

# DATA SHEET

## INDUCTOR

Power Inductors

AWVF Series

RoHS compliant & Halogen Free



**Power Inductor AWVF Series** **Automotive  
AEC-Q200**

RoHS Compliant  
Halogen Free  
REACH Compliant



- Power Circuit
- Shield
- Magnetic Resin LVx
- Ferrite
- High Current

**Part Numbering**

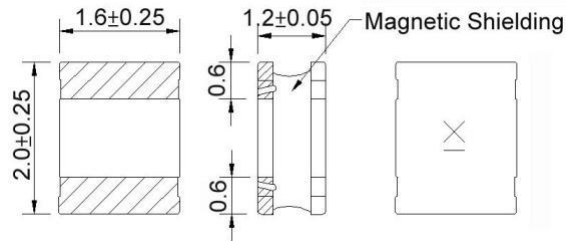
A	WVF	00	404018	1R0	M	00	
Grade	Series Name	Control Code	Dimensions Code (mm)	Inductance (uH)	Tolerance		Internal Code
			201612 2.0x1.6x1.2	R47 0.47	M	±20%	
			252010 2.5x2.0x1.02	1R0 1.0	T	±30%	
			252012 2.5x2.0x1.2	101 100			
			303010 3.0x3.0x1.02				
			303012 3.0x3.0x1.2				
			303015 3.0x3.0x1.5				
			404012 4.0x4.0x1.02				
			404015 4.0x4.0x1.5				
			404018 4.0x4.0x1.9				
			404026 4.0x4.0x2.6				
			505020 5.0x5.0x2.0				
			606020 6.0x6.0x2.0				
			606028 6.0x6.0x2.8				
			808040 8.0x8.0x4.0				

Power Inductor AWVF Series

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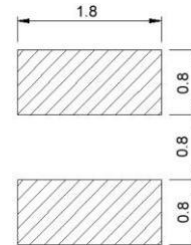
AWVF00201612 Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

■ Electrical Characteristics

Part No.	Inductance (uH)	Test Freq.	RDC (Ω)±30%	Isat(A) Typ.(Max)	Irms(A) Typ.(Max)	Tolerance (±%)	Marking
AWVF00201612R47□00	0.47	1MHz,200mV	0.051	2.70(2.40)	2.30(2.00)	20,30	A
AWVF00201612R68□00	0.68	1MHz,200mV	0.074	2.20(1.90)	2.00(1.80)	20,30	L
AWVF002016121R5□00	1.5	1MHz,200mV	0.130	1.60(1.40)	1.40(1.30)	20,30	D
AWVF002016126R8□00	6.8	1MHz,200mV	0.465	0.82(0.73)	0.78(0.70)	20,30	H

Note: When ordering, please specify tolerance code. Tolerance: M=±20% / T=±30%

1. Operating temperature range - 40°C ~ 125°C
2. Isat for Inductance drop 30% from its value without current
3. I rms for a 40°C temperature rise from 25°C ambient with current
4. Measure Equipment:
  - L: Agilent HP4287A+Agilent HP16197A
  - RDC: DIGITAL MILLINHM METER CHROMA 16502, or equivalent
  - Isat: Agilent HP4284A
  - I rms: Agilent HP4284A

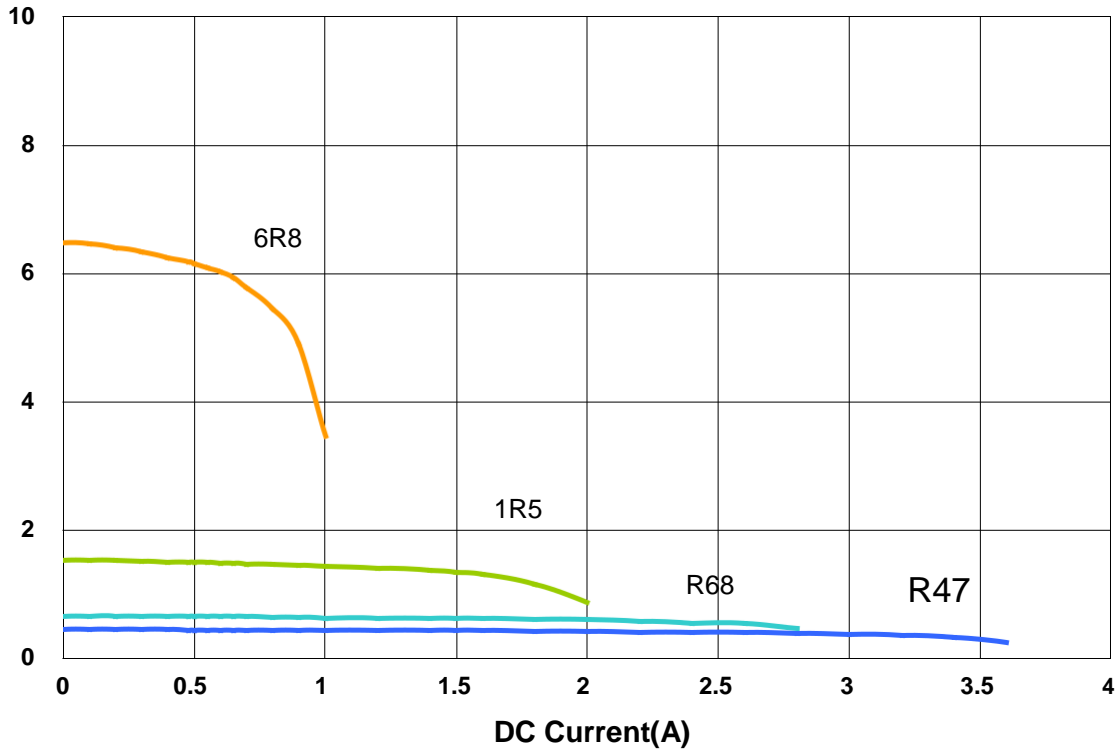
**Power Inductor AWVF Series**

**Automotive  
AEC-Q200**

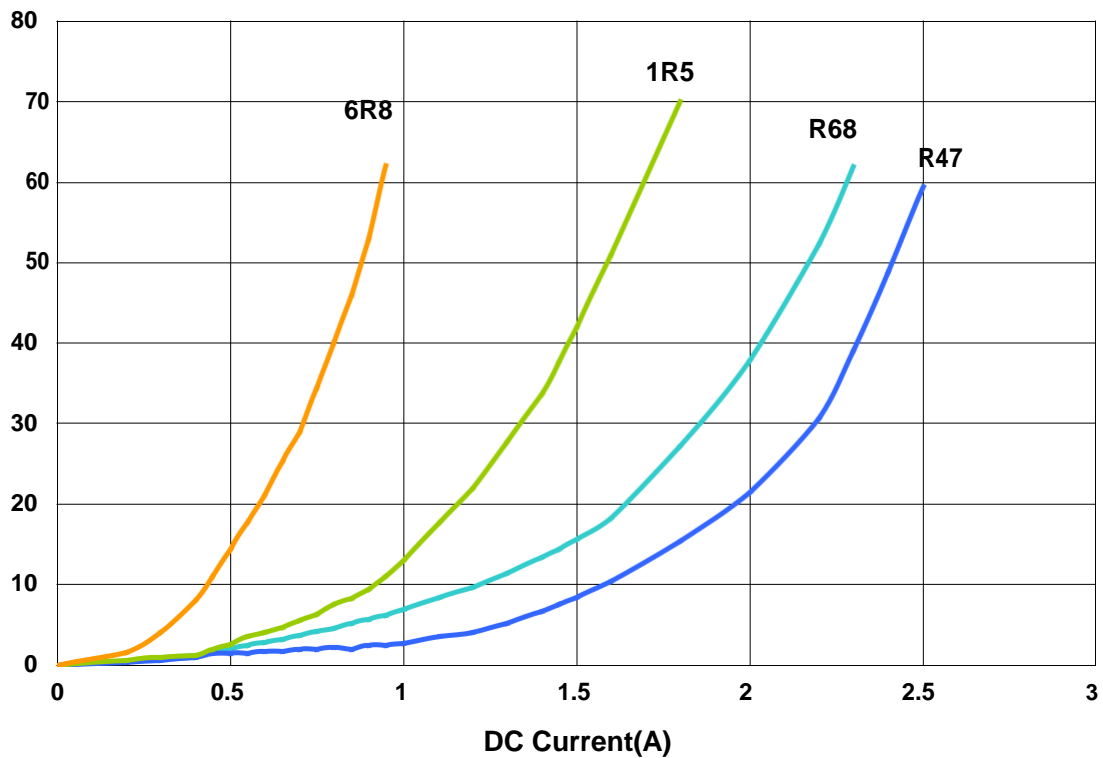
**AWVF00201612 Type**

**■ Characteristics Graph**

**Inductance vs. DC Current**



**Temperature Change vs. DC Current**

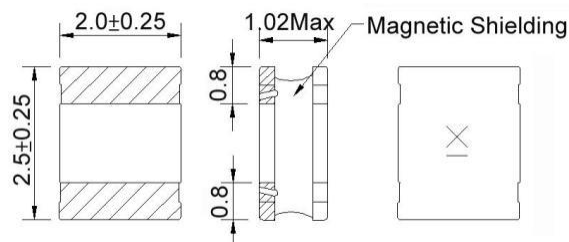


## Power Inductor AWVF Series

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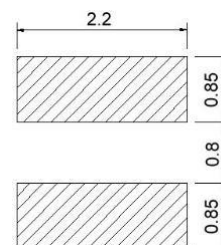
## AWVF00252010 Type

## ■ Dimensions



unit:mm

## ■ Recommended Land Pattern



unit:mm

## ■ Electrical Characteristics

Part No.	Inductance (uH)	Test Freq.	RDC (Ω)±30%	Isat(A) Typ.(Max)	Irms(A) Typ.(Max)	Tolerance (±%)	Marking
AWVF00252010R47□00	0.47	1MHz,200mV	0.045	2.80(2.50)	2.30(2.00)	20,30	A
AWVF002520101R0□00	1.0	1MHz,200mV	0.066	1.90(1.70)	2.00(1.80)	20,30	B
AWVF002520101R5□00	1.5	1MHz,200mV	0.095	1.70(1.50)	1.80(1.60)	20,30	C
AWVF002520104R7□00	4.7	1MHz,200mV	0.285	0.92(0.82)	0.95(0.85)	20,30	F
AWVF00252010100□00	10	1MHz,200mV	0.535	0.60(0.54)	0.70(0.63)	20,30	H
AWVF00252010150□00	15	1MHz,200mV	0.810	0.50(0.45)	0.55(0.49)	20,30	I
AWVF00252010220□00	22	1MHz,200mV	1.200	0.40(0.36)	0.44(0.39)	20,30	J

