Version:1.0

SPECIFICATION FOR APPROVAL

ITEM P/N	PSPMAA1040H-2R2M-ANP	TEST INSTRUMENT	Zentech-3305 / Zentech502BC
PRODUCT	SMD INDUCTOR	TEST FREQUENCY	100 kHz / 1.0V

CUSTOMER :

CUSTOMER P/N :

DESCRIPTION : SMD INDUCTOR

P/N : PSPMAA1040H-2R2M-ANP

REVISION NO. : Version:1.0

DATE : 2019-9-24

NOTES : STANDARD

DOCUMENTED	
APPROVED	Yuki
CHECKED	Ben
PREPARED	Peter

CUSTOMER APPROVAL

company seals

PROD TECHNOLOGY CO., LTD.
TEL :0755-86667379
http://www.prodtech.cn

E-LIVEN TECHNOLOGY CO., LTD.
NO.28 ho-cheng RD,bade city,taoyuan, taiwan

Version:1.0

SPECIFICATION FOR APPROVAL

ITEM P/N	**PSPMAA1040H-2R2M-ANP**	**TEST INSTRUMENT**	**Zentech-3305 / Zentech502BC**
PRODUCT	**SMD INDUCTOR**	**TEST FREQUENCY**	**100 kHz / 1.0V**

Version	REVISON ITEM	BEFORE REVISON	AFTER REVISON	DATE
1.0	First Version			2019-9-24

PROD TECHNOLOGY CO., LTD.
TEL :0755-86667379
http://www.prodtech.cn

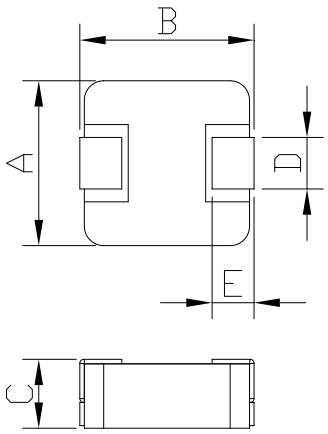
E-LIVEN TECHNOLOGY CO., LTD.
NO.28 ho-cheng RD,bade city,taoyuan, taiwan

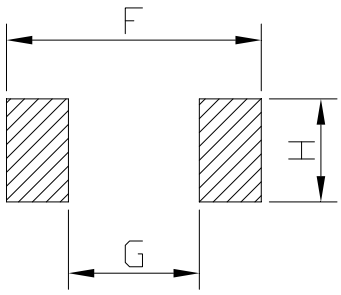
Version:1.0

COIL SPECIFICATION

ITEM P/N	PSPMAA1040H-2R2M-ANP	TEST INSTRUMENT	Zentech-3305 / Zentech502BC
PRODUCT	SMD INDUCTOR	TEST FREQUENCY	100 kHz / 1.0V

PACKING DIMENSIONS (mm)





RECOMMANED
LAND PATTERN

1040H	Dimensions
A	10.2 ± 0.3
B	11.0 ± 0.5
C	4.0MAX
D	3.0 ± 0.3
E	2.0 ± 0.5
F	11.8Ref.
G	6.00Ref.
H	3.50Ref.

EXPLANATION OF PART NUMBERS

PSPMAA	1040H	-	2R2M	-	ANP
Serial Codes	Size		Inductance Code		Description

ELECTRICAL CHARACTERISTICS

ITEM P/N	@ 25 ℃ Ambient Temperture					
	INDUCTANCE		Irms (A)Max.	Isat (A) Max.	DCR (mΩ) Typical	DCR (mΩ) Max.
	Lo (μH)	TOLERANCE				
PSPMAA1040H-2R2M-ANP	2.20	±20%	14	18	7.5	9.0

- All test Data is referenced to 25℃ ambient
- Typical Heat Rating DC Current would cause an approximately △T of 40℃
- Typical Saturation DC Current would cause Lo to drop approximately 35%
- Operation Temperature Range : -40℃ ~ 125℃
- The Part temperature (ambient + △T) should not exceed 125℃ under worst case operating conditions.
- Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all effect the part temperature. Part temperature should be verified in the end application.

