

# Power Inductor

ADCC Series



Power  
Circuit

Shield

Wire  
Wound

Metal

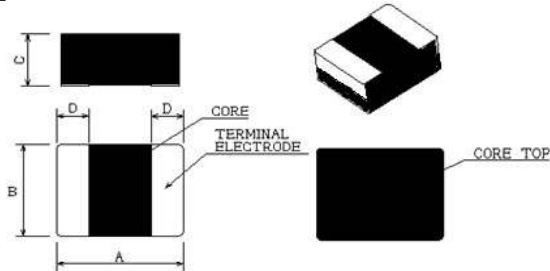
Ultra  
High  
Current

## Part Numbering

A	DCC	00	201612	1R0	M	C1
Grade	Series Name	Control Code	Dimensions Code (mm)	Inductance (uH)	Tolerance	Internal Code
			201612 2.0x1.6x1.2	R15 0.15	M ±20%	
			252012 2.5x2.0x1.2	R24 0.24		
				R33 0.33		
				R47 0.47		
				1R0 1.00		
				1R5 1.50		

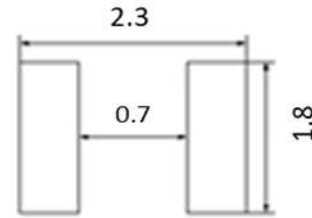
## ADCC00201612 Type

### Dimensions



unit:mm

### Recommended Land Pattern



unit:mm

### Electrical Characteristics

Part No.	Inductance (uH)	Test Freq.	RDC(mΩ) Max(Typ)	Isat(A) Max(Typ)	Irms(A) Max(Typ)	Tolerance (±%)
ADCC00201612R15MC1	0.15	2MHz, 1V	16(10)	7.7(8.6)	5.5(6.9)	20
ADCC00201612R24MC1	0.24	2MHz, 1V	21(16)	5.9(6.5)	5.0(6.2)	20
ADCC00201612R33MC1	0.33	2MHz, 1V	27(22)	5.2(5.8)	4.3(4.8)	20
ADCC00201612R47MC1	0.47	2MHz, 1V	30(24)	4.5(5.0)	3.9(4.5)	20
ADCC00201612R1R0MC1	1.00	2MHz, 1V	50(43)	3.3(3.7)	3.1(3.4)	20
ADCC00201612R1R5MC1	1.50	2MHz, 1V	95(90)	2.5(2.8)	2.3(2.6)	20

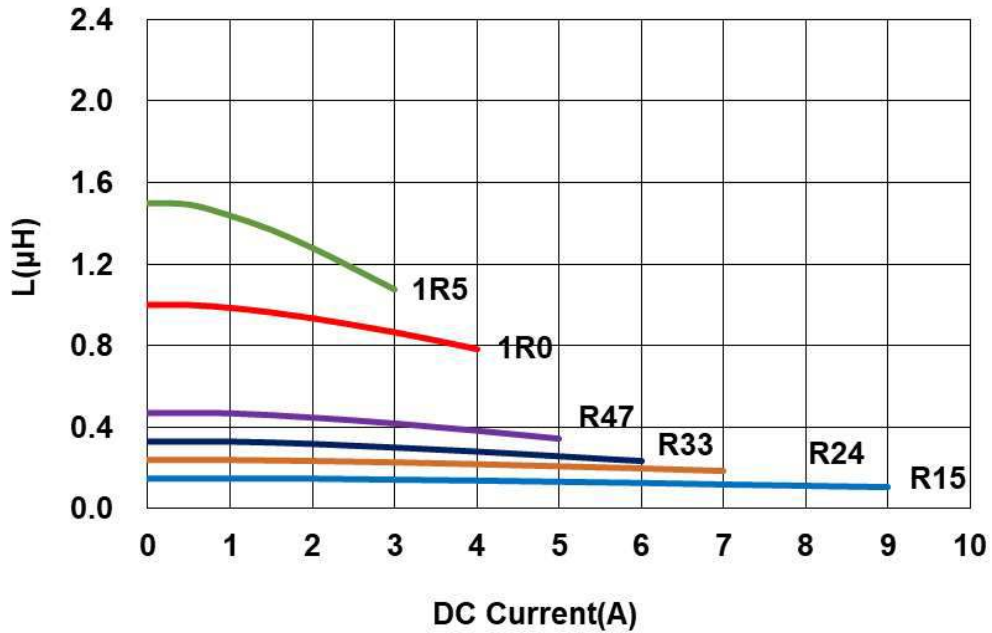
**Note: When ordering, please specify tolerance code. Tolerance: M=±20%**

