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: **EP7**

MODEL NO. : **EP7-505**

VERSION: **A**

DATE: **2019/2/15**

Attachments:

- ☐ Product specification
- ☐ Sample Qty.:
- ☐ Test data

Prepared By	Checked By	Approved By
Hebe Deng 2019/2/15	Liang Wong 2019/2/15	Alan Wong 2019/2/15

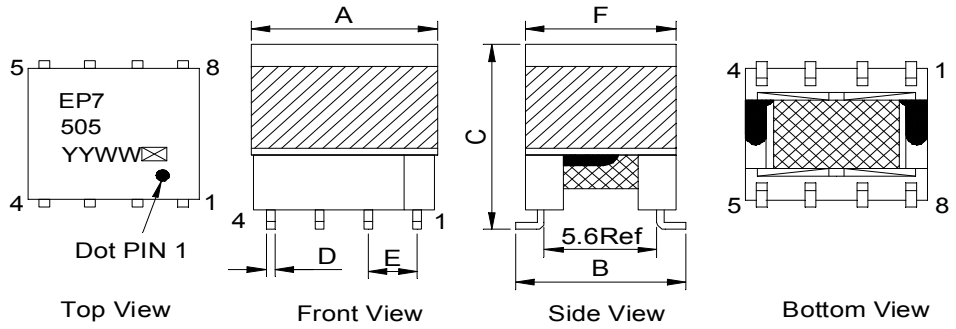
Revision Record

Version	Revision Date	Revision For Items	Revision For Items
A	2019/2/15	New Revision	-

MODEL NO. :	EP7-505	CUSTOMER'S MODEL NO. :	
VERSION:	A	CUSTOMER'S PART NO. :	
DATE:	2019/2/15		

Product Specification

1.Physical Dimensions (Unit:mm)



A 10.0 MAX.
B 9.14MAX.
C 11.0MAX.
D 0.4±0.1
E 2.5±0.3
F 7.9±0.5

Notes:

*Marking type is laser printing , Dot indicates the location of pin#1.

*YY: Year Code; WW: Week Code

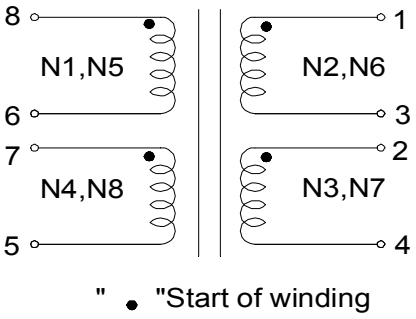
* ☒:When making samples, S is used to represent the product is a sample.

* ☒:Use different letters or numbers to represent the products are produced from different production lines .

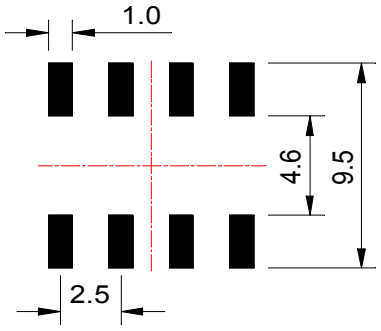
*Size B not including soldering tags

*Coplanarity Requirement: Less than 0.13mm

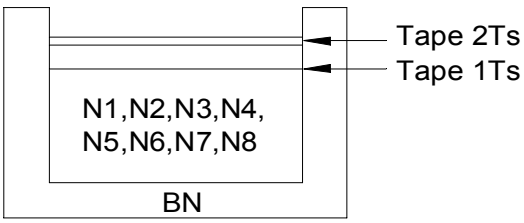
2. Connection



3.Recommended Pad Layout (Unit:mm)



4.Structure of Products



5. No of Turns & Wire Spec

No	No of Pin	Truns	Wire Spec
N1	8 - 6	6 TS	ø0.09mm*1P QPN 180
N2	1 - 3	3 TS	ø0.09mm*1P TIW-F
N3	2 - 4	3 TS	ø0.09mm*1P TIW-F
N4	7 - 5	6 TS	ø0.09mm*1P QPN 180
N5	8 - 6	6 TS	ø0.09mm*1P QPN 180
N6	1 - 3	3 TS	ø0.09mm*1P TIW-F
N7	2 - 4	3 TS	ø0.09mm*1P TIW-F
N8	7 - 5	6 TS	ø0.09mm*1P QPN 180