**Note: When ordering, please specify tolerance code. Tolerance: M=±20% / T=±30%**

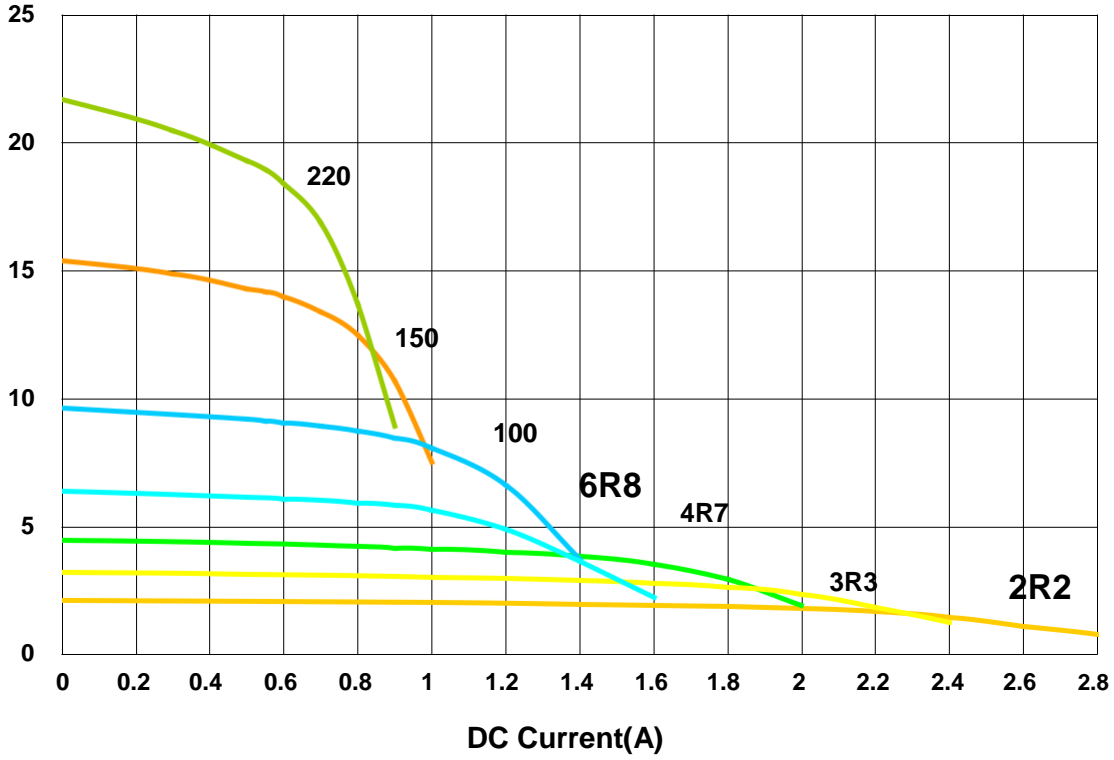
1. Operating temperature range - 40°C ~ 125°C
2. Isat for Inductance drop 30% from its value without current
3. I rms for a 40°C temperature rise from 25°C ambient with current
4. Measure Equipment:
  - L: Agilent HP4287A+Agilent HP16197A
  - RDC: DIGITAL MILLINHM METER CHROMA 16502, or equivalent
  - Isat: Agilent HP4284A
  - I rms: Agilent HP4284A

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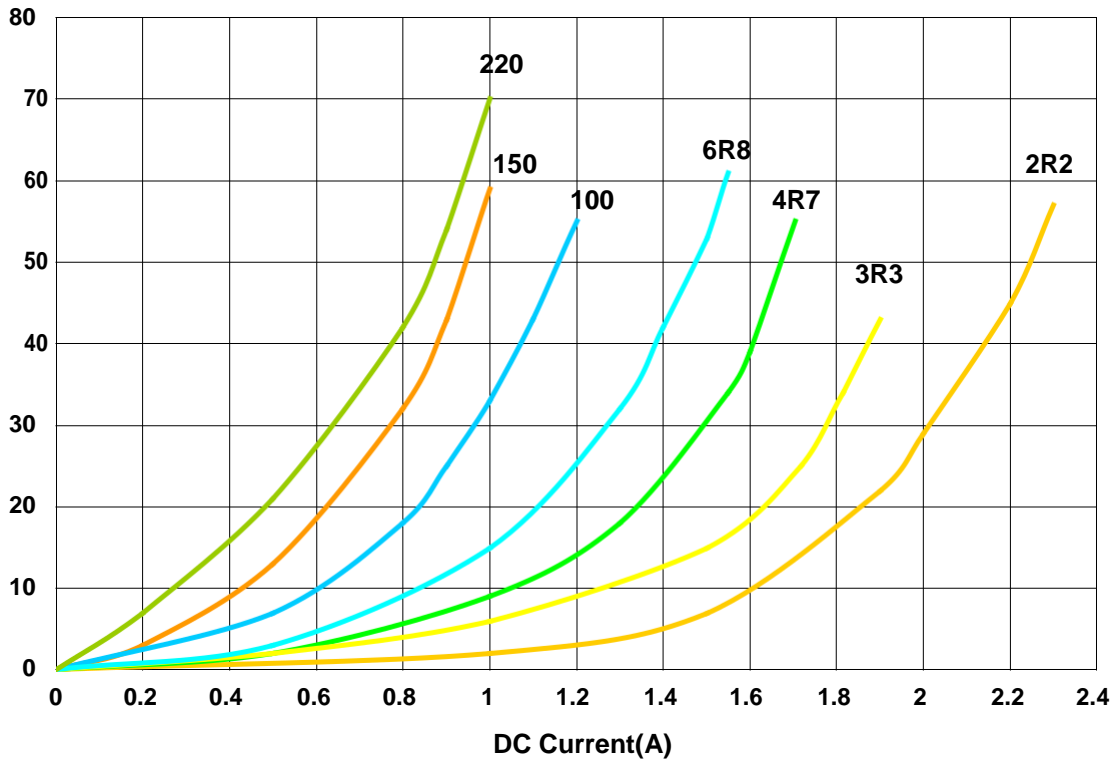
AWVF00252010 Type

Characteristics Graph

Inductance vs. DC Current



Temperature Change vs. DC Current

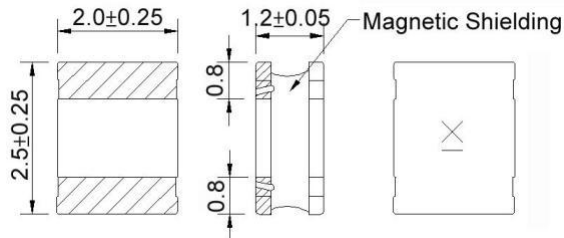


## Power Inductor AWVF Series

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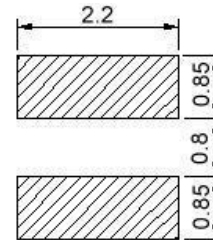
## AWVF00252012 Type

## ■ Dimensions



unit:mm

## ■ Recommended Land Pattern



unit:mm

## ■ Electrical Characteristics

Part No.	Inductance (uH)	Test Freq.	RDC (Ω)±30%	Isat(A) Typ.(Max)	Irms(A) Typ.(Max)	Tolerance (±%)	Marking
AWVF00252012R50□00	0.5	1MHz,200mV	0.028	3.50(3.10)	3.00(2.70)	20,30	B
AWVF002520121R0□00	1.0	1MHz,200mV	0.050	2.50(2.20)	2.40(2.10)	20,30	C
AWVF002520121R2□00	1.2	1MHz,200mV	0.053	2.10(1.80)	2.35(2.10)	20,30	D
AWVF002520121R5□00	1.5	1MHz,200mV	0.068	1.95(1.70)	2.30(2.00)	20,30	E
AWVF002520122R2□00	2.2	1MHz,200mV	0.080	1.80(1.60)	1.80(1.60)	20,30	F
AWVF002520123R3□00	3.3	1MHz,200mV	0.130	1.45(1.20)	1.50(1.30)	20,30	G
AWVF002520124R7□00	4.7	1MHz,200mV	0.190	1.10(0.98)	1.10(0.98)	20,30	H
AWVF002520125R6□00	5.6	1MHz,200mV	0.210	1.05(0.93)	1.00(0.89)	20,30	I
AWVF002520126R8□00	6.8	1MHz,200mV	0.300	0.95(0.84)	0.80(0.71)	20,30	J
AWVF00252012100□00	10	1MHz,200mV	0.385	0.88(0.78)	0.70(0.62)	20,30	K
AWVF00252012150□00	15	1MHz,200mV	0.570	0.68(0.60)	0.62(0.54)	20,30	L
AWVF00252012220□00	22	1MHz,200mV	0.810	0.55(0.48)	0.53(0.46)	20,30	M

**Note: When ordering, please specify tolerance code. Tolerance: M=±20% / T=±30%**

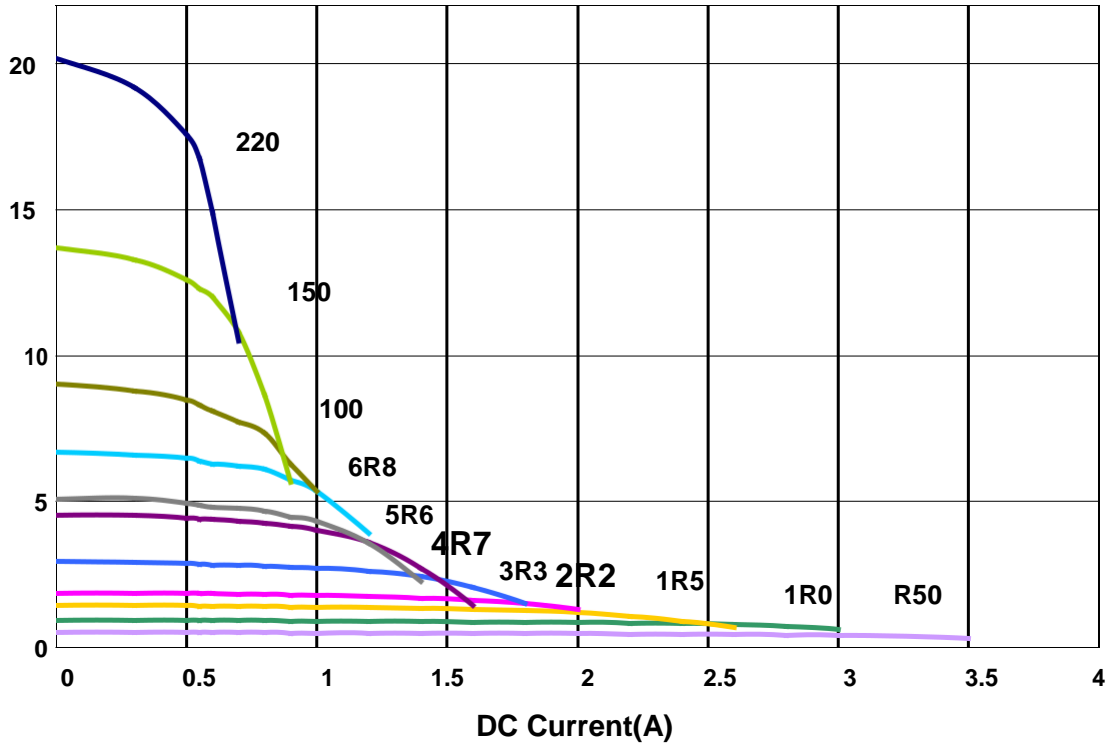
1. Operating temperature range - 40°C ~ 125°C
2. Isat for Inductance drop 30% from its value without current
3. Irms for a 40°C temperature rise from 25°C ambient.
4. Measure Equipment:
  - L: Agilent/HP4287A+Agilent/HP16197A
  - RDC: Digital Milliohm Meter Chroma 16502, or equivalent
  - Isat: Agilent/HP4284A
  - Irms: Agilent/HP4284A

