

ITEM P/N	PSPMAA0603-3R3M-ANF	TEST INSTRUMENT	Zentech-3305 / Zentech502BC
PRODUCT	SMD Inductor	TEST FREQUENCY	100 kHz / 1.0V

**CUSTOMER** :**CUSTOMER P/N** :**DESCRIPTION** : SMD INDUCTOR**P/N** : PSPMAA0603-3R3M-ANF**REVISION NO.** : Version: 2.0**DATE** : 2017-7-3**NOTES** : STANDARD

DOCUMENTED	
APPROVED	Kevin
CHECKED	Peter
PREPARED	Ben

**CUSTOMER APPROVAL**

company seals

Version: 2.0

# SPECIFICATION FOR APPROVAL

**RoHS**  
COMPLIANT

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Version	REVISION ITEM	BEFORE REVISION	AFTER REVISION	DATE
1.0	First Version			2016-1-13
2.0	First Version	PSPAE-0603-3R3M	PSPMAA0603-3R3M-ANF	2017-4-19



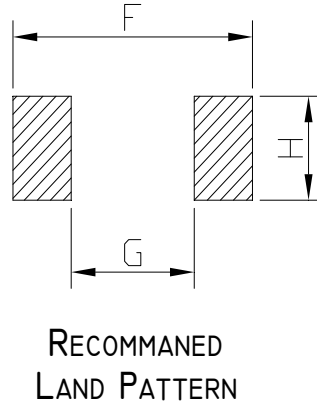
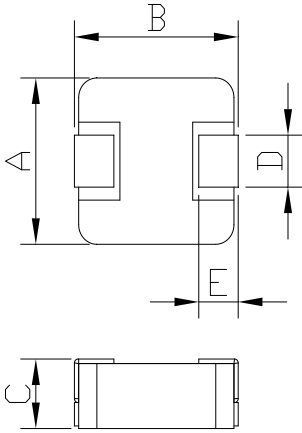
PROD TECHNOLOGY CO., LTD.



E-LIVEN TECHNOLOGY CO., LTD.

NO.28 HO-CHENG RD, BADE CITY, TAOYUAN, TAIWAN

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**PACKING DIMENSIONS (mm)**

0603 3R3M	Dimensions
A	6.6 ± 0.3
B	7.1 ± 0.3
C	3.0 MAX
D	3.0 ± 0.3
E	1.6 ± 0.5
F	7.4 Typ
G	3.7 Typ
H	3.5 Typ

**EXPLANATION OF PART NUMBERS**

<b>P</b>	<b>S</b>	<b>P</b>	<b>M</b>	<b>A</b>	<b>A</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>3</b>	-	<b>3</b>	<b>R</b>	<b>3</b>	<b>M</b>	-	<b>A</b>	<b>N</b>	<b>F</b>
<u>Serial Codes</u>						<u>Size</u>					<u>Inductance</u>							

**ELECTRICAL CHARACTERISTICS**

ITEM P/N	@ 26 °C Ambient Temperture				DCR mΩ @ 25°C Typical	DCR mΩ @ 25°C MAX
	INDUCTANCE		Typical Heat Rating DC Current (A) (Idc)	Typical Saturation DC Current (A) (Isat)		
	Lo (μH)	TOLERANCE				
PSPMAA060 3-3R3M-ANF	3.3	±20%	6	13.5	28	30

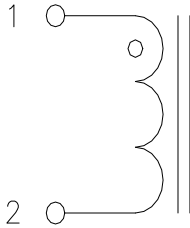
- ⊙ All test Data is referenced to 25°C ambient
- ⊙ Typical Heat Rating DC Current would cause an approximately ΔT of 40°C
- ⊙ Typical Saturation DC Current would cause Lo to drop approximately 30%
- ⊙ Operation Temperature Range : -55°C ~ 125°C
- ⊙ The Part temperature (ambient + ΔT) should not exceed 125°C 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.

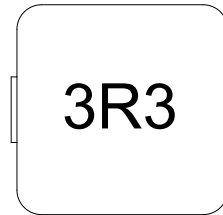
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## CONNECTIONS