- Operating temperature range: -40°C~125°C (Including self-temperature rise)
- Isat for Inductance drop 30% from its initial inductance value without applying current
- Irms for a 40°C temperature rise from 25°C ambient with applying current
- Rated current: Isat or Irms, whichever is smaller
- Absolute maximum voltage: 20VDC
- Measure Equipment:
  - L: WK 6500B/HP4285A (or equivalent), 2MHz 1V
  - RDC: Chen Hwa 502BC/HP4338B (or equivalent)
  - Isat: Agilent E4980A+HP42841A (or equivalent)
  - Irms: Agilent 6641 system DC power supply (or equivalent)

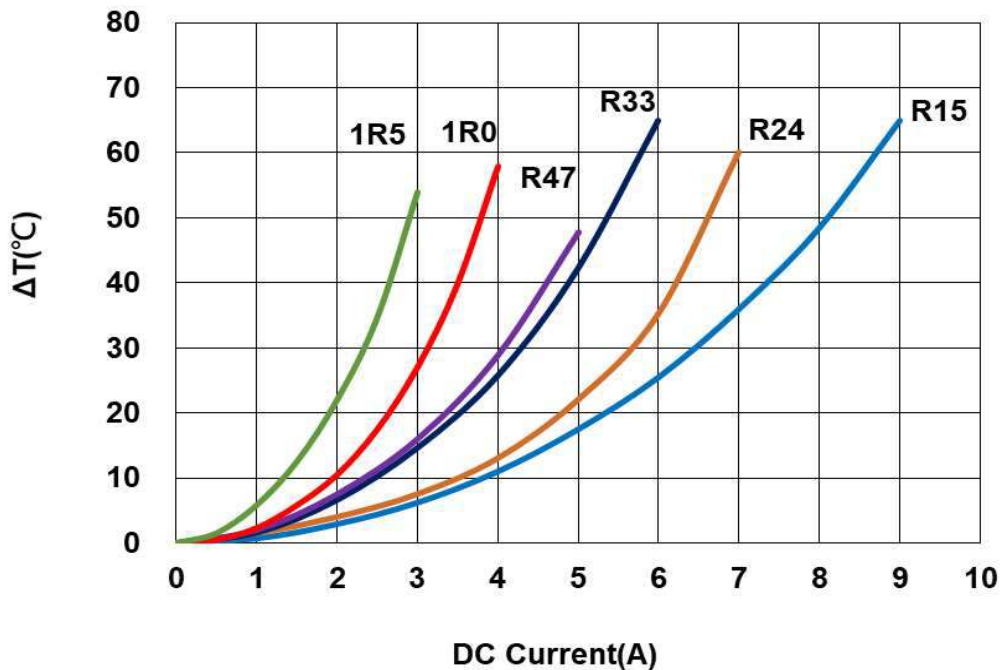
**ADCC00201612 Type**

**Characteristics Graph**

**Inductance vs.DC Current**

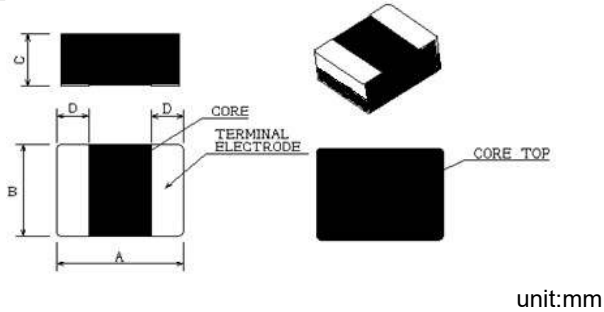


**Temperature Change vs. DC Current**

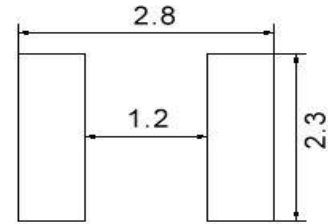


## ADCC00252012 Type

### ■ Dimensions



### ■ Recommended Land Pattern



### ■ Electrical Characteristics

Part No.	Inductance (uH)	Test Freq.	RDC(mΩ) Max(Typ)	Isat(A) Max(Typ)	Irms(A) Max(Typ)	Tolerance (±%)
