

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. : _____

EFD25-445

VERSION: _____

A

DATE: _____

2020/7/8

Attachments:

- Product specification
- Sample Qty.:
- Test data

Prepared By	Checked By	Approved By
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Revision Record

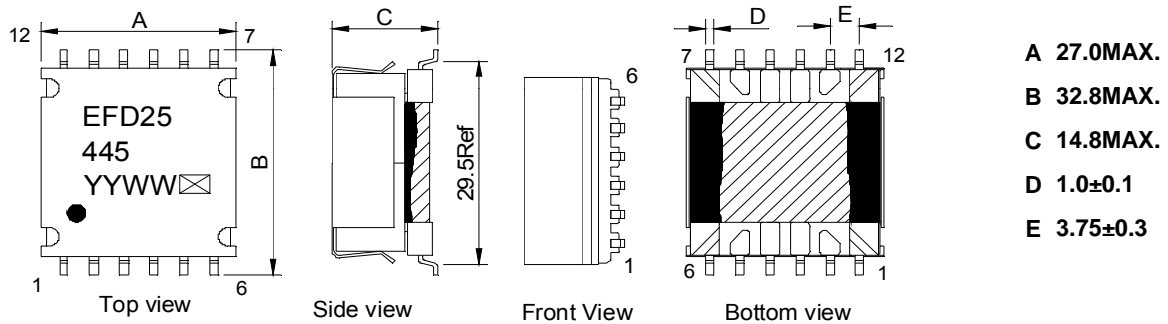
Version	Revision Date	Revision For Items	Reason For Revision
A	2020/7/8	New Revision	-

Semitel'S MODEL NO. :	EFD25-445	CUSTOMER'S MODEL NO.:	
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DATE :	2020/7/8		

Semitel International Ltd.,

Product Specification

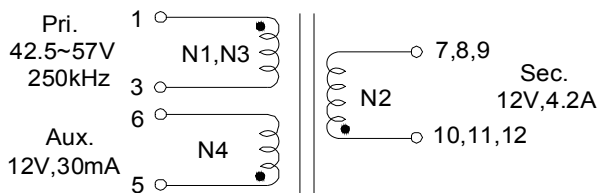
1. Physical Dimensions (Unit:mm)



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 B not including soldering tags
- (6). Coplanarity Requirement: Less than 0.15mm

2. Connection

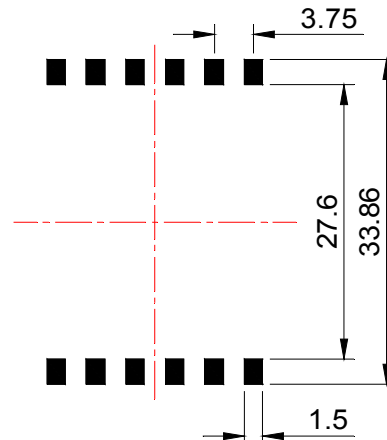


" • " Start of winding

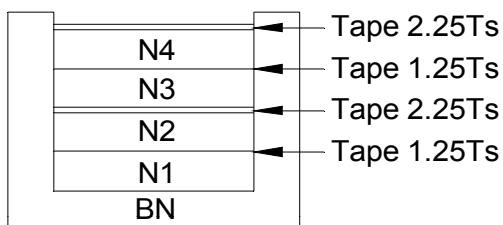
*Customer to tie terminals 7&8&9 and 10&11&12 on PC board.

*Application of the transformer allows for the leadwires between terminals 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	1 -- 3	20 Ts	ø0.30mm*2P P180
N2	12, 11, 10 -- 9, 8, 7	8 Ts	ø0.35mm*9P P180
N3	1 -- 3	20 Ts	ø0.30mm*2P P180
N4	5 -- 6	8 Ts	ø0.25mm*1P 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(1-3)	65uH±10%	at 100kHz,0.1Vrms
LK-Inductance	LK(1-3) Tie other	0.75uH MAX.	at 100kHz,0.1Vrms
DCR	R(1-3)	75mΩ MAX.	at 25°C
	R(5-6)	280mΩ MAX.	
	R(12,11,10-9,8,7)	20mΩ MAX.	
Turns Ratio	(1-3):(5-6):(12,11,10-9,8,7)	20:8:8;±3%	at 20kHz,1Vrms
Hi-Pot	PRI.TO SEC.	1500VAC	1mA.2Sec
	WIN. TO CORE	750VAC	1mA.2Sec

