

ITEM P/N	PSPMAF0615-1R0M-CGF-AP	TEST INSTRUMENT	Zentech-3305 / Zentech502BC
PRODUCT	SMD Inductor	TEST FREQUENCY	100 kHz / 1.0V

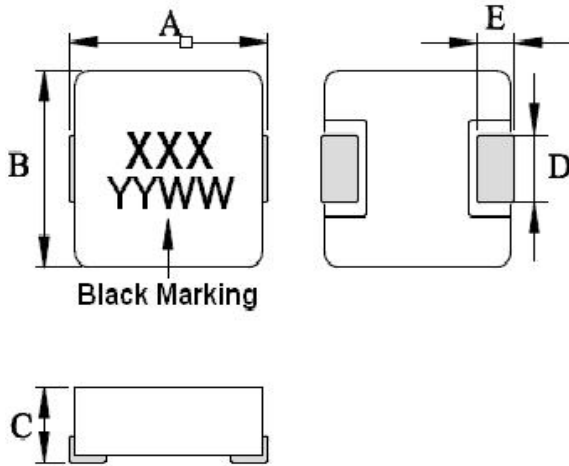
CUSTOMER :**CUSTOMER P/N** :**DESCRIPTION** : SMD INDUCTOR**P/N** : PSPMAF0615-1R0M-CGF-AP**REVISION NO.** : Version: 1.0**DATE** : 2016-1-13**NOTES** : STANDARD

DOCUMENTED	
APPROVED	Kevin
CHECKED	Peter
PREPARED	Ben

CUSTOMER APPROVAL

company seals

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PACKING DIMENSIONS (mm)

0615	Dimensions
A	7.0±0.5
B	6.6±0.3
C	1.3±0.2
D	3.0±0.3
E	1.8±0.5

EXPLANATION OF PART NUMBERS

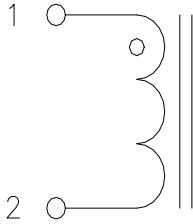
PSPMAF <u>Serial Codes</u>	0615 <u>Size</u>	-	1R0M <u>Inductance Code</u>	-	CGF-AP <u>Description</u>
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ELECTRICAL CHARACTERISTICS

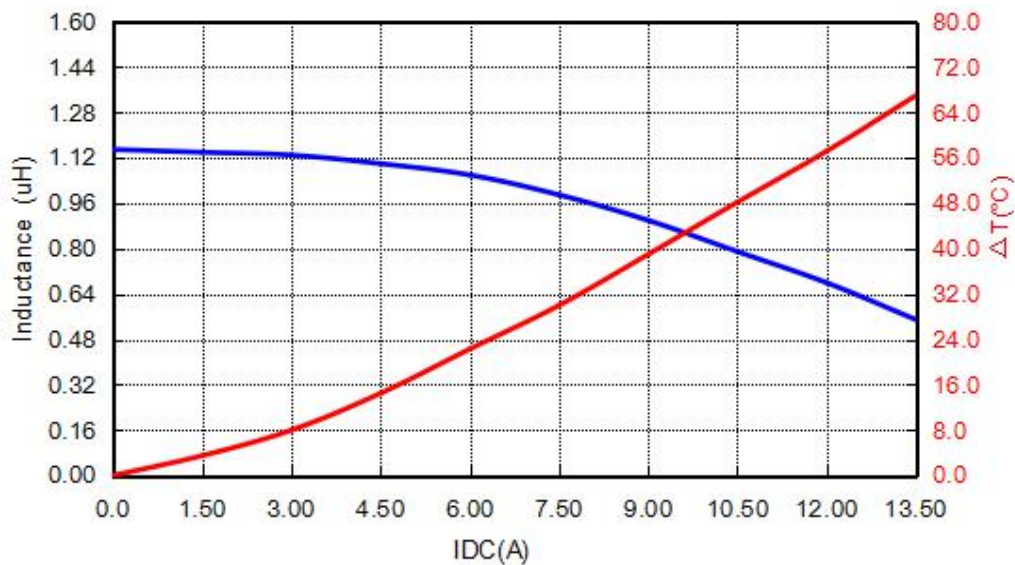
ITEM P/N	@ 25 °C Ambient Temperature				
	INDUCTANCE		Typical Heat Rating DC Current (A) (I _{dc})	Typical Saturation DC Current (A) (I _{sat})	DCR (mΩ) Max.
	Lo (μH)	TOLERANCE			
PSPMAF061 5-1R0M- CGF-AP	1.00	±20%	8.3	10	20.0

- ⊙ 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 35%
- ⊙ 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.