**Power Inductor AWVF Series** **Automotive  
AEC-Q200**

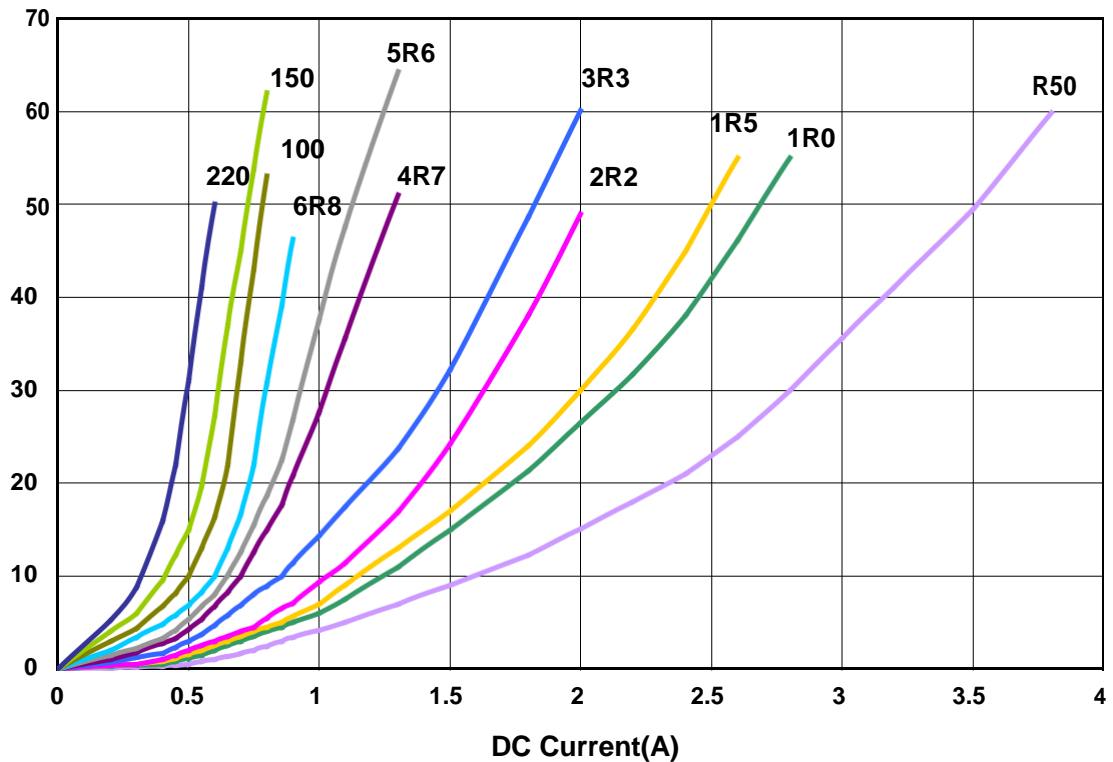
**AWVF00252012 Type**

**■ Characteristics Graph**

**Inductance vs. DC Current**



**Temperature Change vs. DC Current**



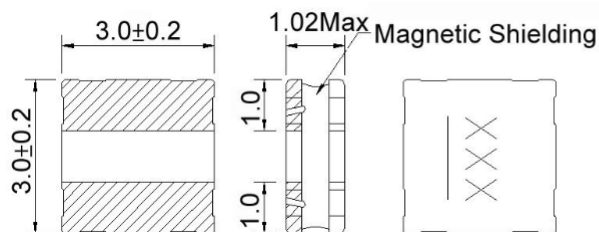


Power Inductor AWVF Series

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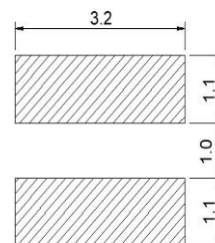
AWVF00303010 Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

■ Electrical Characteristics

Part No.	Inductance (uH)	Test Freq.	RDC (Ω)±30%	Isat(A) Typ.(Max)	Irms(A) Typ.(Max)	Tolerance (±%)	Marking
AWVF003030101R5□00	1.5	1MHz,200mV	0.085	1.80(1.60)	1.70(1.50)	20,30	1R5
AWVF003030102R2□00	2.2	1MHz,200mV	0.100	1.50(1.30)	1.40(1.20)	20,30	2R2
AWVF003030104R7□00	4.7	1MHz,200mV	0.205	1.00(0.90)	0.95(0.85)	20,30	4R7
AWVF003030106R8□00	6.8	1MHz,200mV	0.310	0.87(0.78)	0.85(0.76)	20,30	6R8
AWVF00303010100□00	10	1MHz,200mV	0.430	0.64(0.57)	0.63(0.56)	20,30	100
AWVF00303010150□00	15	1MHz,200mV	0.625	0.56(0.50)	0.55(0.49)	20,30	150
AWVF00303010220□00	22	1MHz,200mV	0.870	0.47(0.42)	0.46(0.41)	20,30	220
AWVF00303010470□00	47	1MHz,200mV	1.750	0.29(0.26)	0.28(0.25)	20,30	470

Note: When ordering, please specify tolerance code. Tolerance: M=±20% / T=±30%

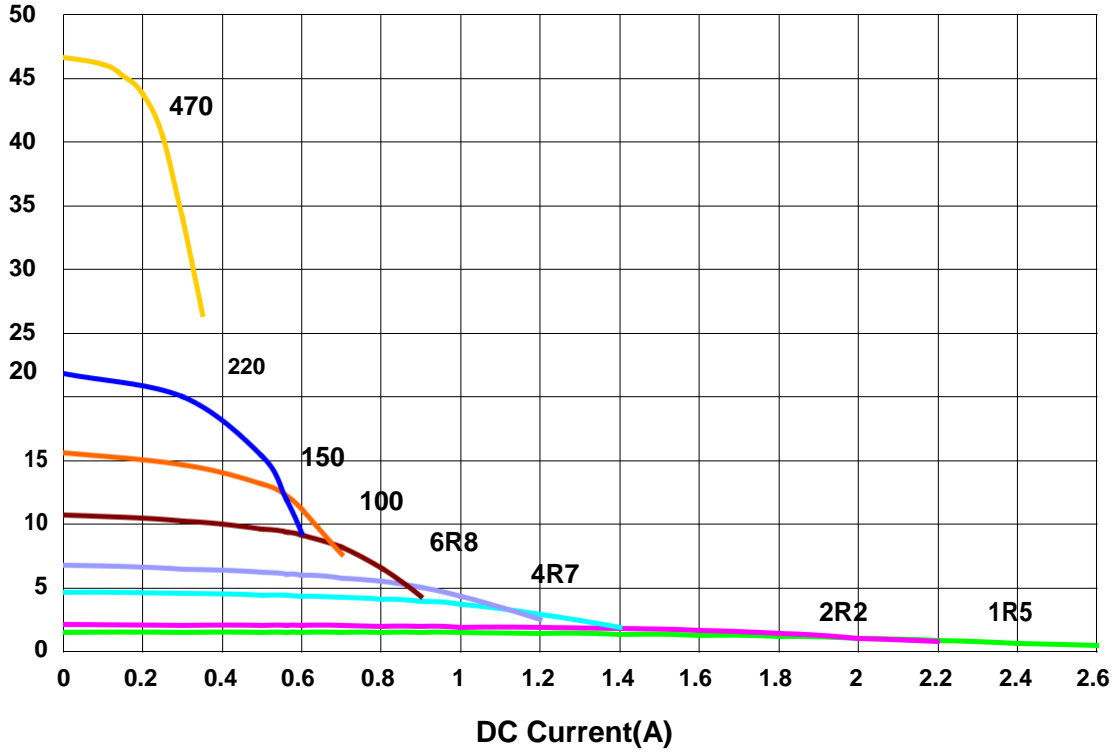
- Operating temperature range - 40°C ~ 125°C
- Isat for Inductance drop 30% from its value without current
- Irms for a 40°C temperature rise from 25°C ambient with current
- Measure Equipment:  
 L: Agilent HP4287A+Agilent HP16197A  
 RDC: DIGITAL MILLINHM METER CHROMA 16502, or equivalent  
 Isat: Agilent HP4284A  
 Irms: Agilent HP4284A

**Power Inductor AWVF Series** **Automotive AEC-Q200**

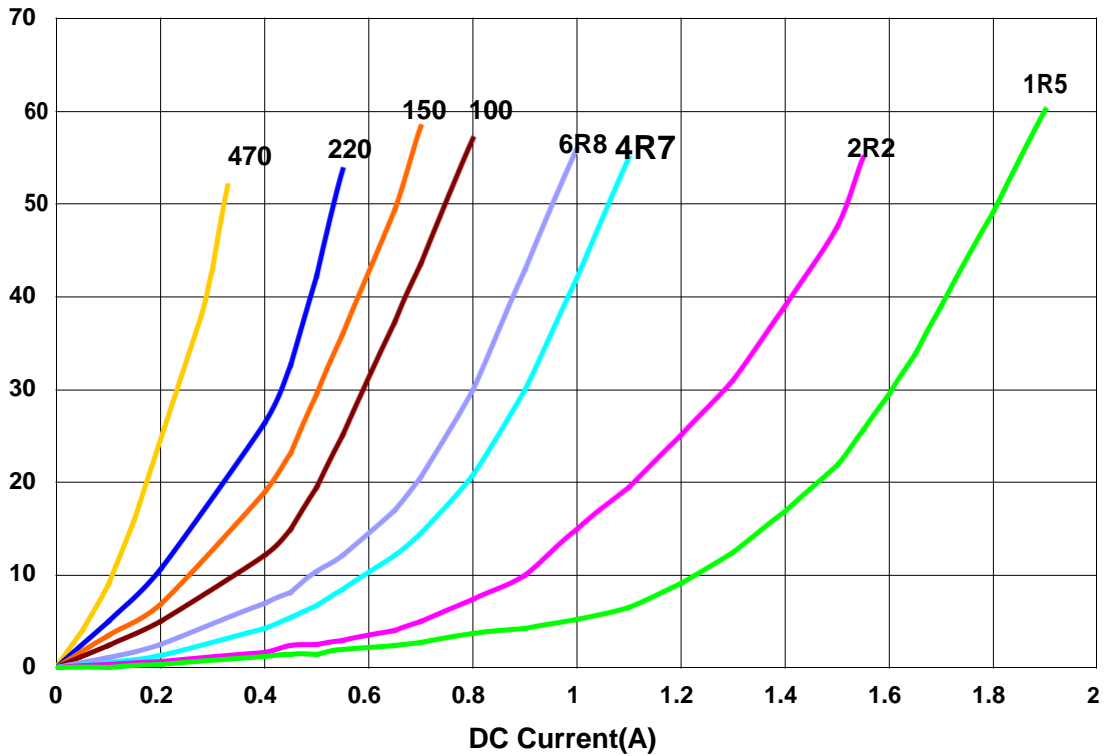
**AWVF00303010 Type**

**Characteristics Graph**

**Inductance vs. DC Current**



**Temperature Change vs. DC Current**

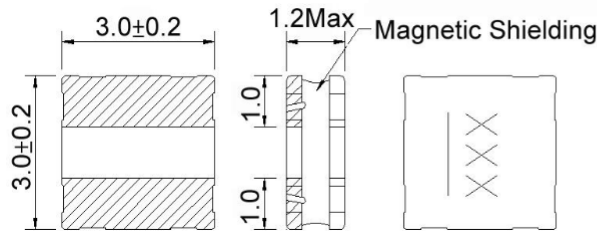


**Power Inductor AWVF Series**

**Automotive  
AEC-Q200**

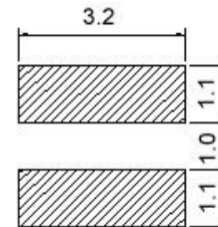
**AWVF00303012 Type**

**■ Dimensions**



unit:mm

**■ Recommended Land Pattern**



unit:mm

**■ Electrical Characteristics**

Part No.	Inductance (uH)	Test Freq.	RDC (Ω)±30%	Isat(A) Typ.(Max)	Irms(A) Typ.(Max)	Tolerance (±%)	Marking
AWVF003030122R2□00	2.2	1MHz,200mV	0.092	2.10(1.80)	2.00(1.80)	20,30	2R2
AWVF003030123R3□00	3.3	1MHz,200mV	0.130	1.84(1.60)	1.80(1.60)	20,30	3R3
AWVF003030124R7□00	4.7	1MHz,200mV	0.180	1.56(1.40)	1.52(1.30)	20,30	4R7
AWVF003030126R8□00	6.8	1MHz,200mV	0.250	1.32(1.10)	1.30(1.10)	20,30	6R8
AWVF00303012100□00	10	1MHz,200mV	0.420	1.06(0.95)	1.00(0.90)	20,30	100
AWVF00303012150□00	15	1MHz,200mV	0.560	0.82(0.73)	0.80(0.72)	20,30	150
AWVF00303012220□00	22	1MHz,200mV	0.860	0.64(0.57)	0.62(0.55)	20,30	220
AWVF00303012470□00	47	1MHz,200mV	1.820	0.49(0.44)	0.43(0.38)	20,30	470