7.Bill of Material

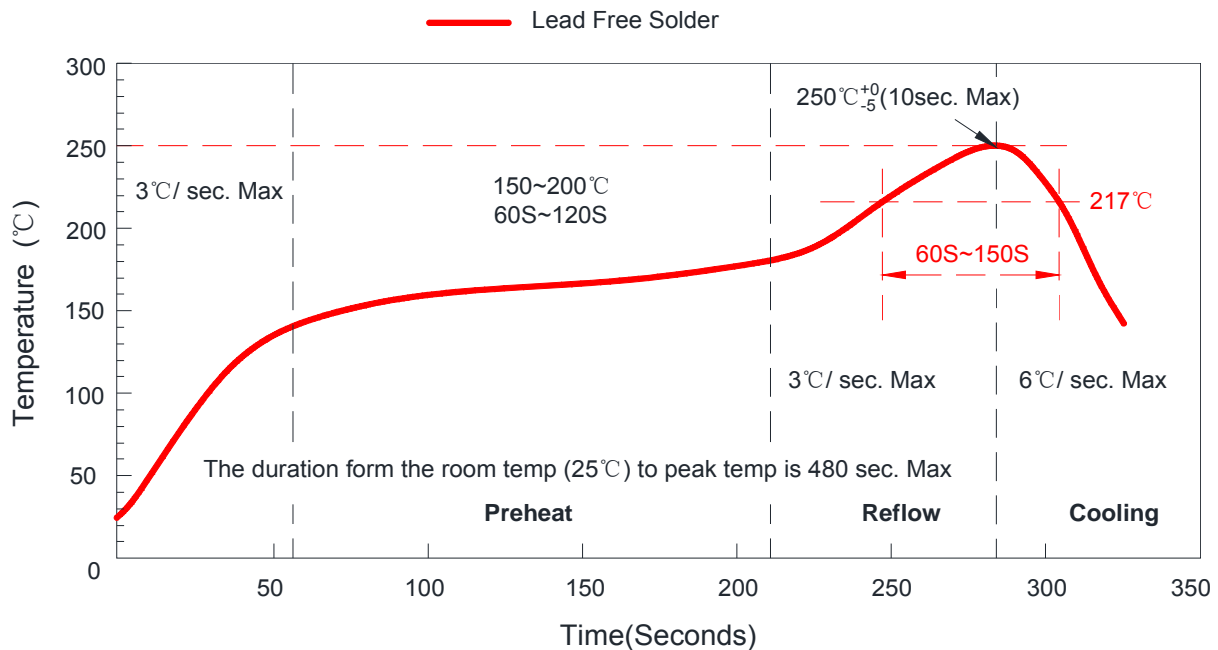
No	Item	Material Name	Manufacturer	UL File No	SGS File No
1	Core	FERRITE CORE JCP-95	FCRI or Equivalent	NIL	CANEC1913430901
2	Bobbin	PM-9630	SUMITOMO (SumiDurez) or Equivalent	E41429	SHAEC2002442505
3	CLIP	SUS301	TONG FENG or Equivalent	NIL	SZXEC1901434601
4	Copper Wire	Polyurethane bare wire (Cu) Polysol 180	ELEKTRISOLA or Equivalent	E258243	CE/2020/34972
OR	Copper Wire	Polyurethane wire UEWH/U	PACIFIC or Equivalent	E201757	A219029024010101E
5	Polyimide Tape	Brown adhesive plastic HN NC 0.025mm V-0	RUNSEA (RAYITEK)or Equivalent	E339977	SZXEC1900617511
6	EPOXY	TH320	TIAN HUAN or Equivalent	E257593	SZXEC1902353001
7	EPOXY	EB-360	CHANGFENG or Equivalent	NIL	SHAEC1925290501
8	Varnish	ZS-NJ-D938XX	ZHAOSHUN or Equivalent	E329120	CANEC1903703503
9	Solder	Lead-free Solder Bar	HONGTAIZHOU or Equivalent	NIL	SZXEC2001415205

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8.Recommended Temperature Conditions of Air Reflow Soldering