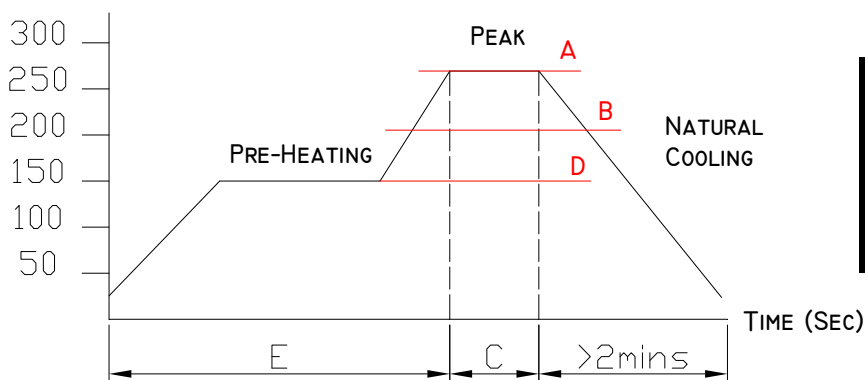
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CONNECTIONS

- ⊙ 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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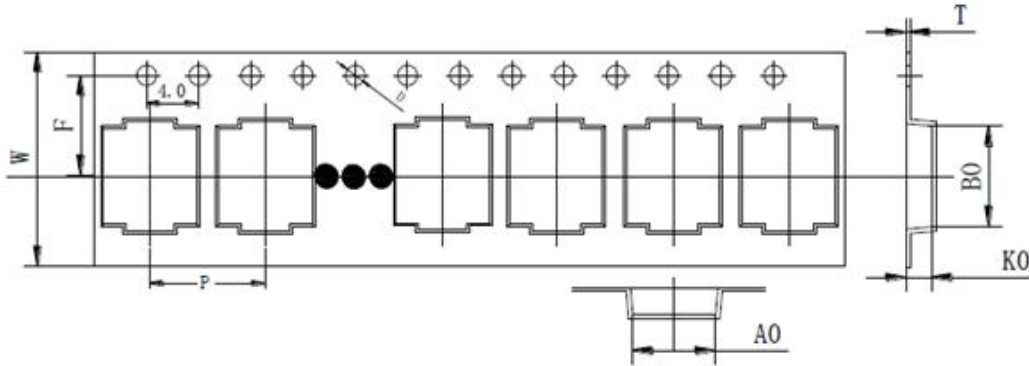
MECHANICAL RELIABILITY

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/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

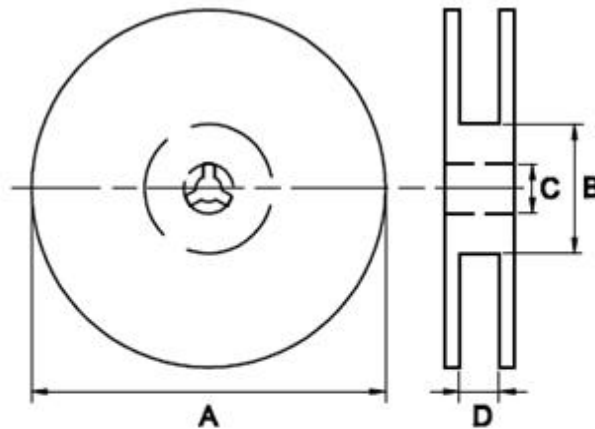
ENDURANCE RELIABILITY

TEST	Specification & Requirement	Method Used
Thermal Shock	Inductance change within ± 5% Without mechanical damage	-25°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

