



## Feature

1. Ultra low cost.
2. Shielded construction.
3. High current rating up to DC 40 Amp.
4. High frequency range up to 1.0 MHz.
5. Very low DC resistance.
6. All lead-free. (RoHS)

## Application

1. Motherboards for laptop and desktop computers.
2. DC/DC converter in distributed power systems or VRM applications.
3. Inductor for general purpose use.

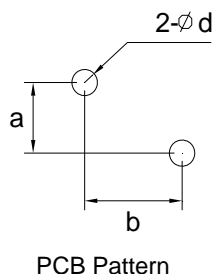
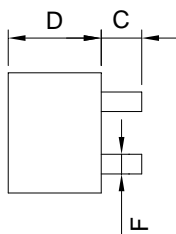
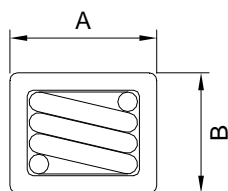
## Product Identification

**APL 1310 P1 - R47 M - C**  
**1 2 3 4 5 6**

1. Series Name.
2. Dimension.
3. RI core material.

4. Inductance. ( See Details )
5. Tolerance. ( See Details )
6. Cover type RI core.

## Configurations & Dimensions



Unit: mm

Series Name	A	B	C	D
APL1310P	13.5 Max.	12.5 Max.	3.5±0.5	10.0 Max.
APL1108P	11.7 Max.	11.7 Max.	3.5±0.5	8.5 Max.
APL1108P-C	11.7 Max.	11.7 Max.	3.5±0.5	9.5 Max.
APL11T08PM	11.7 Max.	9.7 Max.	3.5±0.5	8.5 Max.
APL1008P	11.0 Max.	11.5 Max.	3.5±0.5	8.5 Max.
APL0806P	8.2 Max.	8.2 Max.	3.5±0.5	6.0 Max.
APL0806P-C	8.2 Max.	8.2 Max.	3.5±0.5	7.0 Max.

※ Please contact with our sales department for detail dimension and recommend PCB layout.

## Shielded Construction - DIP / APL Series

### Electrical Characteristics / APL1310P



System Number	Part Number	Inductance ( $\mu$ H)	Test Condition ( Volt / Hz )	DCR (m $\Omega$ ) @25°C $\pm$ 8%	Temperature Rise Current ( mA )	Saturation Current ( mA )
WP54D0701-00	APL1310P1-R47 __	0.47	1.0 / 100K	0.75	40,000	50,000 ※
WP54D0702-00	APL1310P1-R60 __	0.60	1.0 / 100K	0.75	40,000	50,000 ※
WP54D0703-00	APL1310P1-R80 __	0.80	1.0 / 100K	0.75	39,000	50,000
WP54D0804-00	APL1310P-1R0 __	1.00	1.0 / 100K	1.15	32,000	42,000 ※
WP54D0811-00	APL1310P-1R5 __	1.50	1.0 / 100K	1.85	26,000	42,000
WP54D0812-00	APL1310P-2R0 __	2.00	1.0 / 100K	3.00	21,000	35,000
WP54D0814-00	APL1310P-2R4 __	2.40	1.0 / 100K	3.00	20,000	25,000
WP54D0813-00	APL1310P-3R3 __	3.30	1.0 / 100K	4.30	17,000	22,000

### Electrical Characteristics / APL1108P



System Number	Part Number	Inductance ( $\mu$ H)	Test Condition ( Volt / Hz )	DCR (m $\Omega$ ) @25°C $\pm$ 8%	Temperature Rise Current ( mA )	Saturation Current ( mA )
WP54D0501-00	APL1108P-R47 __	0.47	1.0 / 100K	0.80	38,000	50,000 ※
WP54D0502-00	APL1108P-R60 __	0.60	1.0 / 100K	0.80	38,000	50,000
WP54D0503-00	APL1108P-R80 __	0.80	1.0 / 100K	1.30	31,000	45,000
WP54D0504-00	APL1108P-1R0 __	1.00	1.0 / 100K	1.30	31,000	35,000
WP54D0511-00	APL1108P-1R5 __	1.50	1.0 / 100K	1.80	26,000	25,000
WP54D0512-00	APL1108P-2R0 __	2.00	1.0 / 100K	3.30	20,000	30,000
WP54D0513-00	APL1108P-3R3 __	3.30	1.0 / 100K	6.30	14,000	25,000

Note:

1. Temperature Rise Current that will cause temperature rise approximate 40°C without core loss. (Ta=25 $\pm$ 5°C)
2. Saturation Rated Current that will cause initial inductance value approximately 20% rolloff. (Ta=25 $\pm$ 5°C)