Test Solderability Temperature Profile



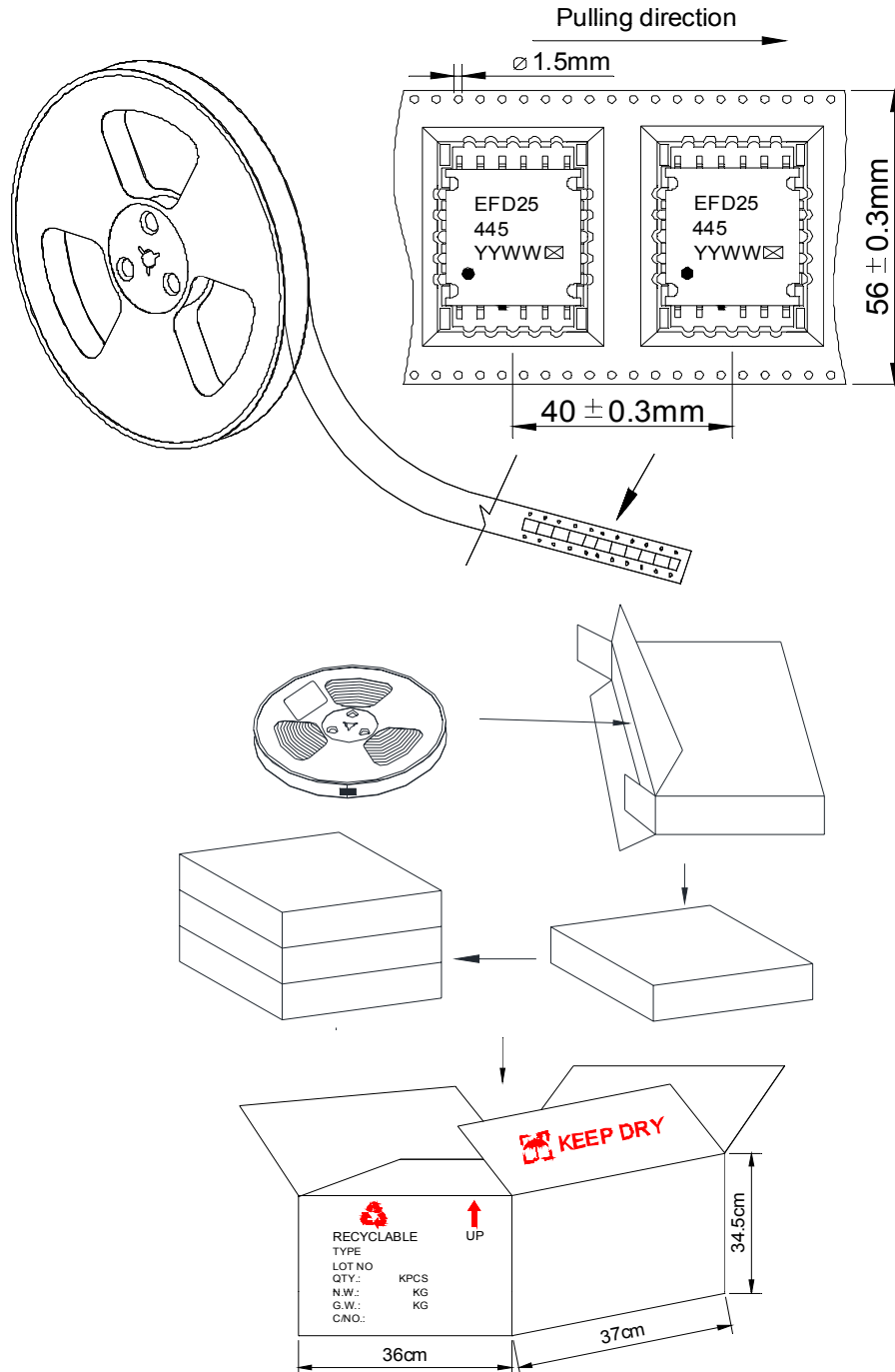
Profile Feature	
Average Ramp-Up Rate (T _{smax} to T _p)	3°C/Second Max.
Preheat	
-Temperature Min. (T _{smin})	150°C
-Temperature Max. (T _{smax})	200°C
-Time (T _{smin} to T _{smax})	60-120 Seconds
Time maintained above:	
-Temperature (T _L)	217°C
-Time (T _L)	60-150 Seconds
Peak/Classification Temperature (T _p)	250°C
Time within 5°C of actual Peak Temperature (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 cartoon 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 100kHz,0.1Vrms	at 100kHz,0.1Vrms	at 25°C			at 20kHz,1Vrms	1mA.2Sec	
	L(1-3)	LK(1-3) Tie other	R(1-3)	R(5-6)	R(12,11,10- 9,8,7)	(1-3):(5- 6):(12,11,10- 9,8,7)	PRI.TO SEC.	WIN. TO CORE
	65uH±10%	0.75uH MAX.	75mΩ MAX.	280mΩ MAX.	20mΩ MAX.	20:8:8;±3%	1500VAC	750VAC
1	64.00	0.41	58.00	167.00	8.19	Passed	Passed	Passed
2								
3								
4								
5								
MIN.	64.00	0.41	58.00	167.00	8.19			
MAX.	64.00	0.41	58.00	167.00	8.19			
AVG.	64.00	0.41	58.00	167.00	8.19			
Result	Passed	Passed	Passed	Passed	Passed	Passed	Passed	Passed

Overall Dimensions Test

Measurement Tools: Caliper (Unit:mm)

NO	A	B	C	D	E			
	27.0MAX.	32.8MAX.	14.8MAX.	1.0±0.1	3.75±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!			
Result	Passed	Passed	Passed	Passed	Passed			

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