**Note: When ordering, please specify tolerance code. Tolerance: M=±20% / T=±30%**

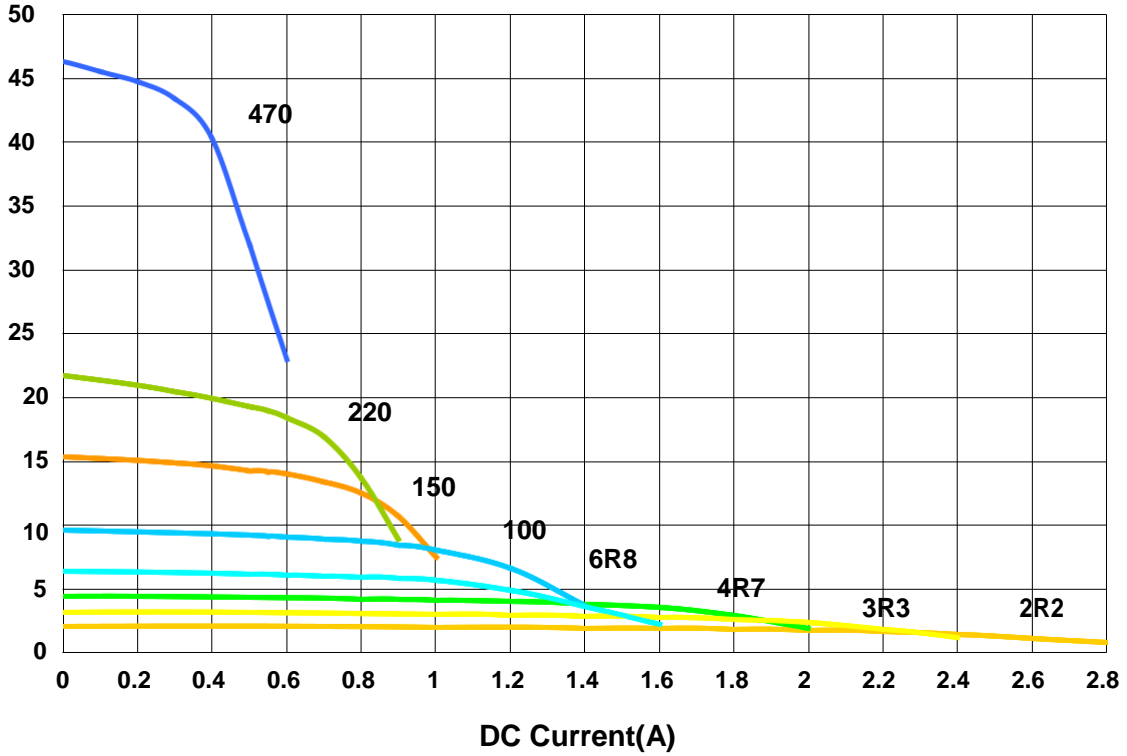
- Operating temperature range - 40°C ~ 125°C
- Isat for Inductance drop 30% from its value without current
- Irms for a 40°C temperature rise from 25°C ambient with current
- Measure Equipment:
  - L: Agilent HP4287A+Agilent HP16197A
  - RDC: DIGITAL MILLINHM METER CHROMA 16502, or equivalent
  - Isat: Agilent HP4284A
  - Irms: Agilent HP4284A

**Power Inductor AWVF Series** **Automotive  
AEC-Q200**

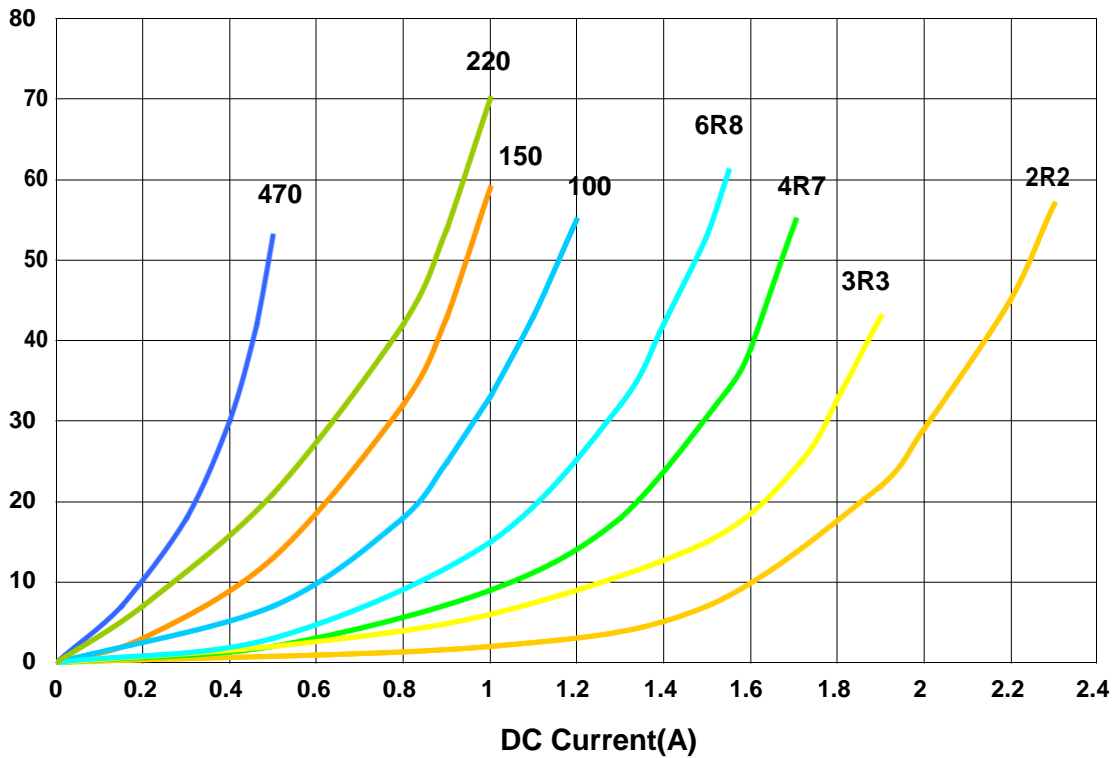
**AWVF00303012 Type**

**Characteristics Graph**

**Inductance vs. DC Current**



**Temperature Change vs. DC Current**

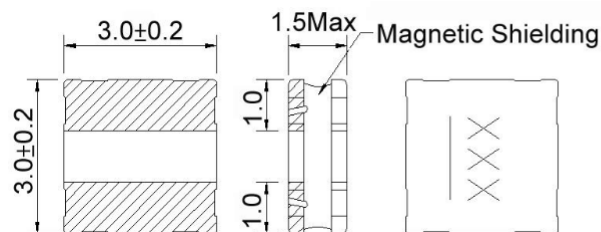


## Power Inductor AWVF Series

Automotive  
AEC-Q200

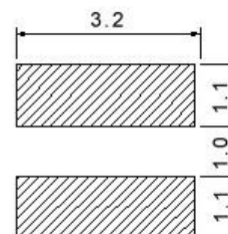
## AWVF00303015 Type

## ■ Dimensions



unit:mm

## ■ Recommended Land Pattern



unit:mm

## ■ Electrical Characteristics

Part No.	Inductance (uH)	Test Freq.	RDC (Ω)±30%	Isat(A) Typ.(Max)	Irms(A) Typ.(Max)	Tolerance (±%)	Marking
AWVF00303015R47□00	0.47	1MHz,200mV	0.036	4.70(4.20)	4.00(3.60)	20,30	R47
AWVF003030151R0□00	1.0	1MHz,200mV	0.054	3.40(3.00)	3.00(2.70)	20,30	1R0
AWVF003030151R5□00	1.5	1MHz,200mV	0.063	3.00(2.70)	2.60(2.30)	20,30	1R5
AWVF003030152R2□00	2.2	1MHz,200mV	0.09	2.30(2.00)	2.00(1.80)	20,30	2R2
AWVF003030153R3□00	3.3	1MHz,200mV	0.125	1.90(1.70)	1.80(1.60)	20,30	3R3
AWVF003030154R7□00	4.7	1MHz,200mV	0.17	1.58(1.40)	1.52(1.30)	20,30	4R7
AWVF003030156R8□00	6.8	1MHz,200mV	0.235	1.34(1.20)	1.30(1.10)	20,30	6R8
AWVF00303015100□00	10	1MHz,200mV	0.36	1.06(0.95)	1.00(0.90)	20,30	100
AWVF00303015150□00	15	1MHz,200mV	0.55	0.90(0.81)	0.8(0.72)	20,30	150
AWVF00303015220□00	22	1MHz,200mV	0.77	0.76(0.68)	0.65(0.58)	20,30	220
AWVF00303015330□00	33	1MHz,200mV	0.93	0.65(0.58)	0.6(0.54)	20,30	330
AWVF00303015470□00	47	1MHz,200mV	1.5	0.52(0.46)	0.42(0.37)	20,30	470
AWVF00303015101□00	100	1MHz,200mV	2.7	0.36(0.32)	0.30(0.27)	20,30	101

**Note: When ordering, please specify tolerance code. Tolerance: M=±20% / T=±30%**

1. Operating temperature range - 40°C ~ 125°C
2. Isat for Inductance drop 30% from its value without current
3. Irms for a 40°C temperature rise from 25°C ambient with current
4. Measure Equipment:

