Wire Wound SMD Power Inductors – AMWPH Series

Operating Temp. : -40℃~+125℃ (Including self-heating)

FEATURES

- High saturation current, low DC resistance
- Excellent temperature stability
- High reliability,
- AEC-Q200 verified

APPLICATIONS

- Infotainment system
- LED lighting
- Airbag
- Power supply system except for power engineer chassis and safety system

PRODUCT IDENTIFICATION

AMWPH ① **6045** ② **S** ③ **2R2** ④ **M** ⑤ **T** ⑥

①	Type
AMWPH	Wire Wound SMD Power Inductor

③	Feature Type
S	S Type

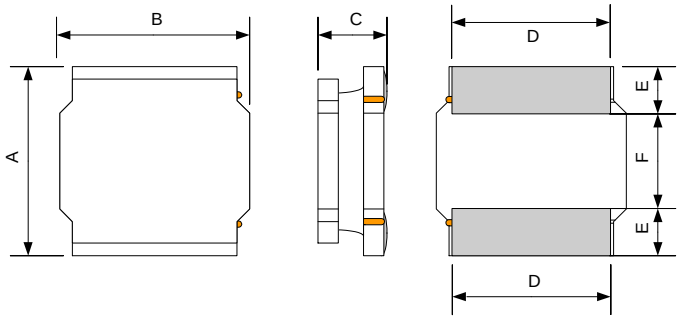
②	External Dimensions (L×W×H) [mm]
3015	3.0×3.0×1.5
4018	4.0×4.0×1.8
5030	5.0×5.0×2.9
6045	6.0×6.0×4.4

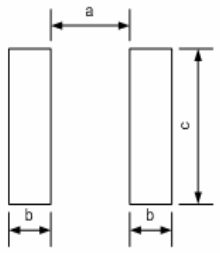
④	Nominal Inductance
Example	Nominal Value
2R2	2.2μH
100	10μH

⑥	Packing
T	Tape & Reel

⑤	Inductance Tolerance
N	±30%
M	±20%

SHAPE AND DIMENSIONS





Recommended PCB pattern

Unit: mm

Series	A	B	C	D	E	F	a	b	c
AMWPH3015S	3.0±0.2	3.0±0.2	1.5±0.15	2.5±0.2	0.9±0.2	/	1.0Typ.	1.4Typ.	2.7Typ.
AMWPH4018S	4.0±0.2	4.0±0.2	1.8±0.2	3.3±0.2	1.1±0.2	/	1.2Typ.	1.8Typ.	3.7Typ.
AMWPH5030S	5.0±0.2	5.0±0.2	2.9±0.2	4.0±0.2	1.25±0.2	2.3 Typ.	1.8Typ.	2.0Typ.	4.2Typ
AMWPH6045S	6.0±0.3	6.0±0.3	4.4±0.2	4.9±0.3	1.55±0.3	2.8 Typ.	2.5 Typ.	2.2Typ.	5.7Typ.

Sunlord Industrial Park, Dafuyuan Industrial Zone, Guanlan, Shenzhen, China 518110 **Tel**: 0086-755-29832660 **Fax**: 0086-755-82269029 **E-Mail**: sunlord@sunlordinc.com

SPECIFICATIONS

AMWPH3015S Series

Parameters	Inductance	DC Resistance		Saturation Current	Heat Rating Current
	0.1MHz,1V	Max.	Typ.	Typ.	Typ.
Unit	uH	Ω		A	A
Symbol	L	DCR		Isat	Irms
AMWPH3015S1R0NT	1.0±30%	0.043	0.036	2.75	2.40
AMWPH3015S1R5NT	1.5±30%	0.052	0.043	2.20	2.22
AMWPH3015S2R2MT	2.2±20%	0.068	0.057	1.70	1.92
AMWPH3015S3R3MT	3.3±20%	0.098	0.082	1.50	1.55
AMWPH3015S4R7MT	4.7±20%	0.120	0.100	1.15	1.47
AMWPH3015S6R8MT	6.8±20%	0.180	0.150	1.00	1.20
AMWPH3015S100MT	10±20%	0.288	0.240	0.80	0.95
AMWPH3015S150MT	15±20%	0.360	0.300	0.70	0.84
AMWPH3015S220MT	22±20%	0.552	0.460	0.56	0.70
AMWPH3015S330MT	33±20%	1.092	0.910	0.48	0.50
AMWPH3015S470MT	47±20%	1.248	1.040	0.35	0.48
AMWPH3015S101MT	100±20%	2.880	2.400	0.25	0.30