MODEL NO. :	**EP7-505**	**CUSTOMER'S MODEL NO. :**	
VERSION:	**A**	**CUSTOMER'S PART NO. :**	
DATE:	**2019/2/15**		

Product Specification

6.Electrical Characteristics

***Electrical specifications @ 25℃ unless otherwise noted**

***Operating temperature range:-40℃~+85℃**

***CB code. SF7AD**

***Was passed ITU-T K.21 2003 Enhance Level 6KV.**

Items	Winding	Specifications	Test Conditions
Inductance	L(8-5)	60uH±10%	at 100kHz,0.1Vrms
LK-Inductance	LK(8-5) Tie other	0.25uH MAX.	at 1MHz,0.1Vrms
DCR	R(8-5) Tie (6-7)	2.0Ω MAX.	at 25℃
	R(1-4) Tie (2-3)	1.0Ω MAX.	
Turn Raito	(8-5):(1-4) Tie(6-7,2-3)	2:1;±3%	at 100kHz,0.1Vrms
Interwinding Capacitance	1-8 Tie(1-2-3-4,8-5)	20pF MAX.	at 100kHz,0.1Vrms
THD	(8-5):(1-4) Tie(6-7)、Tie(2-3)	-75dB MAX.	at 200kHz,2Vrms
	(8-5):(1-4) Tie(6-7)、Tie(2-3)	-65dB MAX.	at 200kHz,5.5Vrms
LCL	(8-5):(1-4) Tie(6-7)、Tie(2-3)	-32dB MAX.	at 35MHz, 25°C
	(8-5):(1-4) Tie(6-7)、Tie(2-3)	-30dB MAX.	at 106MHz, 25°C
	(8-5):(1-4) Tie(6-7)、Tie(2-3)	-24dB MAX.	at 212MHz, 25°C
Hi-Pot	PRI. To Sec.	1500VAC	1mA.2SEC