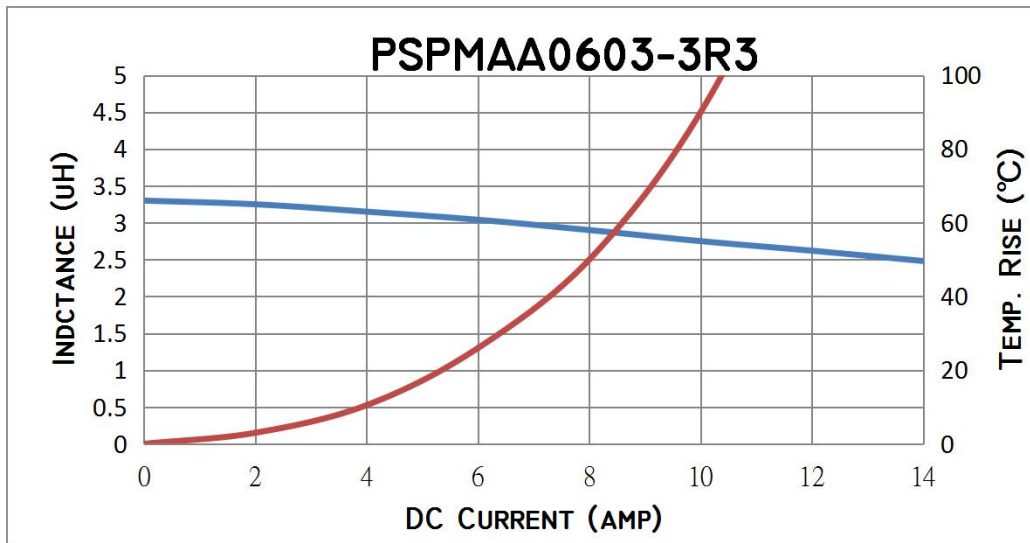


## MARKING



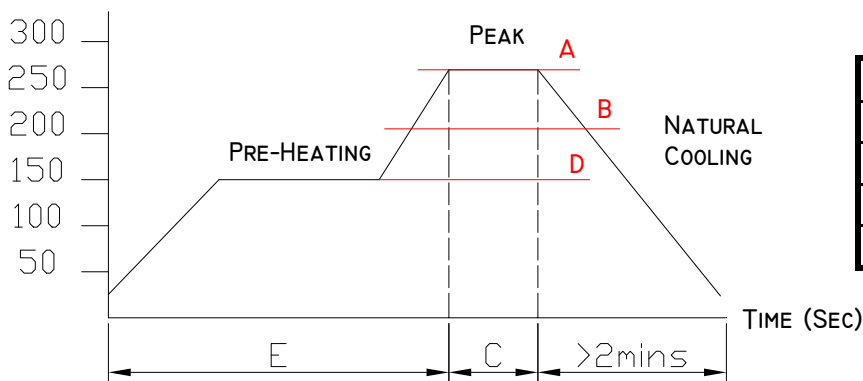
- ⊙ Inductor Contents ONE (1) Set(s) of Coil
- ⊙ DC/AC Current Shall Be Introduced By Any One of Two Pads

## PERFORMANCE CURVES



## RECOMMENDED SOLDERING TEMP. GRAPH

TEMPERATURE (°C)



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

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**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°C 90 seconds Soldering: 255 ±5°C for 3 ±1 sec
Shock	Inductance change within ± 5% Without mechanical damage	Drop down with 981m/s <sup>2</sup> (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**

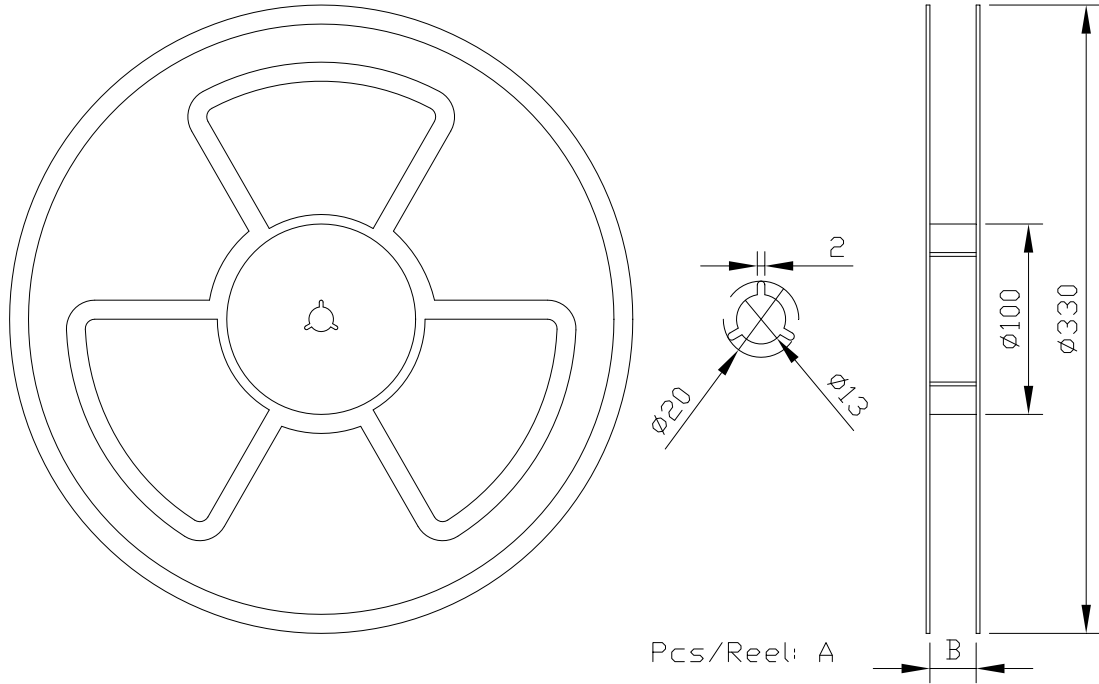
TEST	Specification & Requirement	Method Used
Thermal Shock	Inductance change within ± 5% Without mechanical damage	-25°C, (30 mins) -> room temp. (5 mins) -> 125°C, (30 mins) -> room temp. (5 mins) 100 cycles
Heat Resistance	Inductance change within ± 5% Without mechanical damage	Apply IDC current @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