※ Saturation Rated Current that will cause initial inductance value approximately 10% rolloff. (Ta=25 $\pm$ 5°C)

## ■ Electrical Characteristics / APL1108P-C



System Number	Part Number	Inductance ( $\mu$ H)	Test Condition ( Volt / Hz )	DCR (m $\Omega$ ) @25°C $\pm$ 8%	Temperature Rise Current ( mA )	Saturation Current ( mA )
WP54D0601-00	APL1108P-R47 _ -C	0.47	1.0 / 100K	0.80	41,000	50,000
WP54D0602-00	APL1108P-R60 _ -C	0.60	1.0 / 100K	0.80	41,000	50,000
WP54D0603-00	APL1108P-R80 _ -C	0.80	1.0 / 100K	1.30	33,000	45,000
WP54D0604-00	APL1108P-1R0 _ -C	1.00	1.0 / 100K	1.30	32,000	35,000
WP54D0611-00	APL1108P-1R5 _ -C	1.50	1.0 / 100K	1.80	27,000	25,000
WP54D0612-00	APL1108P-2R0 _ -C	2.00	1.0 / 100K	3.30	20,000	30,000
WP54D0613-00	APL1108P-3R3 _ -C	3.30	1.0 / 100K	6.30	14,000	25,000

## ■ Electrical Characteristics / APL11T08PM



System Number	Part Number	Inductance ( $\mu$ H)	Test Condition ( Volt / Hz )	DCR (m $\Omega$ ) @25°C $\pm$ 8%	Temperature Rise Current ( mA )	Saturation Current ( mA )
WP54D0409-00	APL11T08PM-R25 _	0.25	1.0 / 100K	0.65	43,000	50,000 ※
WP54D0410-00	APL11T08PM-R30 _	0.30	1.0 / 100K	0.65	43,000	45,000

## ■ Electrical Characteristics / APL1008P



System Number	Part Number	Inductance ( $\mu$ H)	Test Condition ( Volt / Hz )	DCR (m $\Omega$ ) @25°C $\pm$ 8%	Temperature Rise Current ( mA )	Saturation Current ( mA )
WP54D0301-00	APL1008P-R47 _	0.47	1.0 / 100K	0.87	36,000	45,000 ※
WP54D0302-00	APL1008P-R60 _	0.60	1.0 / 100K	0.87	36,000	45,000
WP54D0303-00	APL1008P-R80 _	0.80	1.0 / 100K	1.30	30,000	45,000
WP54D0304-00	APL1008P-1R0 _	1.00	1.0 / 100K	1.30	30,000	40,000

Note:

1. Temperature Rise Current that will cause temperature rise approximate 40°C without core loss. (Ta=25 $\pm$ 5°C)
  2. Saturation Rated Current that will cause initial inductance value approximately 20% rolloff. (Ta=25 $\pm$ 5°C)
- ※ Saturation Rated Current that will cause initial inductance value approximately 10% rolloff. (Ta=25 $\pm$ 5°C)

■ **Electrical Characteristics / APL0806P**



System Number	Part Number	Inductance ( $\mu$ H)	Test Condition ( Volt / Hz )	DCR (m $\Omega$ ) @25°C $\pm$ 8%	Temperature Rise Current ( mA )	Saturation Current ( mA )
WP54D0101-00	APL0806P-R47 __	0.47	1.0 / 100K	1.90	22,000	38,000
WP54D0102-00	APL0806P-R60 __	0.60	1.0 / 100K	1.90	21,000	34,000
WP54D0103-00	APL0806P-R80 __	0.80	1.0 / 100K	2.90	17,000	27,000
WP54D0104-00	APL0806P-1R0 __	1.00	1.0 / 100K	4.30	14,000	22,000

■ **Electrical Characteristics / APL0806P-C**



System Number	Part Number	Inductance ( $\mu$ H)	Test Condition ( Volt / Hz )	DCR (m $\Omega$ ) @25°C $\pm$ 8%	Temperature Rise Current ( mA )	Saturation Current ( mA )
WP54D0205-00	APL0806P-R56 _ -C	0.56	1.0 / 100K	1.90	23,000	28,000
WP54D0207-00	APL0806P-R82 _ -C	0.82	1.0 / 100K	2.90	18,000	23,000
WP54D0208-00	APL0806P-1R2 _ -C	1.20	1.0 / 100K	4.30	15,000	21,000

Note:

1. Temperature Rise Current that will cause temperature rise approximate 40°C without core loss. (Ta=25 $\pm$ 5°C)
2. Saturation Rated Current that will cause initial inductance value approximately 20% rolloff. (Ta=25 $\pm$ 5°C)