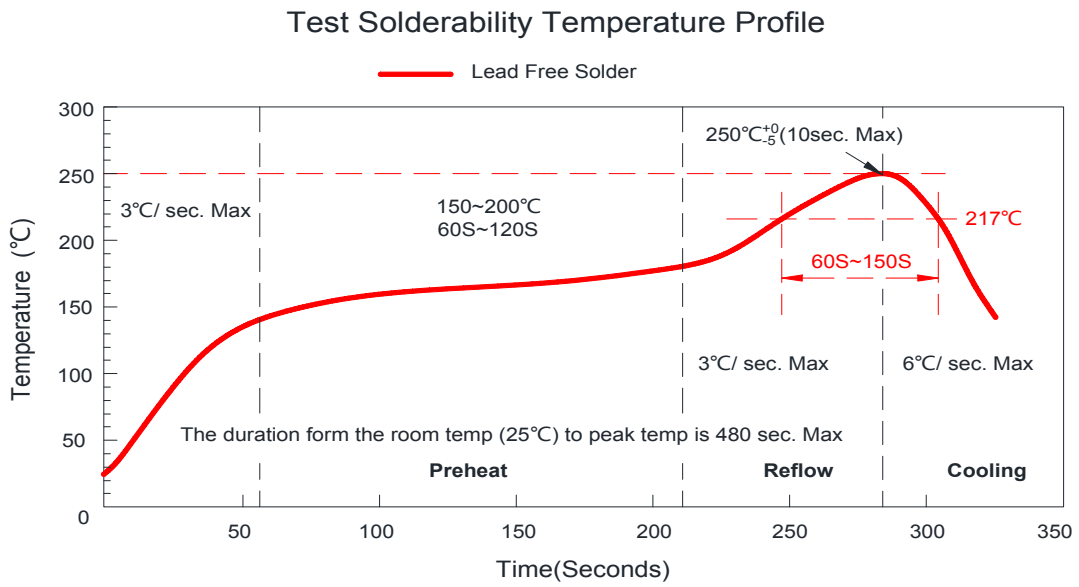
7.Bill of Material

No	Item	Material Name	Manufacturer	Rating	UL File No	SGS File No
1	Core	Ferrite core A101	ACME or Equivalent		NIL	CE/2017/A2987B
2	Bobbin	PM-9630	SUMITOMO or Equivalent	150℃	E41429	SHAEC1802754204
3	Copper Wire	enamelled wire QPN 180	SUNTEK or Equivalent	180℃	E234867	A2180011364102E
4	Wire	Single layer and multilayer insulated wire TIW-FXX	FLUO-TECH or Equivalent	155℃	E488352	CANML1723506501
OR	Wire	Single layer and multilayer insulated wire FIW-F*	Yusheng or Equivalent	155℃	E332529	SHAEC1718738501
OR	Wire	Single layer and multilayer insulated wire E&B-XXXH-2*	E&B technology or Equivalent	180℃	E315265	ECL01J084046001E
5	Polyimide Tape	Brown adhesive plastic 0.025mm V-0	RUNSEA(RAYITEK) or Equivalent	130℃	E339977	CANML1808714601
6	Insulation tape	Yellow color 1350F-1(b)	3M or Equivalent	130℃	E17385	CE/2018/A2622
7	EPOXY	EB-360	CHANGFENG or Equivalent	130℃	NIL	SHAEC1726002103
8	EPOXY	TH320	TIANHUAN or Equivalent	130℃	E257593	CANEC1719881801
9	Solder	Lead free solder	HONGTAIZHOU or Equivalent	227℃	NIL	CANEC1812220901

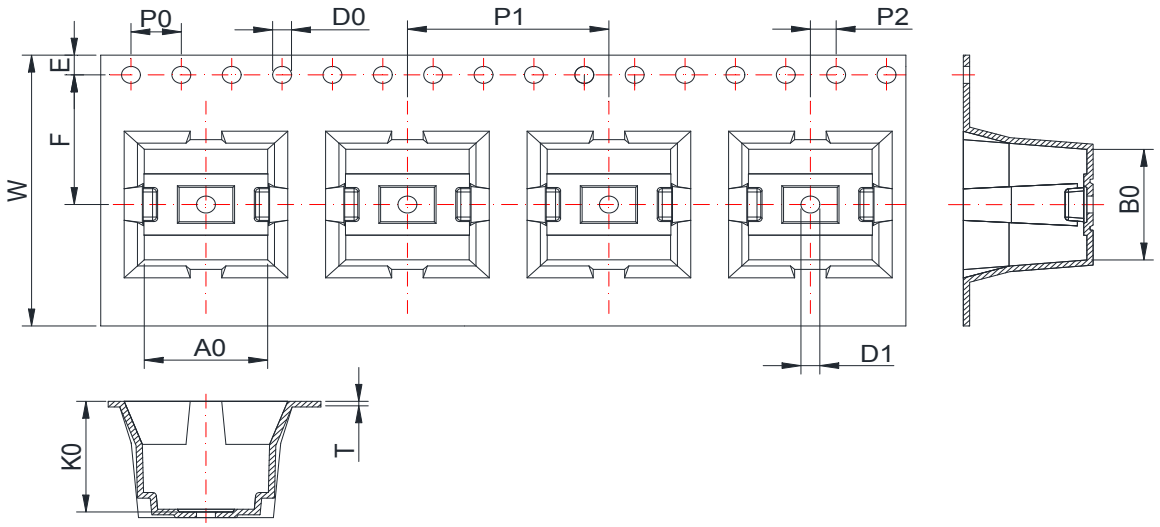
MODEL NO. :	**EP7-505**	**CUSTOMER'S MODEL NO. :**	
VERSION:	**A**	**CUSTOMER'S PART NO. :**	
DATE:	**2019/2/15**		

Product Specification

8.Recommended Temperature Conditions of Air Reflow Soldering



9.Tape Dimensions (Unit:mm)



symbol	A0	B0	K0	P0	P1	P2
spec	9.8±0.3	9.5±0.3	10.8±0.3	4±0.1	16.0±0.1	2.0±0.1
symbol	W	T	E	F	D0	D1
spec	24±0.3	0.5±0.05	1.75±0.1	11.5±0.1	⌀1.5+0.1 -0	⌀1.5+0.1 -0