ADCC00252012R24MC1	0.24	2MHz, 1V	13(8)	8.0(9.0)	6.7(8.5)	20
ADCC00252012R33MC1	0.33	2MHz, 1V	22(16)	6.2(7.0)	4.7(5.4)	20
ADCC00252012R47MC1	0.47	2MHz, 1V	27(21)	5.2(6.1)	4.0(4.7)	20
ADCC002520121R0MC1	1.00	2MHz, 1V	42(35)	3.7(4.3)	3.3(3.8)	20
ADCC002520121R5MC1	1.50	2MHz, 1V	60(55)	3.4(3.8)	2.6(2.9)	20
ADCC002520122R2MC1	2.20	2MHz, 1V	92(85)	2.8(3.1)	2.1(2.3)	20

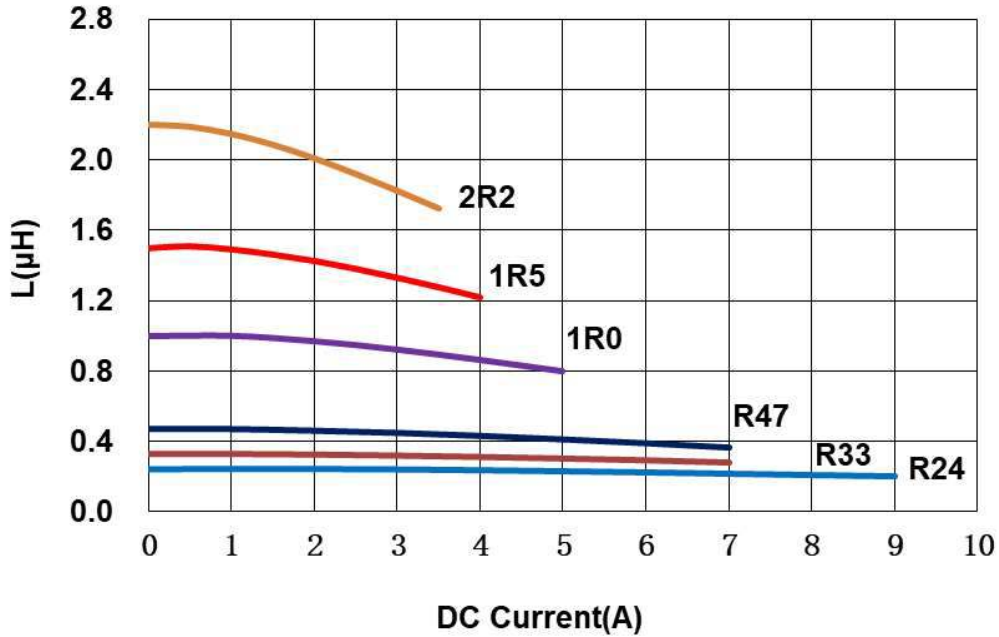
**Note: When ordering, please specify tolerance code. Tolerance: M=±20%**

- Operating temperature range: -40°C~125°C (Including self-temperature rise)
- Isat for Inductance drop 30% from its initial inductance value without applying current
- Irms for a 40°C temperature rise from 25°C ambient with applying current
- Rated current: Isat or Irms, whichever is smaller
- Absolute maximum voltage: 20VDC
- Measure Equipment:
  - L: WK 6500B/HP4285A (or equivalent), 2MHz 1V
  - RDC: Chen Hwa 502BC/HP4338B (or equivalent)
  - Isat: Agilent E4980A+HP42841A (or equivalent)
  - Irms: Agilent 6641 system DC power supply (or equivalent)