L: Agilent HP4287A+Agilent HP16197A

RDC: DIGITAL MILLINHM METER CHROMA 16502, or equivalent

Isat: Agilent HP4284A

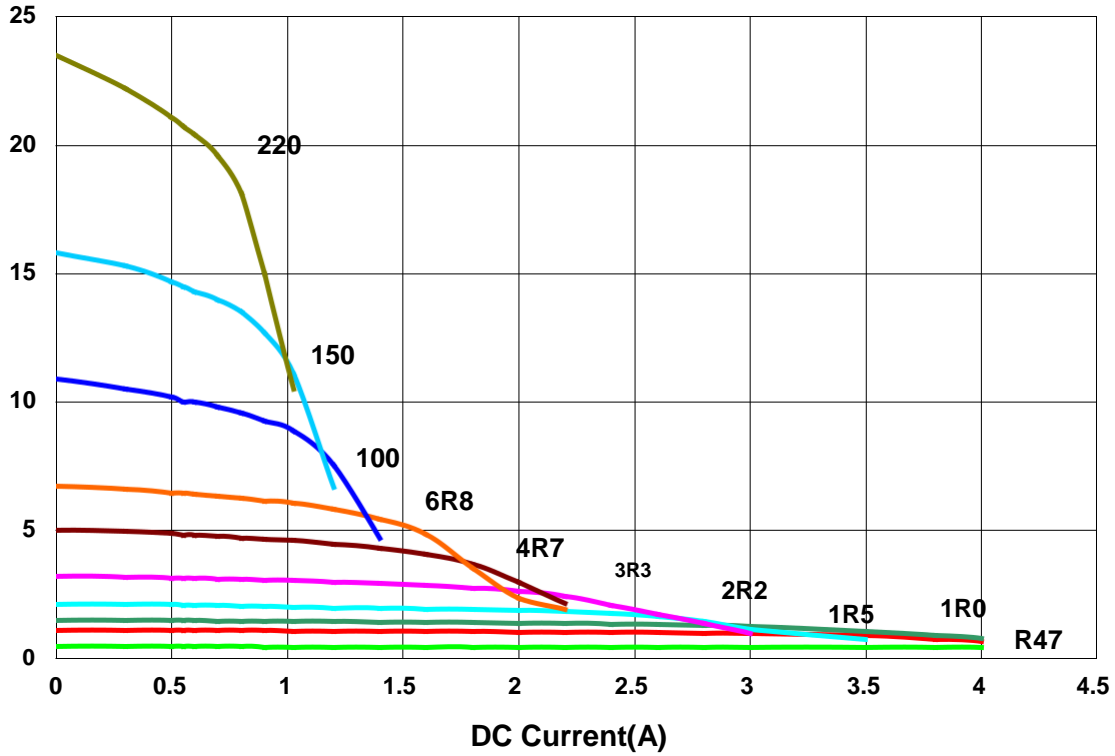
Irms: Agilent HP4284A

**Power Inductor AWVF Series** **Automotive AEC-Q200**

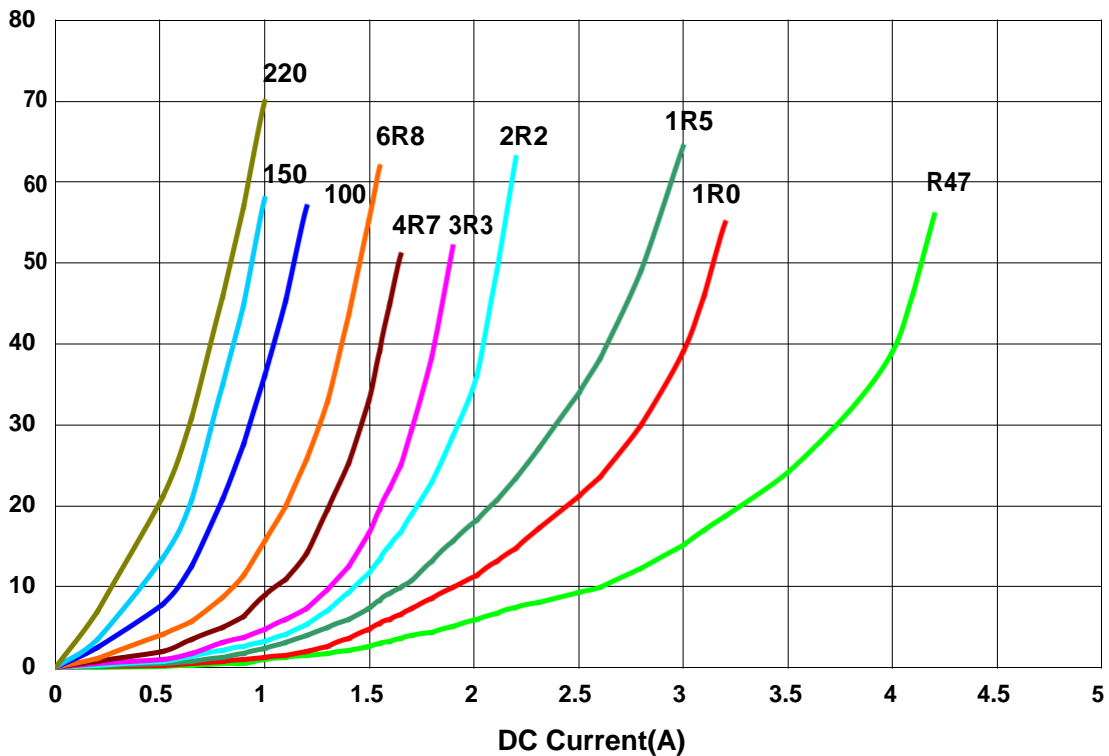
**AWVF00303015 Type**

**■ Characteristics Graph**

**Inductance vs. DC Current**



**Temperature Change vs. DC Current**

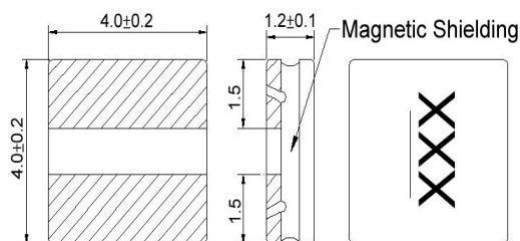


Power Inductor AWVF Series

Automotive  
AEC-Q200

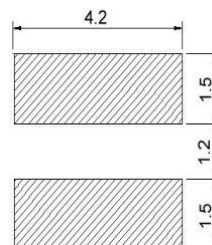
AWVF00404012 Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

■ Electrical Characteristics

Part No.	Inductance (uH)	Test Freq.	RDC (Ω)±30%	Isat(A) Typ.(Max)	Irms(A) Typ.(Max)	Tolerance (±%)	Marking
AWVF004040123R3□00	3.3	1MHz,200mV	0.072	1.5(1.30)	2.1(1.80)	20,30	3R3
AWVF00404012100□00	10	1MHz,200mV	0.190	0.9(0.81)	1.2(1.00)	20,30	100

Note: When ordering, please specify tolerance code. Tolerance: M=±20% / T=±30%

1. Operating temperature range - 40°C ~ 125°C
2. Isat for Inductance drop 30% from its value without current
3. Irms for a 40°C temperature rise from 25°C ambient with current
4. Measure Equipment:

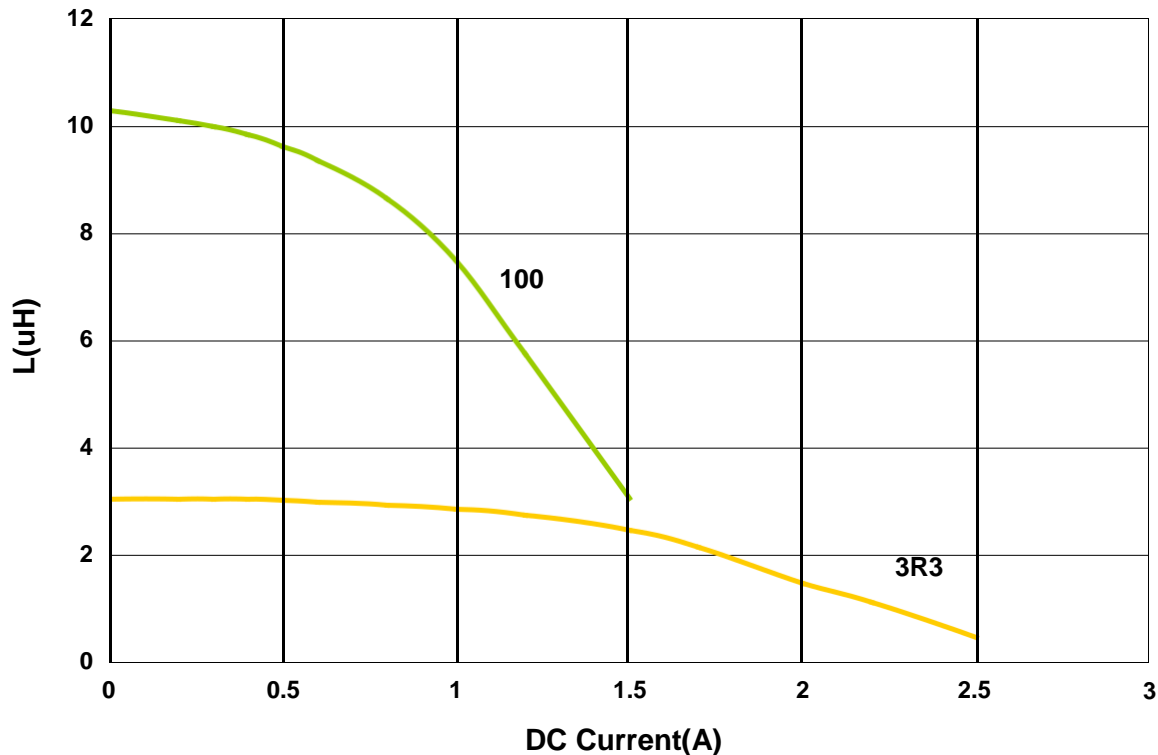
L: Agilent HP4284A+Agilent HP42841A  
 RDC: DIGITAL MILLINHM METER CHROMA 16502, or equivalent  
 Isat: Agilent HP4284A  
 Irms: Agilent HP4284A

**Power Inductor AWVF Series** **Automotive  
AEC-Q200**

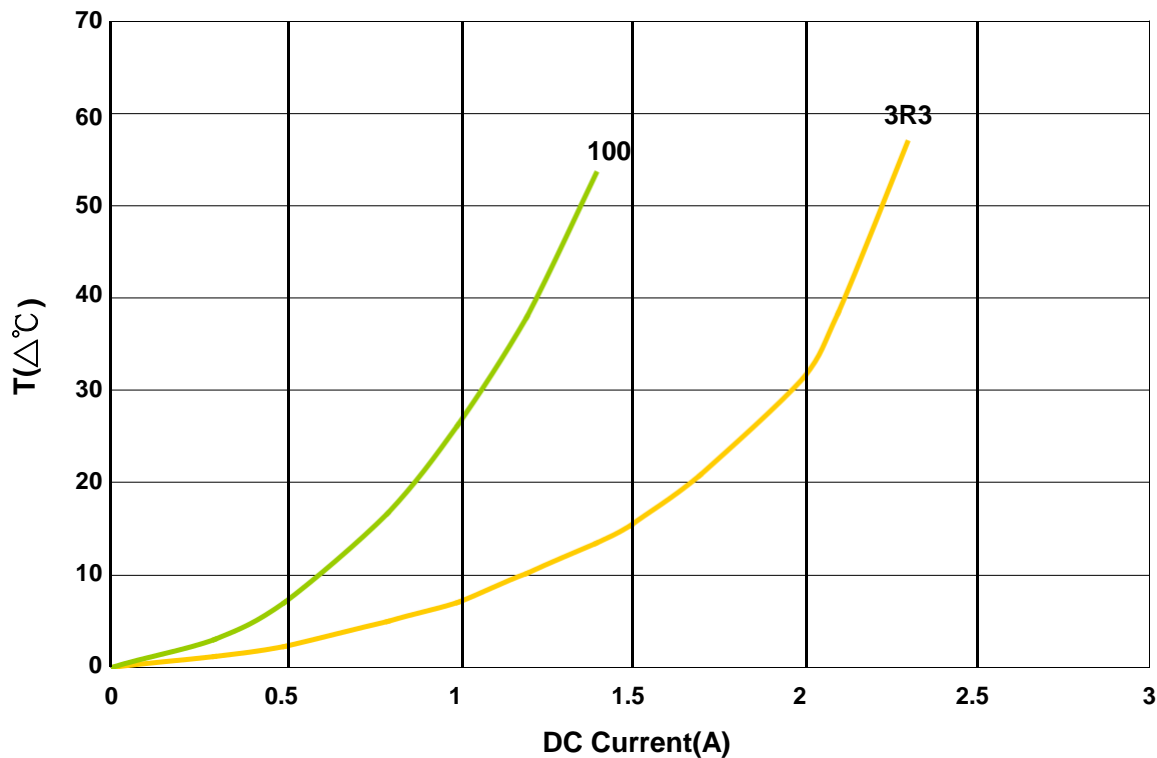
**AWVF00404012 Type**

**■ Characteristics Graph**

**Inductance vs. DC Current**



**Temperature Change vs. DC Current**



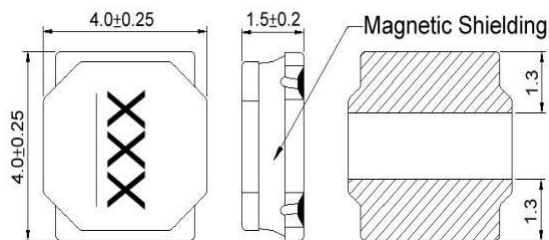


Power Inductor AWVF Series

Automotive  
AEC-Q200

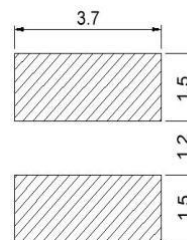
AWVF00404015 Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

■ Electrical Characteristics

Part No.	Inductance (uH)	Test Freq.	RDC (Ω)±30%	Isat(A) Typ.(Max)	Irms(A) Typ.(Max)	Tolerance (±%)	Marking
AWVF00404015R47□00	0.47	1MHz,200mV	0.019	4.00(3.60)	4.2(3.70)	20,30	R47
AWVF004040151R5□00	1.5	1MHz,200mV	0.041	3.00(2.70)	3.2(2.80)	20,30	1R5
AWVF004040152R2□00	2.2	1MHz,200mV	0.054	2.30(2.00)	2.6(2.30)	20,30	2R2
AWVF004040154R7□00	4.7	1MHz,200mV	0.100	1.60(1.40)	1.8(1.60)	20,30	4R7
AWVF004040156R8□00	6.8	1MHz,200mV	0.138	1.40(1.20)	1.6(1.40)	20,30	6R8
AWVF00404015100□00	10	1MHz,200mV	0.200	1.00(0.90)	1.2(1.00)	20,30	100
AWVF00404015150□00	15	1MHz,200mV	0.300	0.92(0.82)	1.0(0.94)	20,30	150
AWVF00404015220□00	22	1MHz,200mV	0.400	0.72(0.64)	0.85(0.76)	20,30	220