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

Type	A ₀	B ₀	K ₀	P	F	W	D	T
0615HG	7.0±0.1	7.7±0.1	1.8±0.1	12±0.1	7.5±0.1	16±0.3	1.5±0.1	0.35±0.05



Unit: mm

Type	A	B	C	D
0615HG	330	100±2	13.0±0.5	16.4+2-0

Standard Quantity for Packaging: 2000 pcs/Reel

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TEST DATA

SPEC No.	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	DCR Max(mΩ)	INDUCTANCE	
	7.0±0.5	6.6±0.3	1.3±0.2	3.0±0.3	1.8±0.5		L(0) ± 20%	10 A ≈65% L(0)
1	7.22	6.62	1.32	2.91	1.65	17.5	1.12	PASS
2	7.25	6.65	1.33	2.96	1.64	16.5	1.13	PASS
3	7.18	6.68	1.35	2.95	1.68	17.4	1.02	PASS
4	7.15	6.65	1.34	2.91	1.63	18.4	0.99	PASS
5	7.21	6.64	1.32	2.93	1.64	18.6	0.98	PASS
6	7.24	6.66	1.32	2.96	1.68	18.4	1.06	PASS
7	7.16	6.68	1.33	2.91	1.69	17.2	1.04	PASS
8	7.22	6.65	1.33	2.92	1.62	17.5	0.96	PASS
9	7.31	6.68	1.35	2.94	1.64	18.6	0.95	PASS
10	7.23	6.65	1.32	2.91	1.69	17.9	0.98	PASS
\bar{X}	7.22	6.66	1.33	2.93	1.66	17.80	1.02	
R	0.16	0.06	0.03	0.05	0.07	2.10	0.18	

© All test Data is referenced to 25°C ambient



注意事項

ANNOUNCEMENTS

使用本产品时，请注意以下事项

- ◎ 產品保存期限為12個月，保存條件：溫度5~40° C、濕度10~80%RH以內，超過保存期限可能會使產品端子電極發生氧化。
- ◎ 請勿在極端環境下使用和保存（高鹽，強酸，強鹼，強輻射等）。
- ◎ 產品焊接前，請進行預熱，預熱溫度與焊接溫度之間溫差建議控制在150° C以內。
- ◎ 產品焊接前後需重新拆卸焊接修正時，請遵循規格書規定的條件範圍；過高的加熱溫度以及反復拆卸可能會導致產品失效。
- ◎ 產品焊接到線路板後，請注意不可因線路板整體變形或局部變形而施加給電感剩餘應力，這可能會導致電感發生破裂，脫落，以致失效。
- ◎ 產品請勿接觸清洗劑，酒精等液體，這會侵蝕產品本體，從而導致產品失效。
- ◎ 產品通電後溫度會隨電流的增大爾上升，設計時請務必考慮留有餘量。
- ◎ 過高的靜電會對產品產生永久性損害，請注意靜電防護。
- ◎ 產品通電過程請勿觸摸產品任何部位，防止觸電。
- ◎ 本產品為磁性產品，設計時請務必考慮周邊元器件與本產品可能產生的相互影響。

本產品適用於一般電子設備：如AV設備，通信設備，家電產品，娛樂設備，計算機設備，個人設備，辦公設備，計測設備，工業機器人等。且該一般電子設備需在常規的操作和使用方法環境下使用。對於需要高度安全性和可靠性的，或者因本產品失效造成設備故障，誤操作，運轉不良等危及到人的生命身體及財產安全，以及對社會產生較大不良影響的特殊用途，設計使用前務必同本公司溝通，設計使用者如在未取得我司書面同意狀況下使用造成任何後果，我司不予承擔。特殊用途包含但不限定如下清單：

- | | |
|-----------------------|-----------------|
| 1 軍用設備 | 8 關係到國防安全的設備 |
| 2 運輸設備（汽車，軌道交通產品，船舶等） | 9 防災賑災設備 |
| 3 航空，航天設備 | 10 各自安規設備 |
| 4 發電控制設備 | 11 緊急救護設備 |
| 5 核動力相關設備 | 12 其他被認定特殊用途的設備 |
| 6 爆炸引燃控制設備 | |
| 7 交通控制設備 | |

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