MODEL NO. :	**EP7-505**	**CUSTOMER'S MODEL NO. :**	
VERSION:	**A**	**CUSTOMER'S PART NO. :**	
DATE:	**2019/2/15**		

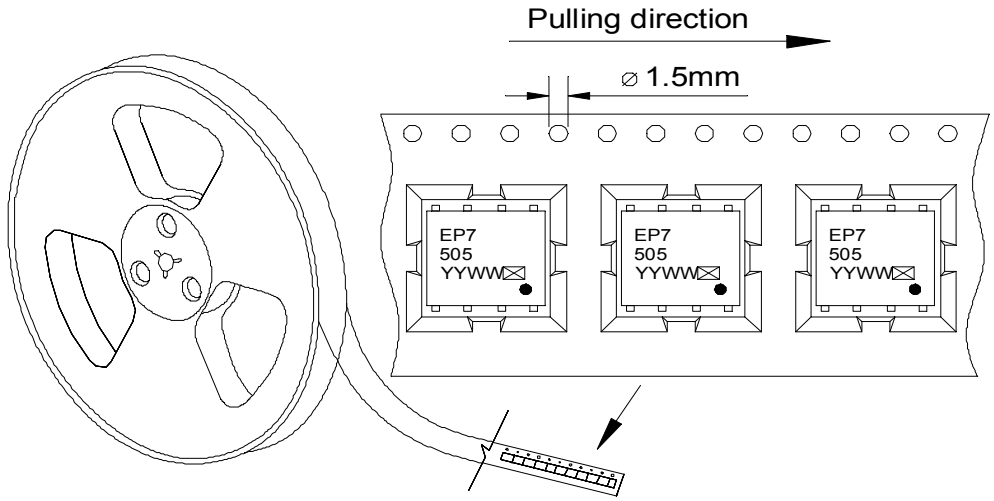
Product Specification

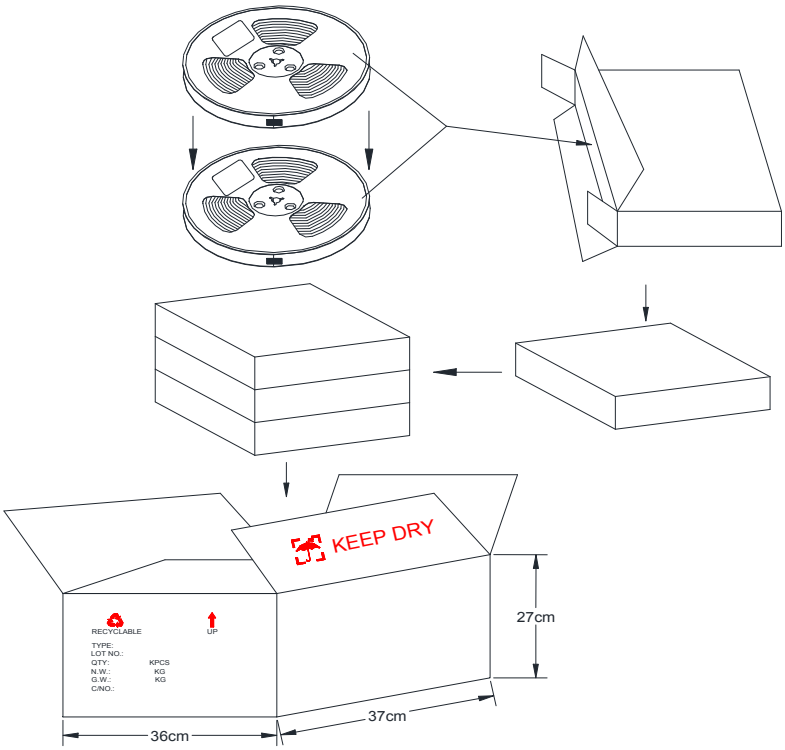
10.Packing Request

(1).Every roll of the carrier tape can contain 350pcs products.

(2).Every small packing box contains two rolls of carrier tape. Total quantity: 700pcs.

(3).Every cartoon box contains 3 small packing boxes.Total quantity: 2100pcs.





