



Assembled Wire Wound SMD Power Inductors

– AWPE Series

Operating Temp. : -55°C~+150°C (Including self-heating)



FEATURES

- Metal alloy core
- High saturation current, low DC resistance
- Excellent temperature stability
- High reliability, AEC-Q200 qualified
- Simple assembled structure
- Close magnetic circuit design reduce leakage

APPLICATIONS

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

PRODUCT IDENTIFICATION

AWPE
①

101006
②

H
③

2R2
④

M
⑤

T
⑥

□□□
⑦

①	Type
AWPE	Assembled Wire Wound SMD Power Inductor

⑤	Inductance Tolerance
N	±30%
M	±20%

②	External Dimensions (L×W×H) [mm]
101006	10×10×6.0

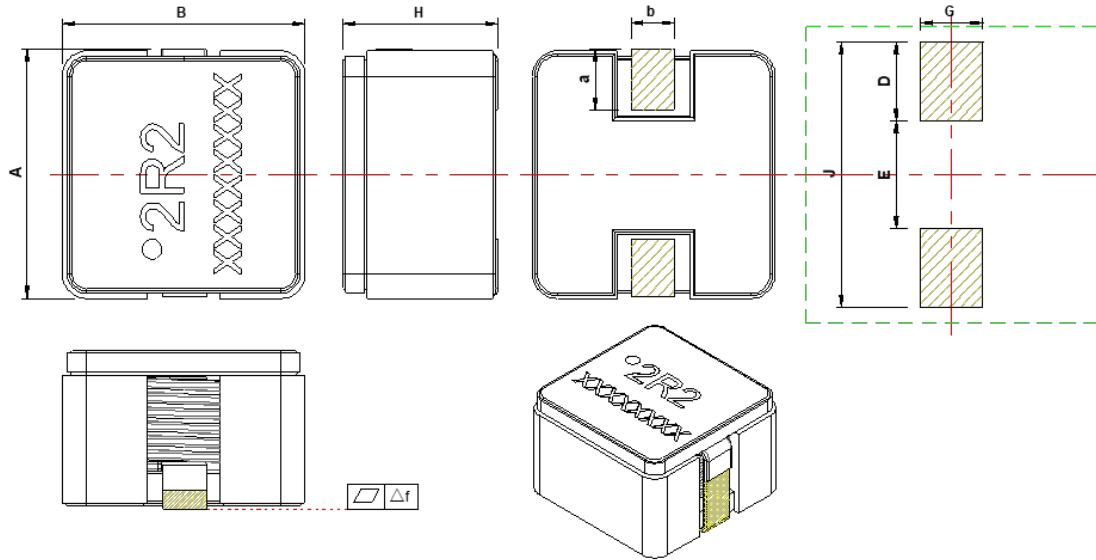
⑥	Packing
T	Tape & Reel

③	Feature Type
H	H Type material

④	Nominal Inductance
Example	Nominal Value
2R2	2.2μH

⑦	Design Code	
□□□	blank	Flat wire
	R01	Round wire

SHAPE AND DIMENSIONS



Unit: mm

A	B	H	Δf	a	b	D	E	G	J
10.2±0.5	10.0±0.5	6.2±0.5	0.1Max.	2.2±0.3	1.8±0.2	3.2Typ.	4.8Typ.	2.6Typ.	11.2 Typ.

SPECIFICATIONS

AWPE101006H Series

Part Number	Inductance	DC Resistance		Saturation Current	Heat Rating Current
	0.1MHz/1V	Max.	Typ.	Typ.	Typ.
Units	μH	$\text{m}\Omega$		A	A
Symbol	L	DCR		I_{sat}	I_{rms}
AWPE101006H1R0MT	1.0±20%	2.8	2.3	25.6	22
AWPE101006H1R5MT	1.5±20%	3.4	2.8	21.6	20
AWPE101006H2R2MT	2.2±20%	4	3.3	19.2	18
AWPE101006H3R3MT	3.3±20%	6.1	5.1	13.2	15.5
AWPE101006H4R7MT	4.7±20%	7.7	6.4	12	14
AWPE101006H5R6MT	5.6±20%	12.7	10.6	11.2	10.5
AWPE101006H6R8MT	6.8±20%	13.9	11.6	10.8	10
AWPE101006H8R2MT	8.2±20%	15.1	12.6	8.4	9

Note: ※1 : Rated current: I_{sat} or I_{rms} , 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 ($\Delta T=40^\circ\text{C}$) from 20°C ambient;

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.