Note: When ordering, please specify tolerance code. Tolerance: M=±20% / T=±30%

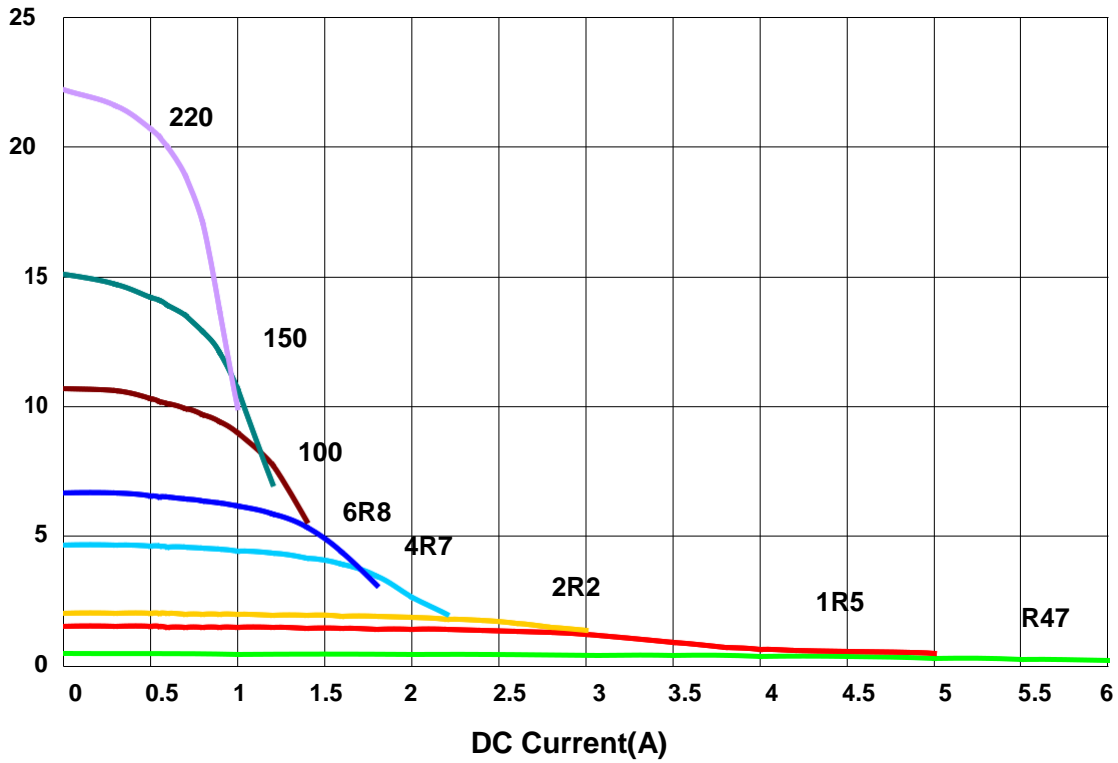
1. Operating temperature range - 40°C ~ 125°C
2. Isat for Inductance drop 30% from its value without current
3. Irms for a 40°C temperature rise from 25°C ambient with current
4. Measure Equipment:
  - L: Agilent HP4284A+Agilent HP42841A
  - RDC: DIGITAL MILLINHM METER CHROMA 16502, or equivalent
  - Isat: Agilent HP4284A
  - Irms: Agilent HP4284A

**Power Inductor AWVF Series** **Automotive AEC-Q200**

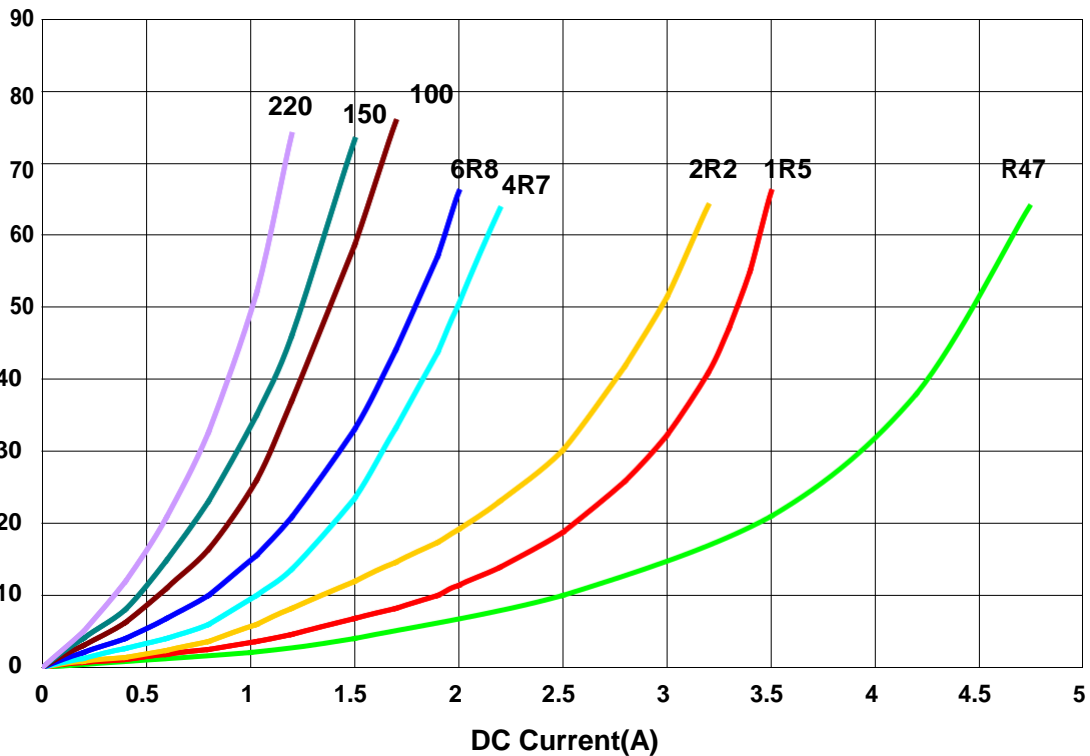
**AWVF00404015 Type**

**■ Characteristics Graph**

**Inductance vs. DC Current**



**Temperature Change vs. DC Current**

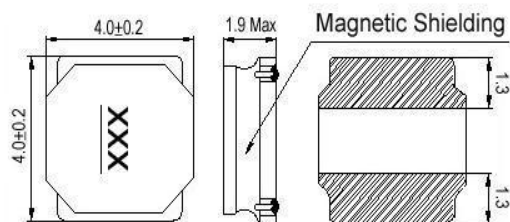


Power Inductor AWVF Series

Automotive  
AEC-Q200

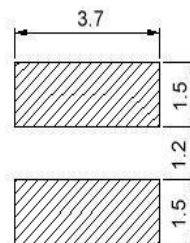
AWVF00404018 Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

■ Electrical Characteristics

Part No.	Inductance (uH)	Test Freq.	RDC (Ω)±30%	Isat(A) Typ.(Max)	Irms(A) Typ.(Max)	Tolerance (±%)	Marking
AWVF004040181R0□00	1.0	100kHz,1V	0.0265	4.20(3.70)	3.80(3.40)	20,30	1R0
AWVF004040181R5□00	1.5	100kHz,1V	0.0370	3.50(3.10)	3.20(2.80)	20,30	1R5
AWVF004040182R2□00	2.2	100kHz,1V	0.0470	3.00(2.70)	2.70(2.40)	20,30	2R2
AWVF004040183R3□00	3.3	100kHz,1V	0.0625	2.30(2.00)	2.10(1.80)	20,30	3R3
AWVF00404018220□00	22	100kHz,1V	0.335	0.90(0.81)	0.88(0.79)	20,30	220

Note: When ordering, please specify tolerance code. Tolerance: M=±20% / T=±30%

1. Operating temperature range - 40°C ~ 125°C
2. Isat for Inductance drop 30% from its value without current
3. Irms for a 40°C temperature rise from 25°C ambient with current
4. Measure Equipment:
  - L: Agilent HP4284A+Agilent HP42841A
  - RDC: DIGITAL MILLINHM METER CHROMA 16502, or equivalent
  - Isat: Agilent HP4284A
  - Irms: Agilent HP4284A