MODEL NO. :	**EP7-505**	**CUSTOMER'S MODEL NO. :**	
VERSION:	**A**	**CUSTOMER'S PART NO. :**	
DATE:	**2019/2/15**		

Test Report

	Test Instruments											
	HP4284A	HP4284A	VR131			SYS2702A		HP4284A			HP4284A	CS2670A
NO	Inductance	LK-Inductance	DCR		Interwinding Capacitance	THD		LCL			Turn Raito	Hi-Pot
	at 100KHz, 0.1Vrms	at 1MHz,0.1Vrms	at 25℃	at 25℃	at 100kHz,0.1Vrms	at 200kHz,2Vrms	at 200kHz,5.5Vrms	at 35MHz, 25°C	at 106MHz, 25°C	at 212MHz, 25°C	at 100kHz,0.1Vrms	1mA.2SEC
	L(8-5)	LK(8-5) Tie other	R(8-5) Tie (6-7)	R(1-4) Tie (2-3)	1-8 Tie(1-2-3-4,8-5)	(8-5):(1-4) Tie(6-7)、Tie(2-3)	(8-5):(1-4) Tie(6-7)、Tie(2-3)	(8-5):(1-4) Tie(6-7)、Tie(2-3)	(8-5):(1-4) Tie(6-7)、Tie(2-3)	(8-5):(1-4) Tie(6-7)、Tie(2-3)	(8-5):(1-4) Tie(6-7,2-3)	PRI. To Sec.
	60uH±10%	0.25uH MAX.	2.0Ω MAX.	1.0Ω MAX.	20pF MAX.	-75dB MAX.	-65dB MAX.	-32dB MAX.	-30dB MAX.	-24dB MAX.	2:1;±3%	1500VAC
1	57.40	0.200	0.313	0.173	12.60	-84.00	-71.50	-43.20	-33.20	-35.70	PASS	PASS
2	58.40	0.200	0.315	0.179	12.30	-86.10	-74.00	-42.30	-32.20	-35.50	PASS	PASS
3	59.30	0.200	0.318	0.174	12.00	-84.30	-73.10	-44.70	-33.90	-38.90	PASS	PASS
4	58.10	0.210	0.339	0.176	12.00	-85.20	-73.60	-45.00	-32.80	-36.00	PASS	PASS
5	63.00	0.200	0.321	0.174	12.20	-82.10	-70.60	-46.30	-32.70	-35.80	PASS	PASS
MIN.	57.40	0.200	0.313	0.173	12.00	-86.10	-74.00	-46.30	-33.90	-38.90		
MAX.	63.00	0.210	0.339	0.179	12.60	-82.10	-70.60	-42.30	-32.20	-35.50		
AVG.	59.24	0.202	0.321	0.175	12.22	-84.34	-72.56	-44.30	-32.96	-36.38		
Result	**Passed**	**Passed**	**Passed**	**Passed**	**Passed**	**Passed**	**Passed**	**Passed**	**Passed**	**Passed**	**Passed**	**Passed**

Overall Dimensions Test **Measurement Tools: Caliper (Unit:mm)**

NO	A	B	C	D	E	F						
	10.0 MAX.	9.14MAX.	11.0MAX.	0.4±0.1	2.5±0.3	7.9±0.5						
1	9.44	8.89	10.60	0.37	2.46	7.64						
2	9.46	8.87	10.59	0.36	2.46	7.75						
3	9.42	8.89	10.57	0.37	2.43	7.70						
4	9.41	8.91	10.57	0.39	2.47	7.72						
5	9.43	8.83	10.55	0.40	2.46	7.66						
MIN.	9.41	8.83	10.55	0.36	2.43	7.64						
MAX.	9.46	8.91	10.60	0.40	2.47	7.75						
AVG.	9.43	8.88	10.58	0.38	2.46	7.69						
Result	**Passed**	**Passed**	**Passed**	**Passed**	**Passed**	**Passed**						

MODEL NO. :	**EP7-505**	**CUSTOMER'S MODEL NO. :**	
VERSION:	**A**	**CUSTOMER'S PART NO. :**	
DATE:	**2019/2/15**		