PROD TECHNOLOGY CO., LTD.
TEL :0755-86667379
http://www.prodtech.cn

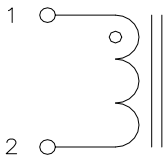
E-LIVEN TECHNOLOGY CO., LTD.
NO.28 ho-cheng RD,bade city,taoyuan, taiwan

Version: 1.0

CHARACTERISTICS

ITEM P/N	PSPMAA1040H-2R2M-ANP	TEST INSTRUMENT	Zentech-3305 / Zentech502BC
PRODUCT	SMD INDUCTOR	TEST FREQUENCY	100 kHz / 1.0V

Schematic Diagram：

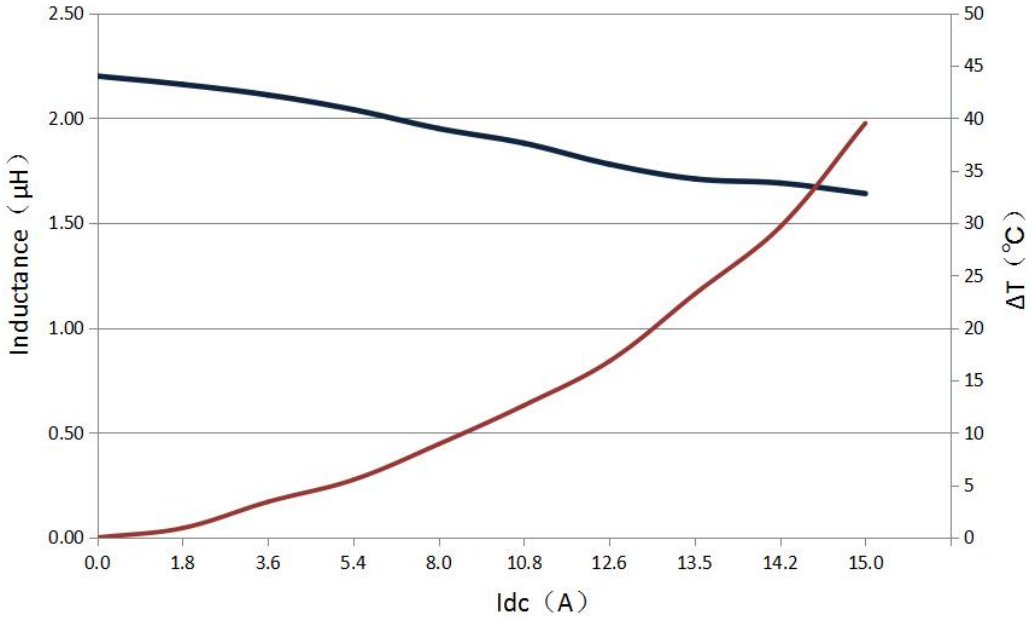


MARKING

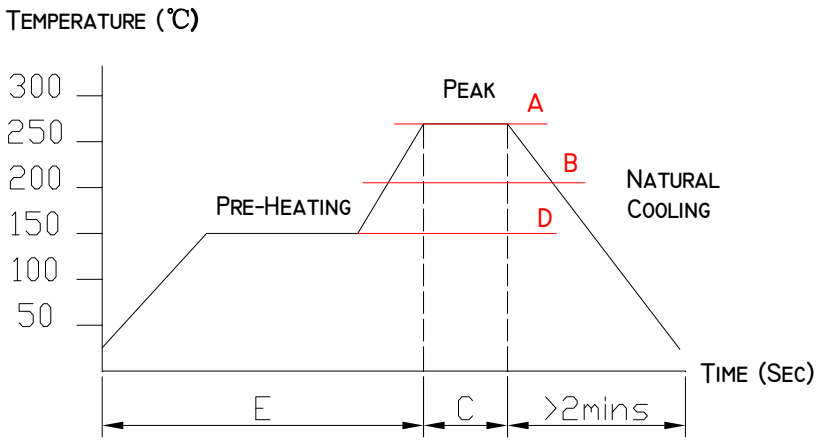
◎ Inductor Contents ONE (1) Set(s) of Coil