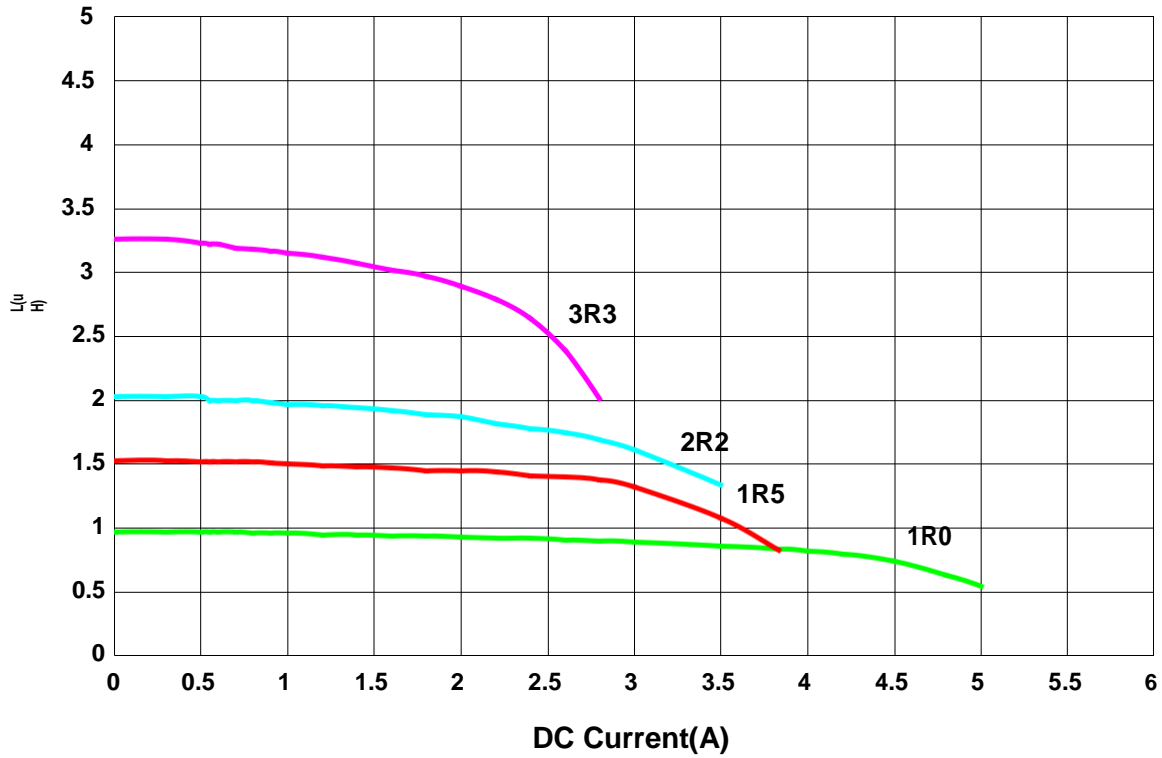
**Power Inductor AWVF Series**

**Automotive  
AEC-Q200**

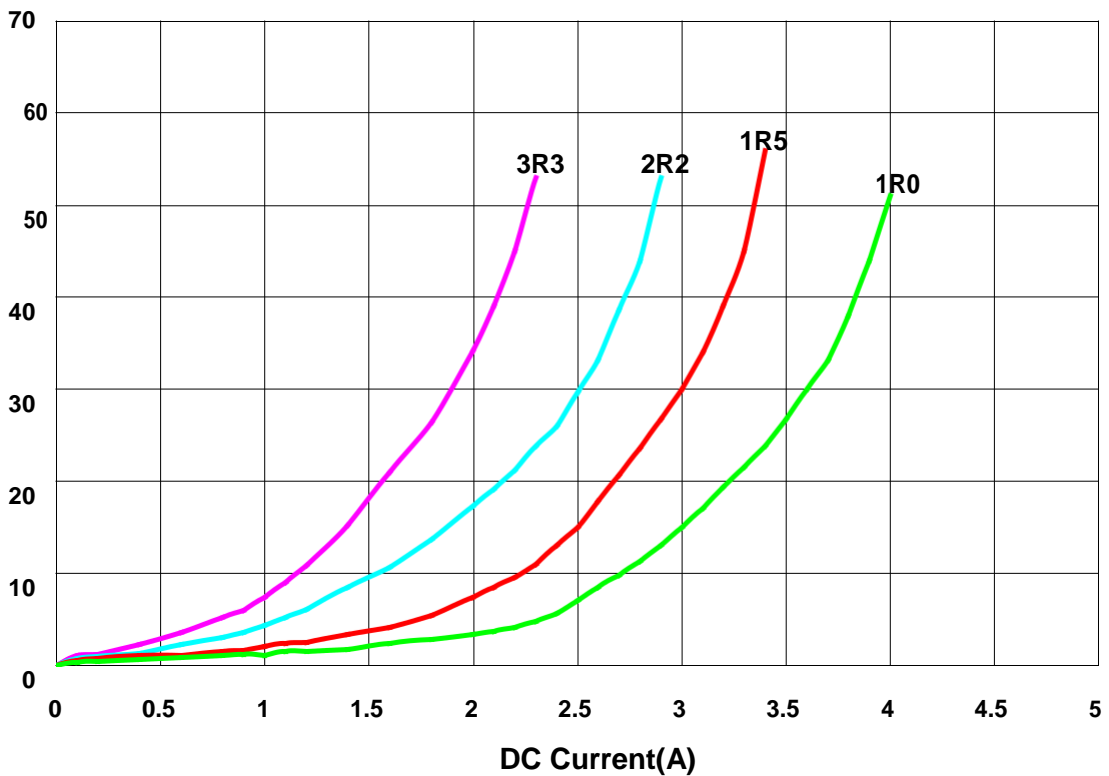
**AWVF00404018 Type**

**■ Characteristics Graph**

**Inductance vs. DC Current**



**Temperature Change vs. DC Current**

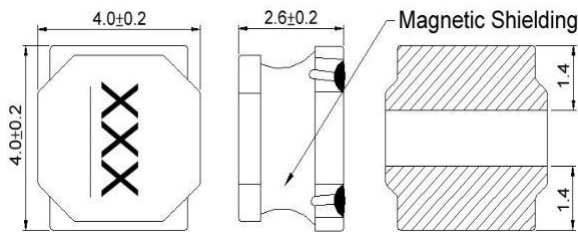


Power Inductor AWVF Series

Automotive  
AEC-Q200

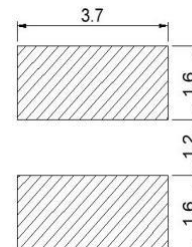
AWVF00404026 Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

■ Electrical Characteristics

Part No.	Inductance (uH)	Test Freq.	RDC (Ω)±30%	Isat(A) Typ.(Max)	Irms(A) Typ.(Max)	Tolerance (±%)	Marking
AWVF004040261R0□00	1.0	100kHz,1V	0.030	5.00(4.50)	4.00(3.60)	20,30	1R0
AWVF004040261R5□00	1.5	100kHz,1V	0.035	4.20(3.70)	3.70(3.3)	20,30	1R5
AWVF004040262R2□00	2.2	100kHz,1V	0.045	3.80(3.40)	3.50(3.1)	20,30	2R2
AWVF004040263R3□00	3.3	100kHz,1V	0.067	3.00(2.70)	2.50(2.2)	20,30	3R3
AWVF004040264R7□00	4.7	100kHz,1V	0.092	2.60(2.30)	2.00(1.80)	20,30	4R7
AWVF004040265R6□00	5.6	100kHz,1V	0.110	2.30(2.00)	1.90(1.70)	20,30	5R6
AWVF004040266R8□00	6.8	100kHz,1V	0.130	2.00(1.80)	1.70(1.50)	20,30	6R8
AWVF00404026100□00	10	100kHz,1V	0.188	1.90(1.70)	1.40(1.20)	20,30	100
AWVF00404026150□00	15	100kHz,1V	0.240	1.40(1.30)	1.20(1.00)	20,30	150
AWVF00404026220□00	22	100kHz,1V	0.330	1.20(1.00)	1.00(0.90)	20,30	220
AWVF00404026330□00	33	100kHz,1V	0.480	1.00(0.90)	0.82(0.73)	20,30	330
AWVF00404026470□00	47	100kHz,1V	0.735	0.88(0.79)	0.64(0.57)	20,30	470
AWVF00404026101□00	100	100kHz,1V	1.380	0.58(0.52)	0.50(0.45)	20,30	101
AWVF00404026331□00	330	100kHz,1V	4.600	0.31(0.27)	0.25(0.22)	20,30	331

Note: When ordering, please specify tolerance code. Tolerance: M=±20% / T=±30%

1. Operating temperature range - 40°C ~ 125°C
2. Isat for Inductance drop 30% from its value without current
3. Irms for a 40°C temperature rise from 25°C ambient with current
4. Measure Equipment:

L: Agilent HP4284A+Agilent HP42841A  
 RDC: DIGITAL MILLINHM METER CHROMA 16502, or equivalent  
 Isat: Agilent HP4284A  
 Irms: Agilent HP4284A

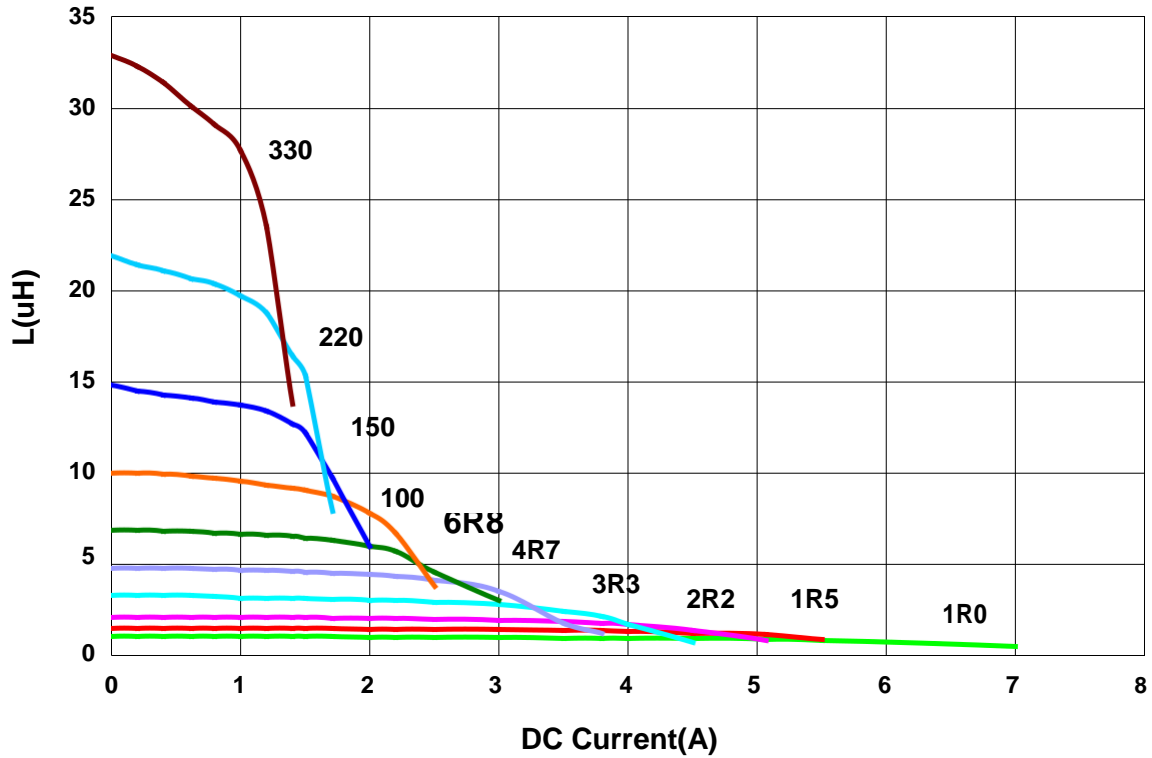
**Power Inductor AWVF Series**

**Automotive  
AEC-Q200**

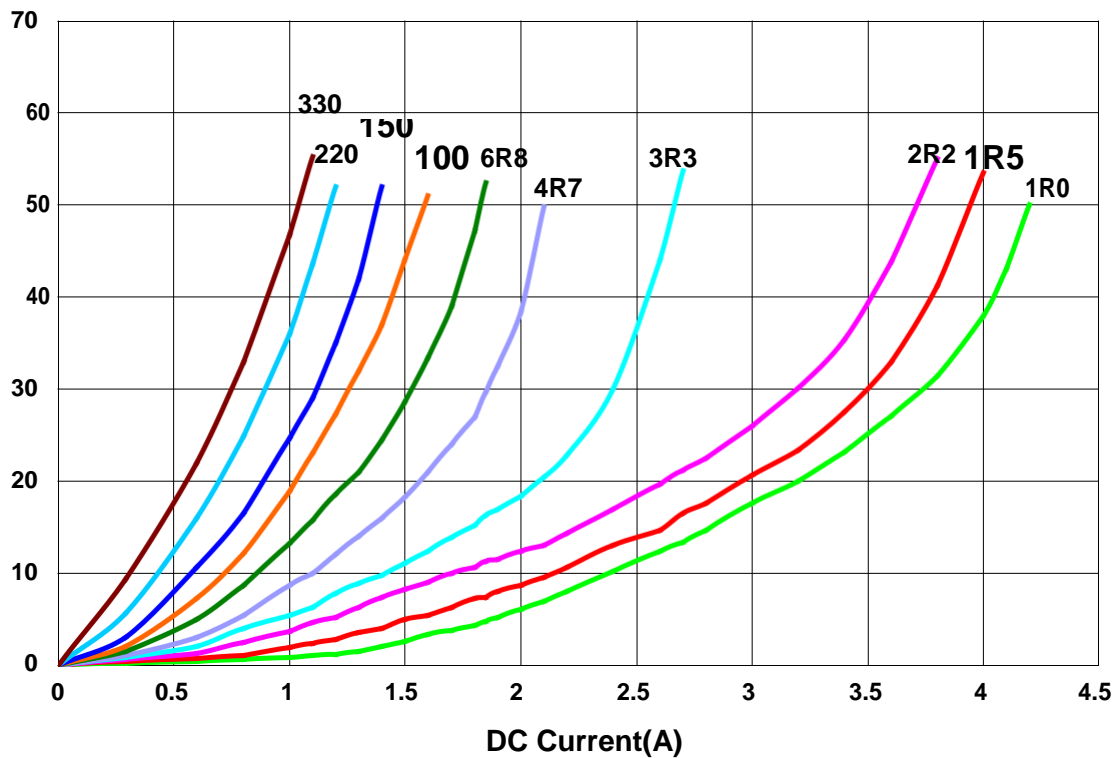
**AWVF00404026 Type**

**Characteristics Graph**

**Inductance vs. DC Current**



**Temperature Change vs. DC Current**

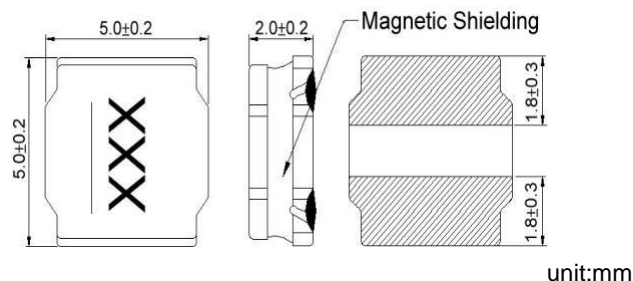


## Power Inductor AWVF Series

Automotive  
AEC-Q200

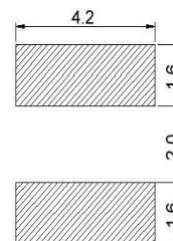
## AWVF00505020 Type

## ■ Dimensions



unit:mm

## ■ Recommended Land Pattern



unit:mm

## ■ Electrical Characteristics

Part No.	Inductance ( $\mu\text{H}$ )	Test Freq.	RDC ( $\Omega$ ) $\pm 30\%$	Isat(A) Typ.(Max)	Irms(A) Typ.(Max)	Tolerance ( $\pm\%$ )	Marking
AWVF005050201R0□00	1.0	100kHz,1V	0.018	6.0(5.4)	4.1(3.6)	20,30	1R0
AWVF005050201R5□00	1.5	100kHz,1V	0.023	4.9(4.4)	3.5(3.1)	20,30	1R5
AWVF005050201R8□00	1.8	100kHz,1V	0.026	4.1(3.6)	3.4(3.0)	20,30	1R8
AWVF005050202R2□00	2.2	100kHz,1V	0.030	4.0(3.6)	3.3(2.9)	20,30	2R2
AWVF005050203R6□00	3.6	100kHz,1V	0.050	3.1(2.7)	2.7(2.4)	20,30	3R6
AWVF005050203R9□00	3.9	100kHz,1V	0.053	2.9(2.6)	2.6(2.3)	20,30	3R9
AWVF005050204R7□00	4.7	100kHz,1V	0.060	2.7(2.4)	2.2(1.9)	20,30	4R7
AWVF005050206R8□00	6.8	100kHz,1V	0.093	2.2(1.9)	1.8(1.6)	20,30	6R8
AWVF00505020100□00	10	100kHz,1V	0.125	1.8(1.6)	1.6(1.4)	20,30	100
AWVF00505020150□00	15	100kHz,1V	0.195	1.4(1.2)	1.2(1.0)	20,30	150
AWVF00505020220□00	22	100kHz,1V	0.265	1.2(1.0)	1.0(0.9)	20,30	220

