- *Customer to tie terminals 1&2,3&4, 7&8&9 and 10&11&12 on PC board.
- *Application of the transformer allows for the leadwires between terminals 1&2,3&4, 7&8&9 and 10&11&12 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,N2	1,2 -- 3,4	16 Ts	ø0.23mm*4P P180
N3,N4,N5	10,11,12 -- 7,8,9	4 Ts	ø0.40mm*9P P180
N6,N7	1,2 -- 3,4	16 Ts	ø0.23mm*4P P180
N8	5 -- 6	9 Ts	ø0.23mm*2P P180

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6. Electrical Characteristics

*Operating temperature:-40°C to +125°C including temp rise.

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

Items	Winding	Specifications	Test Conditions
Inductance	L(1,2-3,4)	100uH±15%	at 300kHz,0.1Vrms
LK-Inductance	LK(1,2-3,4) Tie other	1.95uH MAX.	at 300kHz,0.1Vrms
DCR	R(1,2-3,4)	60mΩ MAX (B)	at 25°C
	R(10,11,12-7,8,9)	5mΩ MAX (B)	
	R(5-6)	270mΩ MAX	
Turns Ratio	(1,2-3,4):(10,11,12-7,8,9):(5-6)	16:4:9;±3%	at 100kHz,0.1Vrms
Hi-Pot	PRI.TO SEC.	1500VAC	1mA.3Sec
	WIN. TO CORE	500VAC	
	PIN1,2 TO PIN5	500VAC	

7.Bill of Material

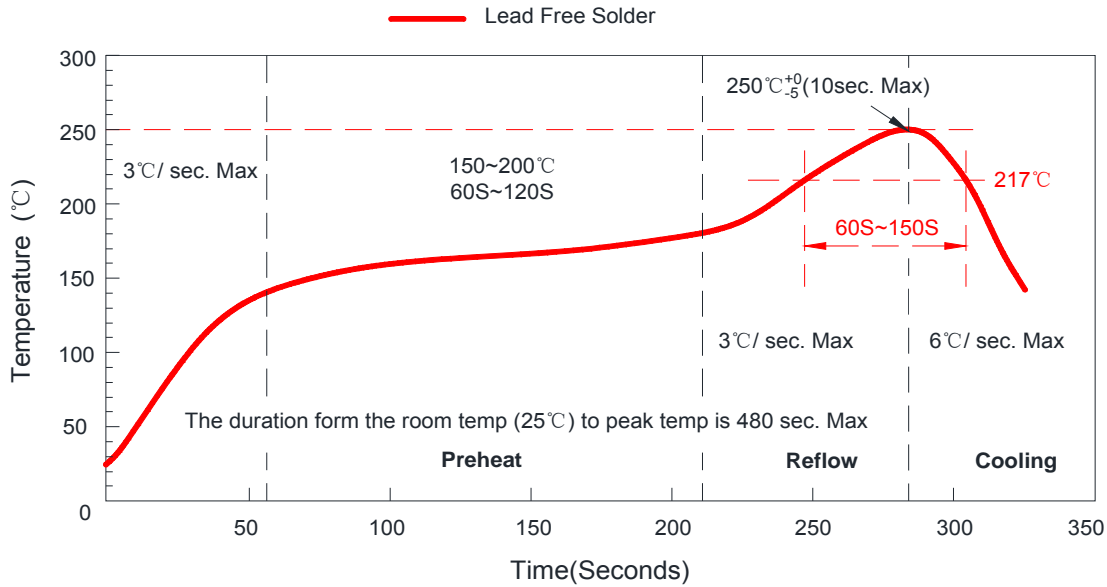
No	Item	Material Name	Manufacturer	UL File No	SGS File No
1	Core	FERRITE CORE JCP-95	FCRI or Equivalent	NIL	CANEC1813462601
2	Bobbin	PM-9630	SUMITOMO (SumiDurez) or Equivalent	E41429	SHAEC1804919410
3	CLIP	SUS301	TONG FENG or Equivalent	NIL	SZXEC1801105401
4	Copper Wire	Polyurethane bare wire (Cu) Polysol 180	ELEKTRISOLA or Equivalent	E258243	CE/2018/40393
OR	Copper Wire	Polyurethane wire UEWH/U	PACIFIC or Equivalent	E201757	A2180198365101E
5	Polyimide Tape	Brown adhesive plastic HN NC 0.025mm V-0	RUNSEA (RAYITEK)or Equivalent	E339977	CANML1808714601
6	EPOXY	TH320	TIAN HUAN or Equivalent	E257593	CANEC1821553805
7	EPOXY	EB-360	CHANGFENG or Equivalent	NIL	SHAEC1826217301
8	Varnish	ZS-NJ-D938 XX	ZHAOSHUN or Equivalent	E329120	CANEC1804050604
9	Solder	Lead free solder	HONGTAIZHOU or Equivalent	NIL	CANEC1812220901

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8.Recommended Temperature Conditions of Air Reflow Soldering