◎ DC/AC Currnet Shall Be Introduced By Any One of Two Pads

PERFORMANCE CURVES:



RECOMMENDED SOLDERING TEMP. GRAPH



A	260℃
B	230℃
C	10 Sec
D	150℃
E	60~240 Sec

PROD TECHNOLOGY CO., LTD.
TEL ：0755-86667379
http://www.prodtech.cn

E-LIVEN TECHNOLOGY CO., LTD.
NO.28 ho-cheng RD,bade city,taoyuan, taiwan

Version: 1.0

CHARACTERISTICS

ITEM P/N	PSPMAA1040H-2R2M-ANP	TEST INSTRUMENT	Zentech-3305 / Zentech502BC
PRODUCT	SMD INDUCTOR	TEST FREQUENCY	100 kHz / 1.0V

MECHANICAL RELIABILITY

TEST	Specification & Requirement	Method Used
Solderability	The surface of terminal/pin tested shall be covered with new solder by 95%	Solder heat proof: Preheating: 180 ±10℃ 90 seconds Soldering: 255 ±5℃ for 3 ±1 sec
Shock	Inductance change within ± 5% Without mechanical damage	Drop down with 981m/s2 (100G) shock Attitude upon a rubber block method shock testing machinem, 3 tests.
Vibration	Inductance change within ± 5% Without mechanical damage	Vibration frequency: 10Hz to 55Hz to 10Hz 60 seconds cycle Vibration time: 2 hours

ENDURANCE RELIABILITY

TEST	Specification & Requirement	Method Used
Thermal Shock	Inductance change within ± 5% Without mechanical damage	-25℃, (30 mins) -> room temp. (5 mins) -> 125℃, (30 mins) -> room temp. (5 mins) 100 cycles
Heat Resistance	Inductance change within ± 5% Without mechanical damage	Apply IDC current @ 85℃ ambient Duration: 1000 hrs
Humidity Resistance	Inductance change within ± 5% Without mechanical damage	Apply IDC current @ 60℃ ambient Humidity: 90~95% Duration: 1000 hrs
Low Temp. Storing	Inductance change within ± 5% Without mechanical damage	Storing Temp. -25 ±2 ℃ for total 1,000 +4/-0 hours
High Temp. Storing	Inductance change within ± 5% Without mechanical damage	Storing Temp. 125 ±2 ℃ for total 1,000 +4/-0 hours

PROD TECHNOLOGY CO., LTD.
TEL :0755-86667379
http://www.prodtech.cn

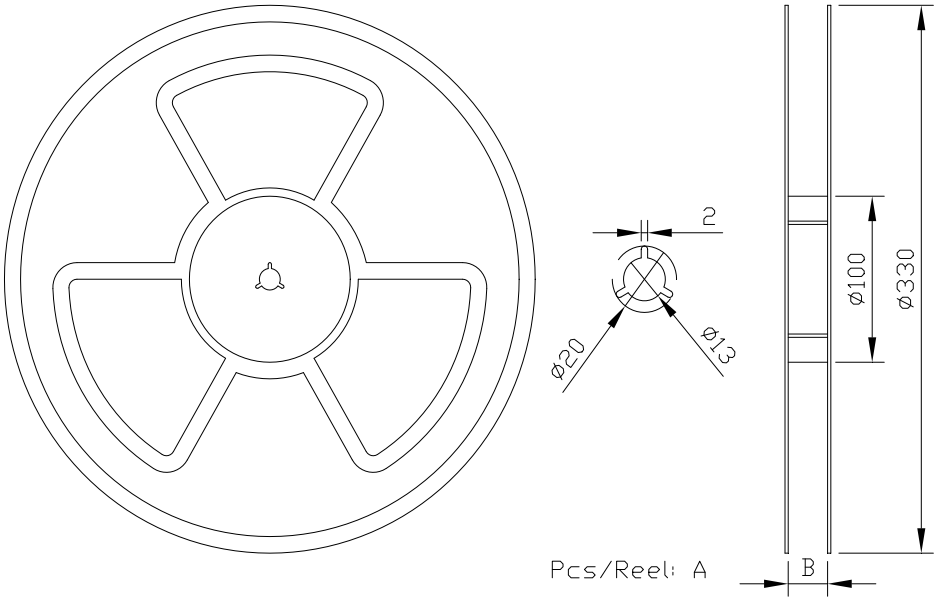
E-LIVEN TECHNOLOGY CO., LTD.
NO.28 ho-cheng RD,bade city,taoyuan, taiwan