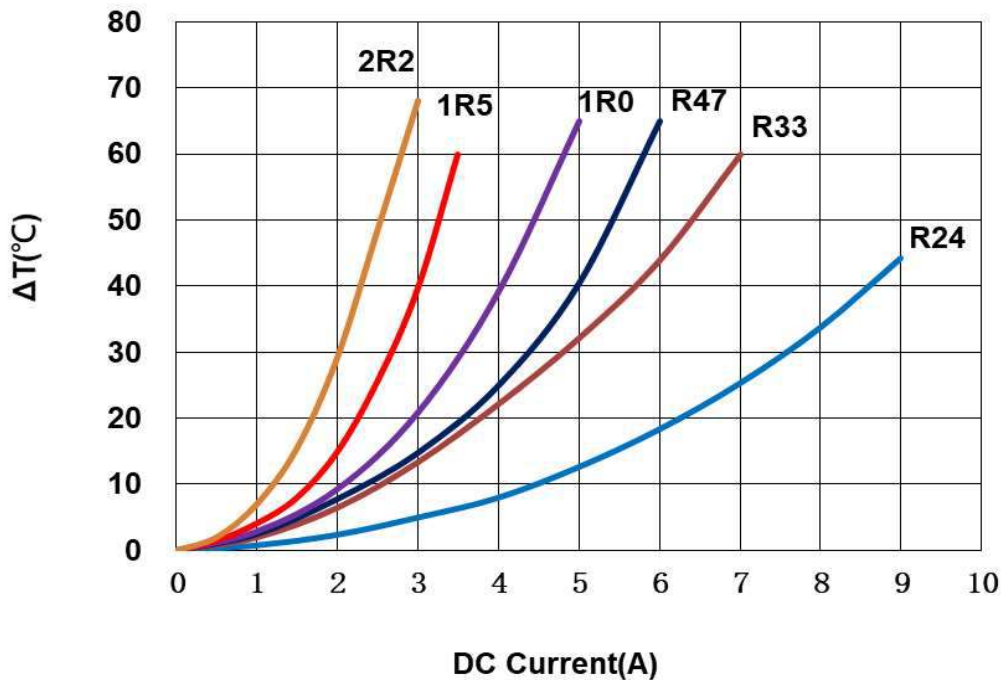
**ADCC00252012 Type**

**Characteristics Graph**

**Inductance vs. DC Current**

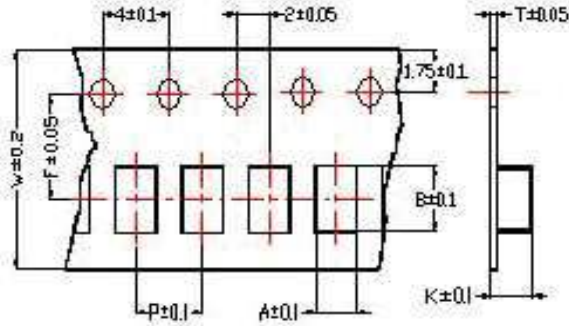


**Temperature Change vs. DC Current**



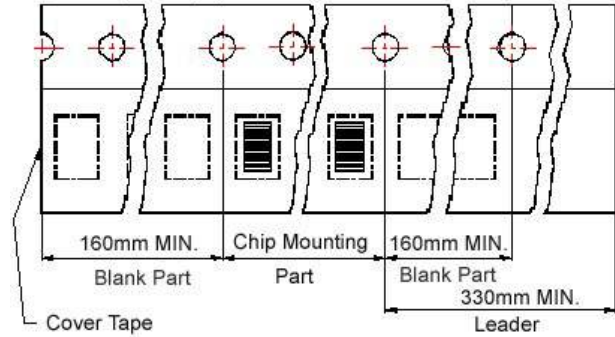
## ■ Packaging

### Tape Dimensions

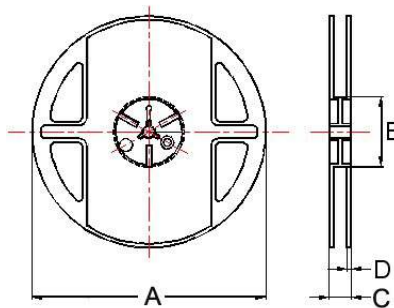


### Tape Material

Carrier Tape: Polycarbonate  
Cover Tape: Polystyrene



### Reel Dimensions



### Dimensions in mm

TYPE	Tape Dimensions							Reel Dimensions				Quantity PCS / Reel
	A	B	T	W	P	F	K	A	B	C	D	
ADCC00201612	1.90	2.20	0.22	8	4	3.5	1.15	178	60	12	2	3000
ADCC00252012	2.30	2.80	0.22	8	4	3.5	1.35	178	60	12	2	3000

### For More Information:

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