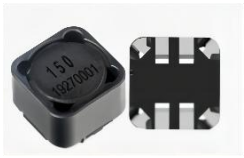
FEATURES

- High efficiency, high coupling.
- High rated current, low DC resistance.
- RoHS compatible.
- Operating Temperature: -50℃~+150℃ .



APPLICATIONS

- SEPIC, Zeta, Flyback topology, etc.
- LED, power supplies.
- Used as common mode choke.
- Used as transformer.

PART NUMBERING

AWPR	1208	-	100	M	□□
① Series Name	② Dimensions Code		③ Nominal inductance	④ Inductance tolerance	⑤ Design Code

① Series Name	
AWPR	Wire Wound SMD Coupled Power Inductor

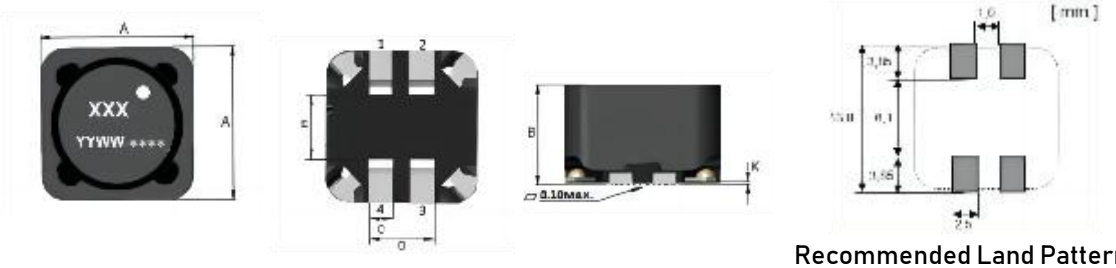
②Dimensions Code	
Code	Dimensions(L×W×H)[mm]
1208	12.5×12.5×8.5
1210	12.5×12.5×10.5

③Nominal inductance	
Code (example)	Nominal inductance ［μH］
4R7	4.7
100	10

⑤Design Code	
□□	Standard product is blank

④Inductance tolerance	
Code	Inductance tolerance
M	±20%

DIMENSIONS & RECOMMENDED LAND PATTERN



Recommended Land Pattern

DIMENSIONS & RECOMMENDED LAND PATTERN

Unit: mm

Dimensions						
Series	A	B	C	D	E	K
AWPR1208	12.50 Max	8.50 Max.	1.80± 0.20	5.0± 0.20	5.0± 0.20	0.15Min.
AWPR1210	12.50 Max	10.50 Max.	1.80± 0.20	5.0± 0.20	5.0± 0.20	0.15Min.

ELECTRICAL CHARACTERISTICS

● AWPR1208 Series

Part Number	Inductance	DC Resistance	Heat Rating Current	Saturation Current	
	@100kHz,0.1V	Max.	Typ.	Inductance drops10%	Inductance drops 30%
Units	μH	mΩ	A	A	
Symbol	L	DCR	Irms	Isat	
AWPR1208-4R7M	4.7± 20%	25	5	9.2	12.9
AWPR1208-6R8M	6.8± 20%	29	4.5	8.1	11.4
AWPR1208-100M	10± 20%	36	4.1	6.8	9.8
AWPR1208-150M	15± 20%	40	3.6	5.2	7
AWPR1208-220M	22± 20%	72	3	4.7	6.7
AWPR1208-270M	27± 20%	96	2.7	3.9	5.7
AWPR1208-330M	33± 20%	105	2.5	3.6	5.2
AWPR1208-470M	47± 20%	132	2.2	3.1	4.3
AWPR1208-680M	68± 20%	206	1.8	2.5	3.6
AWPR1208-101M	100± 20%	280	1.5	2.1	3

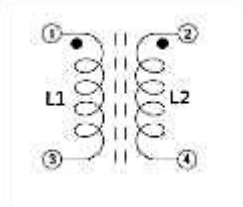
● AWPR1210 Series

Part Number	Inductance	DC Resistance	Heat Rating Current	Saturation Current	
	@100kHz,0.1V	Max.	Typ.	Inductance drops10%	Inductance drops 30%
Units	μH	mΩ	A	A	
Symbol	L	DCR	Irms	Isat	
AWPR1210-3R9M	3.9± 20%	18	7	12.5	17.6
AWPR1210-120M	12.0± 20%	28	5.6	7.1	10.4
AWPR1210-330M	33.0± 20%	75	3.1	4	6.2

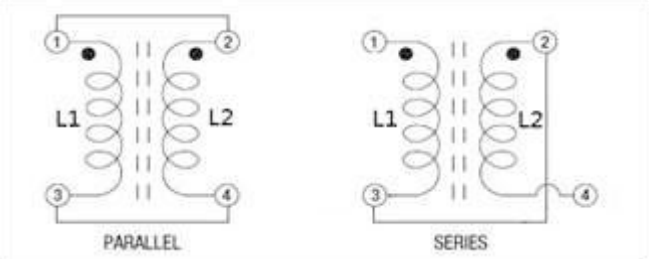
- Saturation Current: Max. Value, DC current at which the inductance dropsless than 30% from its value without current;Typ. Value, DC current at which the inductance drops approximate 30% from its value without current.
- Heat Rating Current:DC current that causes the temperature rise (△T) from 20℃ ambient; For Max. Value,temperature rise (△T) from 20℃. For Typ.l Value,temperature rise (△T) is approximate 40℃.

The part temperature (ambient + temp. rise) should not exceed 150 ° C under worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

EQUIVALENT CIRCUIT



APPLICATION CIRCUIT DIAGRAM



Note:
This series product is not applies in automotive or related products. Otherwise, we will shall not bear than the resulting all the problems of quality and responsibility.

Please be sure to request approval specifications that provide further details of the products. Kindly not that the content of these specifications are subject to change or may be discontinued without prior notice. This product may not be designed/used in medical or high risk applications without APV approval.