# PACKING FOR SMD

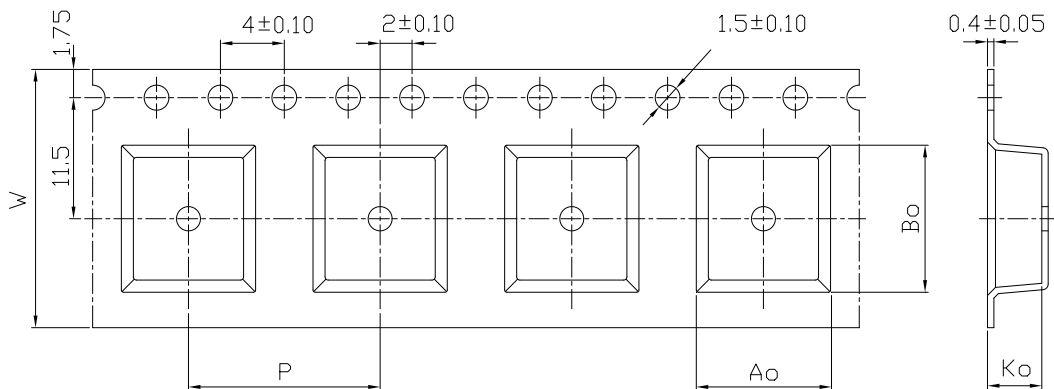
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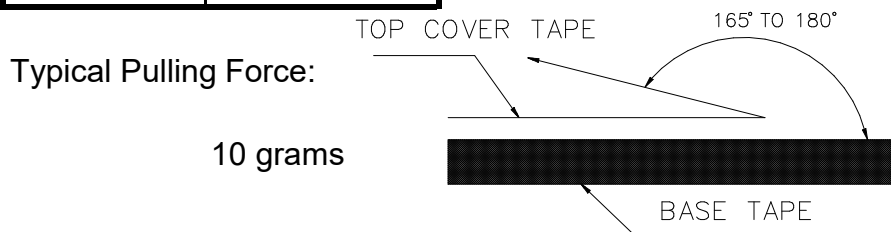
**CARRIERTAPEING REEL & CARRIER MATERIALS (PAPER PLASTICS) UNIT : (mm)**



A	B	Ao	Bo	Ko
1000	17	6.9 ± 0.1	7.6 ± 0.1	3.4 ± 0.1



W	P
16	12



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**TEST DATA**

SPEC No.	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)			DCR	INDUCTANCE	
	6.6 ± 0.3	7.1 ± 0.3	3.0 MAX	3.0 ± 0.3	1.6 ± 0.5			Max( mΩ )	L(0) ± 20%	13.5 A
								30	3.30	≥ 70% L(0)
1	6.72	7.25	2.95	2.95	1.88			28.6	3.11	PASS
2	6.75	7.28	2.88	2.94	1.84			29.1	3.21	PASS
3	6.73	7.22	2.97	2.95	1.86			28.4	3.35	PASS
4	6.72	7.26	2.86	2.95	1.85			28.6	3.16	PASS
5	6.73	7.28	2.88	2.94	1.85			28.8	3.22	PASS
6	6.76	7.25	2.84	2.95	1.85			28.3	3.18	PASS
7	6.71	7.22	2.93	2.95	1.84			29.1	3.21	PASS
8	6.75	7.21	2.92	2.95	1.86			29.1	3.26	PASS
9	6.78	7.25	2.87	2.94	1.86			28.3	3.18	PASS
10	6.73	7.31	2.84	2.94	1.84			28.6	3.35	PASS
$\bar{X}$	6.74	7.25	2.89	2.95	1.85	0.00		28.69	3.22	
R	0.07	0.10	0.13	0.01	0.04	0.00		0.80	0.24	

© All test Data is referenced to 25°C ambient