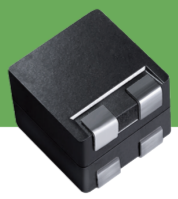
2in1 Molded SMD Power Inductor – AMPR Series



Operating Temp : -55°C ~+125°C (Including self-heating)

FEATURES

- Low loss with low DCR
- High Performance
- AEC-Q200 verified

APPLICATIONS

- Intelligent Cockpit

PRODUCT IDENTIFICATION

1	2	3	4	5	6	7
AMPR	0607	H	3R3	M	T	□□□

1 Type

AMPR	Automotive Molded SMD Power Inductor

2 External Dimensions(L×W×H) [mm]

0607	6.9×7.6×7.3
1009	10.2×9.2×10.8

3 Feature Type

H	H Type

4 Nominal Inductance

Example	Nominal Value
3R3	3.3μH
4R7	4.7μH
6R8	6.8μH
100	10μH
220	22μH

5 Inductance Tolerance

M	±20%

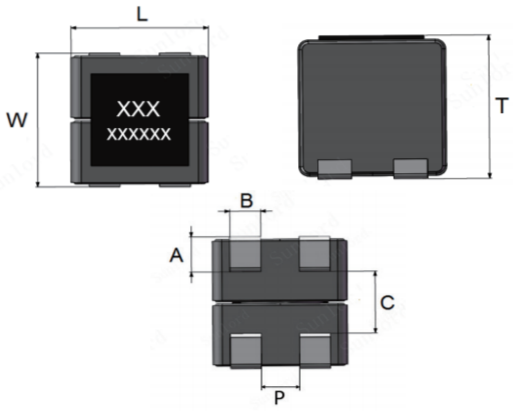
6 Packing

T	Tape Carrier Package

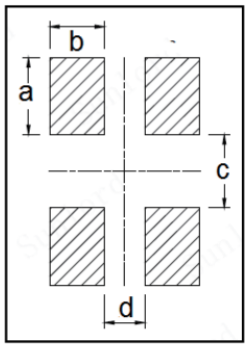
7 Design Code

□□□	Standard product is blank

SHAPE AND DIMENSIONS



Recommended Land Pattern



Unit: mm

Series	L	W	T	A	B	C	P	a	b	c	d
AMPR0607H	6.9±0.3	7.6±0.3	7.3±0.3	2.0±0.3	1.65±0.2	3.4ref.	1.6±0.2	3.2ref.	2.0ref.	3.55ref.	1.25ref.
AMPR1009H	10.2±0.3	9.2±0.3	10.8±0.3	2.6±0.3	2.5±0.2	4.3ref.	2.4±0.2	4.05ref.	2.85ref.	3.84ref.	2.1ref.

SHAPE AND DIMENSIONS

AMPR0607H Series

Part Number	Inductance	DC Resistance		Saturation Current		Heat Rating Current		Withstanding Voltage
	100KHz/1V	Max.	Typ.	Max.	Typ.	Max.	Typ.	Typ.
Units	μH	mΩ		A		A		VDC
Symbol	L	DCR		Isat		Irms		/
AMPR0607H3R3MT	3.3±20%	19.2	16	11.1	13.0	5.1	5.7	75
AMPR0607H100MT	10.0±20%	51	43	5.8	6.8	3.2	3.5	
AMPR0607H220MT	22.0±20%	134	112	3.7	4.2	2.0	2.2	

AMPR1009H Series

Part Number	Inductance	DC Resistance		Saturation Current		Heat Rating Current		Withstanding Voltage
	100KHz/1V	Max.	Typ.	Max.	Typ.	Max.	Typ.	Typ.
Units	μH	mΩ		A		A		VDC
Symbol	L	DCR		Isat		Irms		/
AMPR1009H3R3MT	3.3±20%	8.6	7.5	23.4	26.0	8.0	9.0	75
AMPR1009H100MT	10.0±20%	22	18	10.0	12.0	5.2	5.8	
AMPR1009H220MT	22.0±20%	56	46	7.3	8.3	3.2	3.5	

Note: ※1:Rated current: Isat(Max.) or Irms(Max.), whichever is smaller.
※2:Saturation Current: Typ.Value, DC current at which the inductance drops approximately 30% from its value without current;
※3:Heat Rating Current: DC current that causes an approximate ΔT of 40°C from 20°C 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.