Version:1.0

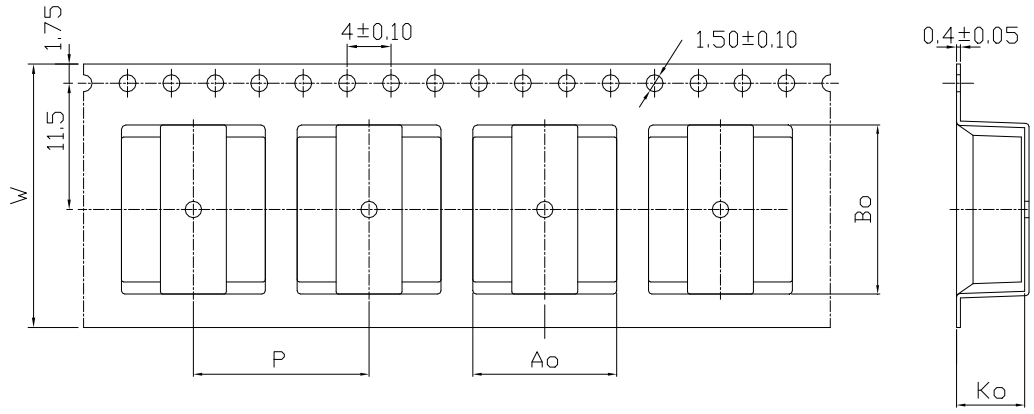
PACKING FOR SMD

ITEM P/N	PSPMAA1040H-2R2M-ANP	TEST INSTRUMENT	Zentech-3305 / Zentech502BC
PRODUCT	SMD INDUCTOR	TEST FREQUENCY	100 kHz / 1.0V

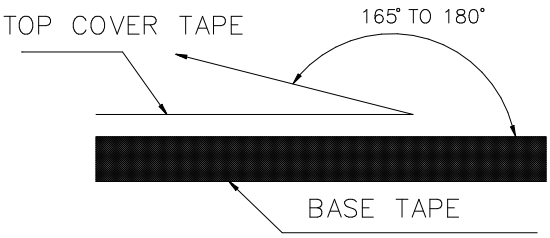
CARRIERTAPEING REEL & CARRIER MATERIALS (PAPER PLASTICS) UNIT : (mm)



A	B	W	P	Ao	Bo	Ko
800	25	24	16	11.0±0.1	12.6 ± 0.1	4.1Typ



Typical Pulling Force:
10 grams



PROD TECHNOLOGY CO., LTD.
TEL :0755-86667379
http://www.prodtech.cn

E-LIVEN TECHNOLOGY CO., LTD.
NO.28 ho-cheng RD,bade city,taoyuan, taiwan

Version:1.0

TESTING REPORT

ITEM P/N	PSPMAA1040H-2R2M-ANP	TEST INSTRUMENT	Zentech-3305 / Zentech502BC
PRODUCT	SMD INDUCTOR	TEST FREQUENCY	100 kHz / 1.0V