Test Solderability Temperature Profile



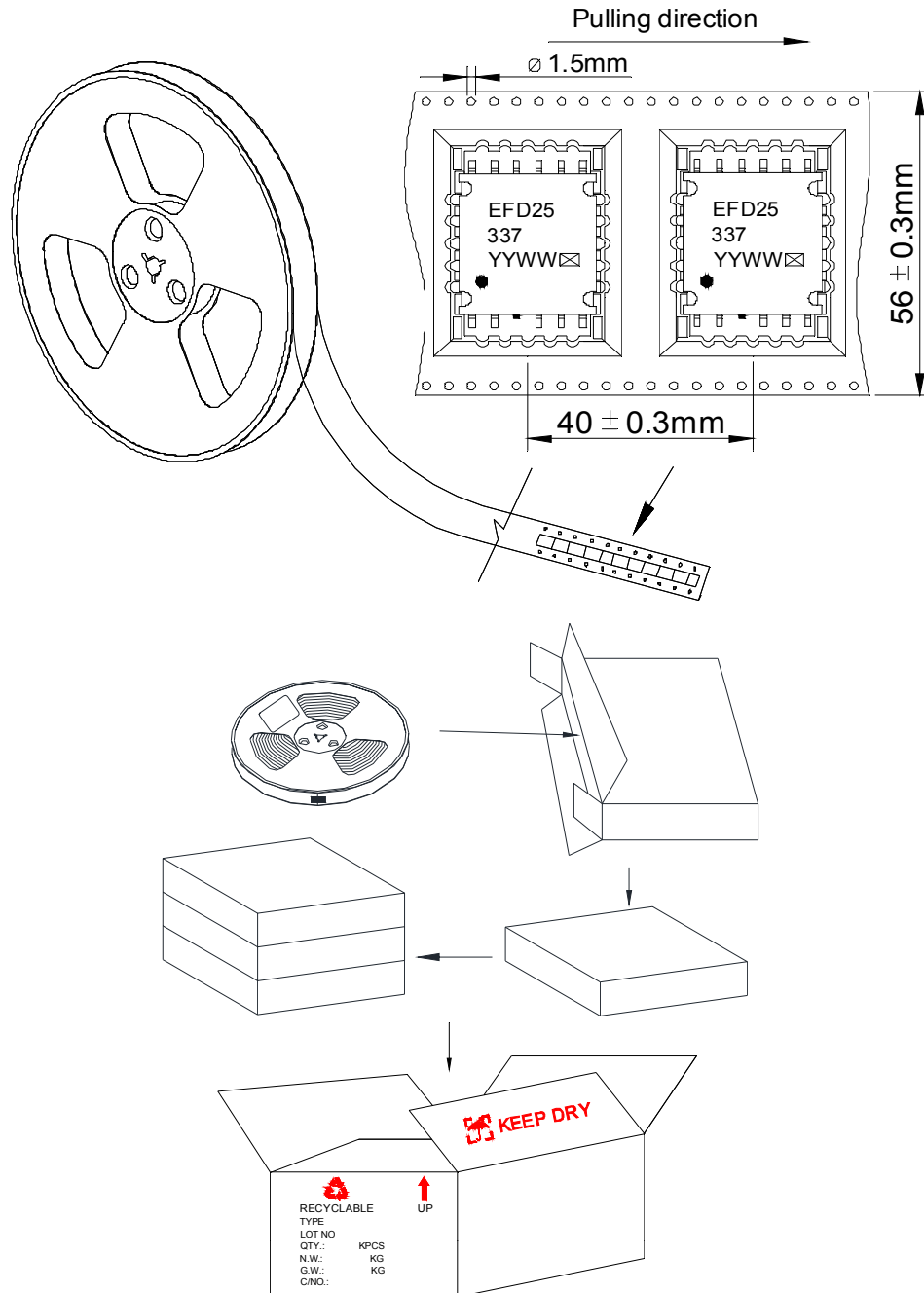
Profile Feature	
Average Ramp-Up Rate (T _{max} to T _p)	3°C/Second Max.
Preheat	
-Temperature Min. (T _{min})	150°C
-Temperature Max. (T _{max})	200°C
-Time (T _{min} to T _{max})	60-120 Seconds
Time maintained above:	
-Temperature (T _L)	217°C
-Time (T _L)	60-150 Seconds
Peak/Classification Temperature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

- (1), Every roll of the carrier tape can contain 95pcs products.
- (2), Every small packing box contains one rolls of carrier tape. Total quantity: 95pcs.
- (3), Every carton box contains 3 small packing boxes. Total quantity: 285pcs.



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Test Report

Test Instruments									
HP4284A		DCR METER 131			HP4284A		CS2670A		
NO	Inductance	LK-Inductance	DCR			Turns Ratio	Hi-Pot		
	at 300kHz,0.1Vrms	at 300kHz,0.1Vrms	at 25°C			at 100kHz,0.1Vrms	1mA.3Sec		
	L(1,2-3,4)	LK(1,2-3,4) Tie other	R(1,2-3,4)	R(10,11,12- 7,8,9)	R(5-6)	(1,2- 3,4):(10,11,12- 7,8,9):(5-6)	PRI.TO SEC.	WIN. TO CORE	PIN1,2 TO PIN5
	100uH±15%	1.95uH MAX.	60mΩ MAX	5mΩ MAX	270mΩ MAX	16:4:9;±3%	1500VAC	500VAC	500VAC
1	102.00	0.32	37.10	2.30	95.70	PASS	PASS	PASS	PASS
2	99.30	0.34	36.80	2.10	94.90	PASS	PASS	PASS	PASS
3	102.60	0.34	36.90	2.40	94.60	PASS	PASS	PASS	PASS
4									
5									
MIN.	99.30	0.32	36.80	2.10	94.60				
MAX.	102.60	0.34	37.10	2.40	95.70				
AVG.	101.30	0.33	36.93	2.27	95.07				
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			
	27.5MAX.	33.0MAX.	15.5MAX.	3.75±0.3	29.0REF	1.0±0.1			
1	26.10	31.90	13.50	3.83	27.20	1.01			
2	26.00	31.70	13.30	3.82	27.30	1.02			
3	26.10	31.90	13.40	3.83	27.20	1.03			
4									
5									
MIN.	26.00	31.70	13.30	3.82	27.20	1.01			
MAX.	26.10	31.90	13.50	3.83	27.30	1.03			
AVG.	26.07	31.83	13.40	3.83	27.23	1.02			
Result	Passed	Passed	Passed	Passed	Passed	Passed			

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