AMWPH4018S Series

Parameters	Inductance	DC Resistance		Saturation Current	Heat Rating Current
	0.1MHz,1V	Max.	Typ.	Typ.	Typ.
Unit	uH	Ω		A	A
Symbol	L	DCR		Isat	Irms
AMWPH4018S1R0NT	*1.0±30%*	*0.036*	*0.030*	*5.50*	*3.00*
AMWPH4018S1R5NT	*1.5±30%*	*0.043*	*0.036*	*4.60*	*2.85*
AMWPH4018S2R2MT	*2.2±20%*	*0.060*	*0.050*	*4.00*	*2.55*
AMWPH4018S3R3MT	3.3±20%	0.066	0.055	2.90	2.50
AMWPH4018S4R7MT	4.7±20%	0.094	0.078	2.20	2.00
AMWPH4018S6R8MT	*6.8±20%*	*0.127*	*0.106*	*1.90*	*1.75*
AMWPH4018S8R2MT	*8.2±20%*	*0.172*	*0.143*	*1.85*	*1.50*
AMWPH4018S100MT	*10±20%*	*0.187*	*0.156*	*1.50*	*1.48*
AMWPH4018S120MT	*12±20%*	*0.278*	*0.232*	*1.75*	*1.10*
AMWPH4018S150MT	*15±20%*	*0.354*	*0.295*	*1.50*	*1.00*
AMWPH4018S220MT	*22±20%*	*0.408*	*0.340*	*1.20*	*0.95*
AMWPH4018S330MT	*33±20%*	*0.582*	*0.485*	*1.00*	*0.70*
AMWPH4018S470MT	*47±20%*	*0.774*	*0.645*	*0.70*	*0.65*

Sunlord Industrial Park, Dafuyuan Industrial Zone, Guanlan, Shenzhen, China 518110 **Tel**: 0086-755-29832660 **Fax**: 0086-755-82269029 **E-Mail**: sunlord@sunlordinc.com

SPECIFICATIONS

AMWPH5030S Series

Parameters	Inductance	DC Resistance		Saturation Current	Heat Rating Current
	0.1MHz,1V	Max.	Typ.	Typ.	Typ.
Unit	uH	Ω		A	A
Symbol	L	DCR		Isat	Irms
AMWPH5030SR47NT	*0.47±30%*	*0.013*	*0.011*	*13.00*	*5.15*
AMWPH5030S1R0NT	1.0±30%	0.017	0.014	9.50	4.55
AMWPH5030S1R5NT	*1.5±30%*	*0.022*	*0.018*	*7.50*	*4.00*
AMWPH5030S2R2MT	2.2±20%	0.038	0.032	7.10	3.20
AMWPH5030S3R3MT	3.3±20%	0.043	0.036	5.10	2.75
AMWPH5030S4R7MT	4.7±20%	0.068	0.057	4.50	2.40
AMWPH5030S100MT	10±20%	0.115	0.096	3.15	1.60
AMWPH5030S220MT	22±20%	0.254	0.212	*1.95*	0.88
AMWPH5030S330MT	33±20%	0.367	0.306	1.55	0.75

AMWPH6045S Series

Parameters	Inductance	DC Resistance		Saturation Current	Heat Rating Current
	0.1MHz,1V	Max.	Typ.	Typ.	Typ.
Unit	uH	Ω		A	A
Symbol	L	DCR		Isat	Irms
AMWPH6045SR55MT	0.55±20%	0.009	0.007	15.50	6.50
AMWPH6045S1R0MT	1.0±20%	0.013	0.010	10.50	5.90
AMWPH6045S1R5MT	1.5±20%	0.016	0.012	8.70	5.40
AMWPH6045S2R2MT	2.2±20%	0.020	0.016	6.90	4.70
AMWPH6045S4R7MT	4.7±20%	0.040	0.030	5.15	3.40
AMWPH6045S100MT	10±20%	0.060	0.049	3.45	2.70
AMWPH6045S150MT	15±20%	0.085	0.071	2.70	2.05
AMWPH6045S220MT	22±20%	0.140	0.116	2.25	1.75
AMWPH6045S470MT	47±20%	0.300	0.225	1.50	1.20
AMWPH6045S680MT	68±20%	0.395	0.328	1.30	1.00
AMWPH6045S101MT	100±20%	0.560	0.460	1.05	0.85

Note:

※1 : Rated current: Isat or Irms, whichever is smaller.
※2 : Saturation Current : DC current at which the inductance drops approximate 30% from its value without current.
※3 : Heat Rating Current: DC current that causes the temperature rise (ΔT=40℃) from 20℃ ambient;
The part temperature (ambient + temp. rise) should not exceed 125 °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

Sunlord Industrial Park, Dafuyuan Industrial Zone, Guanlan, Shenzhen, China 518110 **Tel**: 0086-755-29832660 **Fax**: 0086-755-82269029 **E-Mail**: sunlord@sunlordinc.com

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Fixed Inductors ***category:***

Click to view products by Sunlord ***manufacturer:***

Other Similar products are found below :

CR32NP-151KC CR32NP-180KC CR32NP-181KC CR32NP-1R5MC CR32NP-390KC CR32NP-3R9MC CR32NP-680KC CR32NP-820KC CR32NP-8R2MC CR43NP-390KC CR43NP-560KC CR43NP-680KC CR54NP-181KC CR54NP-470LC CR54NP-820KC CR54NP-8R5MC 70F224AI MGDQ4-00004-P MHL1ECTTP18NJ MHQ1005P10NJ MHQ1005P1N0S MHQ1005P2N4S MHQ1005P3N6S MHQ1005P5N1S MHQ1005P8N2J PE-51506NL PE-53601NL PE-53602NL PE-53630NL PE-53824SNLT PE-92100NL PG0434.801NLT PG0936.113NLT 9220-20 9310-16 PM06-2N7 PM06-39NJ A01TK 1206CS-471XJ HC2LP-R47-R HC2-R47-R HC3-2R2-R HCF1305-3R3-R 1206CS-151XG RCH664NP-140L RCH664NP-4R7M RCH8011NP-221L RCP1317NP-332L RCP1317NP-391L RCR1010NP-470M