TEST DATA

SPEC / No.	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)			DCR	INDUCTANCE	
								Max(mΩ)	L(0)±20%	18 A
	10.2 ± 0.3	11.0 ± 0.5	4.0MAX	3.0 ± 0.3	2.0 ± 0.5			9	2.20	≈65% L(0)
1	10.09	11.14	3.89	3.03	1.95			7.80	2.26	PASS
2	10.11	11.17	3.92	3.01	2.04			7.65	2.18	PASS
3	10.12	11.13	3.83	3.02	1.99			7.32	2.15	PASS
4	10.09	11.21	3.85	3.02	1.97			7.54	2.10	PASS
5	10.11	11.14	3.87	3.01	2.02			7.52	2.09	PASS
6	10.11	11.16	3.93	3.01	2.04			7.69	2.16	PASS
7	10.11	11.17	3.87	3.01	2.01			7.34	2.18	PASS
8	10.12	11.18	3.89	3.02	2.01			7.58	2.16	PASS
9	10.09	11.14	3.92	3.01	1.99			7.26	2.09	PASS
10	10.09	11.21	3.87	3.02	2.03			7.55	2.15	PASS
$\overline{X}$	10.10	11.17	3.88	3.02	2.01			7.53	2.15	
R	0.03	0.08	0.10	0.02	0.09			0.54	0.17	

◎ All test Data is referenced to 25℃ ambient

PROD TECHNOLOGY CO., LTD.
TEL :0755-86667379
http://www.prodtech.cn

E-LIVEN TECHNOLOGY CO., LTD.
NO.28 ho-cheng RD,bade city,taoyuan, taiwan

ANNOUNCEMENTS

产品注意事项

使用本产品时，请注意以下事项

© 产品保存期限为12个月，保存条件：温度5~40℃，湿度10~80%RH以内，超过保存期限可能会使产品端子电极发生氧化。

© 请勿在极端环境下使用和保存（高盐，强酸，强碱，强辐射等）。

© 产品焊接前，请进行预热；预热温度与焊接温度之间温差建议控制在150℃以内。

© 产品焊接后需重新拆卸焊接修正时，请遵循规格书规定的条件范围；过高的加热温度以及反复的拆卸可能会导致产品失效。

© 产品焊接到线路板后，请注意不可因线路板整体变形或局部变形而施加给电感剩余应力，这可能会导致电感发生破裂，脱落，以致失效。

© 产品请勿接触清洗剂，酒精等液体，这会侵蚀产品本体，从而导致产品失效。

© 产品通电后温度会随电流的增大而上升，设计时请务必考虑留有余量。

© 过高的静电会对产品产生永久性损害，请注意静电防护。

© 产品通电过程请勿触摸产品任何部位，防止触电。

© 本产品作为磁性产品，设计时请务必考虑周边元器件与本产品可能产生的相互影响。

© 本产品适用于一般电子设备，如：AV设备，通信设备，家电产品，娱乐设备，计算机设备，个人设备，办公设备，计测设备，工业机器人等。且该一般电子设备需在常规的操作和使用方法环境下使用。
对于需要高度安全性和可靠性的，或者因本产品失效造成设备故障，误操作，运转不良等危及到人的生命身体及财产安全，以及对社会产生较大不良影响的特殊用途，设计使用前务必同本公司沟通，设计使用者如在未取得我司书面同意状况下使用造成任何后果，我司不予承担。特殊用途包含但不限定如下清单：

1 军用设备
2 运输设备（汽车，轨道交通产品，船舶等）
3 航空，航天设备
4 发电控制设备
5 核动力相关设备
6 爆炸引燃控制设备
7 交通控制设备
8 关系到国防安全的设备
9 防灾赈灾设备
10 各种安规设备
11 紧急救护设备
12 其他被认定为特殊用途的设备

PROD TECHNOLOGY CO., LTD.
TEL :0755-86667379
http://www.prodtech.cn

E-LIVEN TECHNOLOGY CO., LTD.
NO.28 ho-cheng RD,bade city,taoyuan, taiwan