Note: When ordering, please specify tolerance code. Tolerance: M $\pm 20\%$  / T $\pm 30\%$

1. Operating temperature range - 40°C ~ 125°C
2. Isat for Inductance drop 30% from its value without current
3. Irms for a 40°C temperature rise from 25°C ambient with current
4. Measure Equipment:

L: Agilent HP4284A+Agilent HP42841A

RDC: DIGITAL MILLINHM METER CHROMA 16502, or equivalent

Isat: Agilent HP4284A

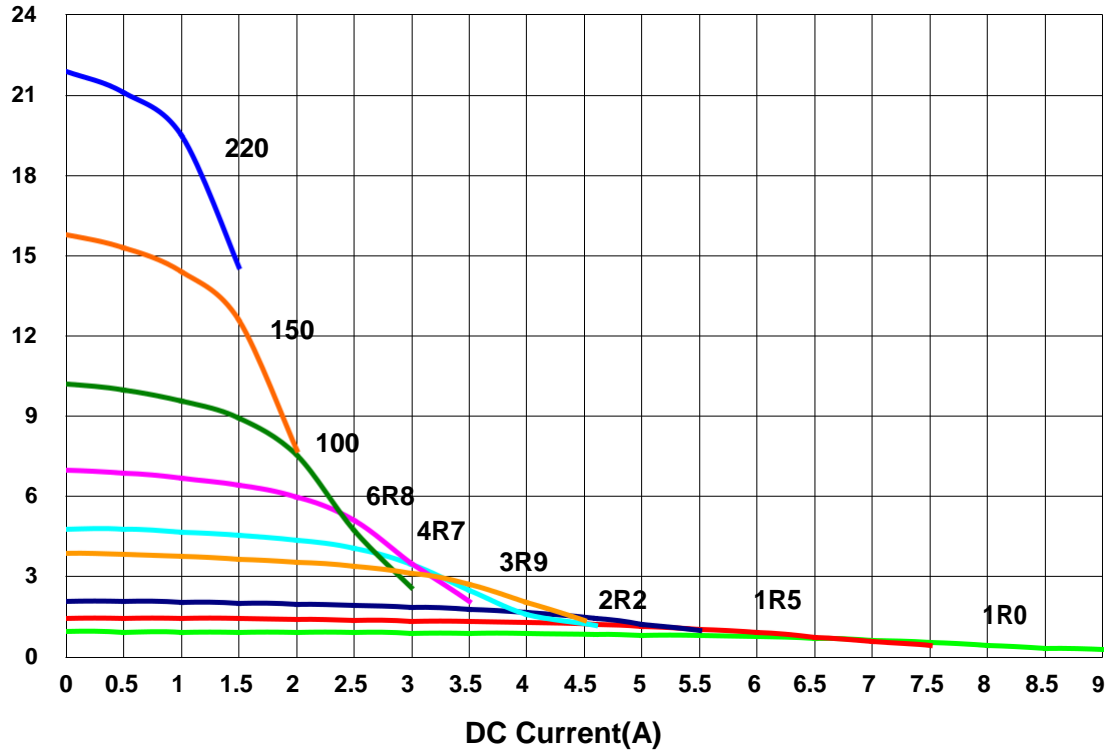
Irms: Agilent HP4284A

**Power Inductor AWVF Series** **Automotive  
AEC-Q200**

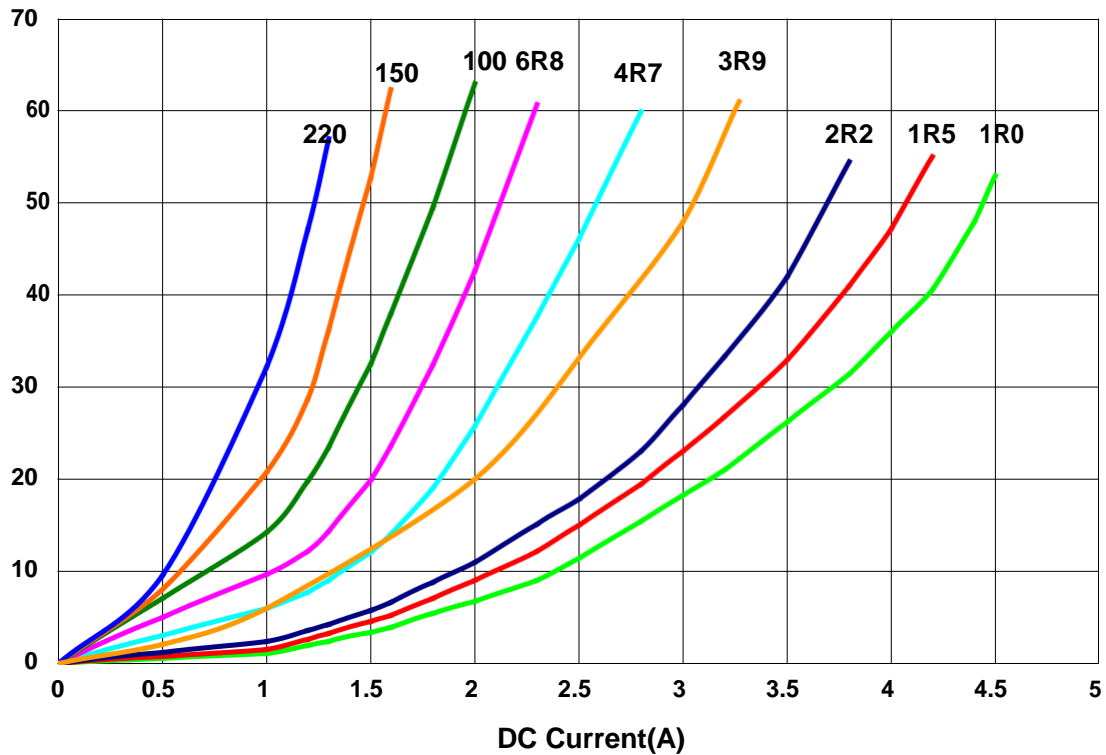
**AWVF00505020 Type**

**■ Characteristics Graph**

**Inductance vs. DC Current**



**Temperature Change vs. DC Current**



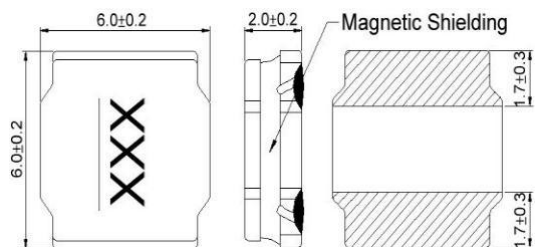


**Power Inductor AWVF Series**

**Automotive  
AEC-Q200**

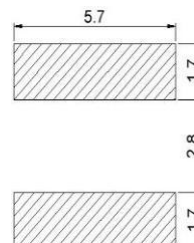
**AWVF00606020 Type**

**■ Dimensions**



unit:mm

**■ Recommended Land Pattern**



unit:mm

**■ Electrical Characteristics**

Part No.	Inductance (uH)	Test Freq.	RDC (Ω)±30%	Isat(A) Typ.(Max)	Irms(A) Typ.(Max)	Tolerance (±%)	Marking
AWVF006060204R7□00	4.7	100kHz,1V	0.058	3.0(2.7)	2.3(2.0)	20,30	4R7
AWVF00606020100□00	10	100kHz,1V	0.130	2.1(1.8)	1.6(1.4)	20,30	100
AWVF00606020150□00	15	100kHz,1V	0.195	1.6(1.4)	1.3(1.1)	20,30	150
AWVF00606020220□00	22	100kHz,1V	0.260	1.3(1.1)	1.1(0.99)	20,30	220
AWVF00606020470□00	47	100kHz,1V	0.510	0.9(0.8)	0.8(0.72)	20,30	470

**Note: When ordering, please specify tolerance code. Tolerance: M=±20% / T=±30%**

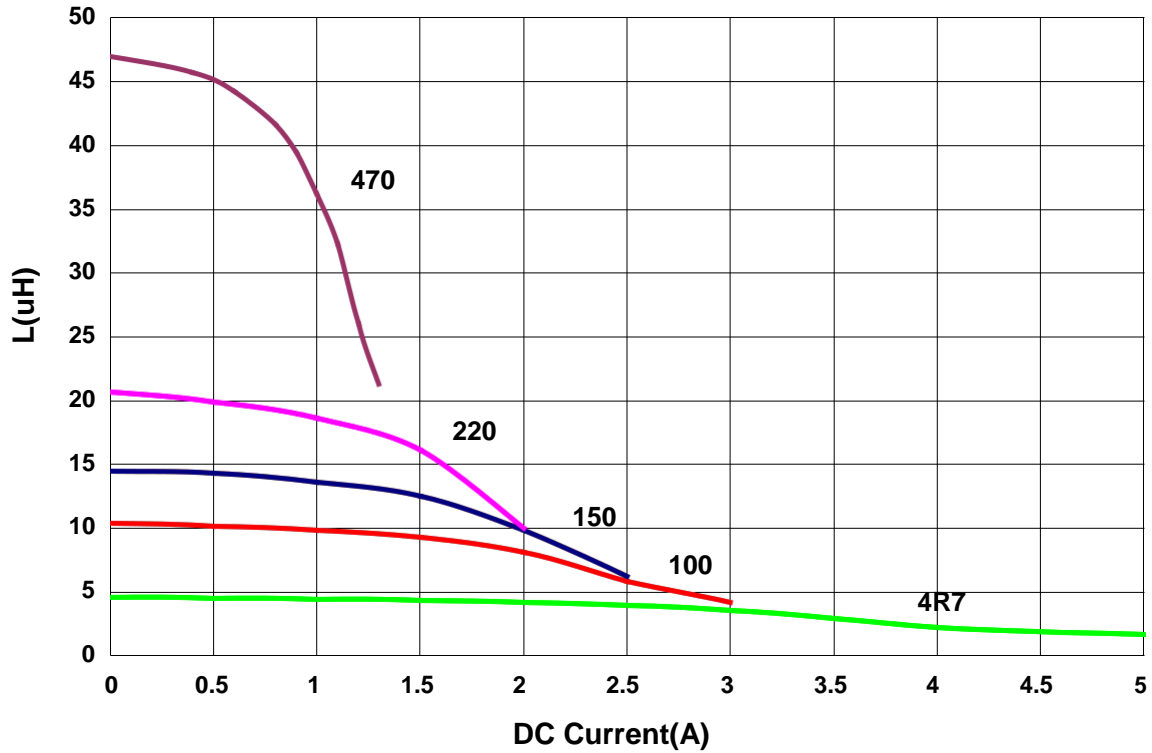
1. Operating temperature range - 40°C ~ 125°C
2. Isat for Inductance drop 30% from its value without current
3. Irms for a 40°C temperature rise from 25°C ambient with current
4. Measure Equipment:
  - L: Agilent HP4284A+Agilent HP42841A
  - RDC: DIGITAL MILLINHM METER CHROMA 16502, or equivalent
  - Isat: Agilent HP4284A
  - Irms: Agilent HP4284A

**Power Inductor AWVF Series** **Automotive AEC-Q200**

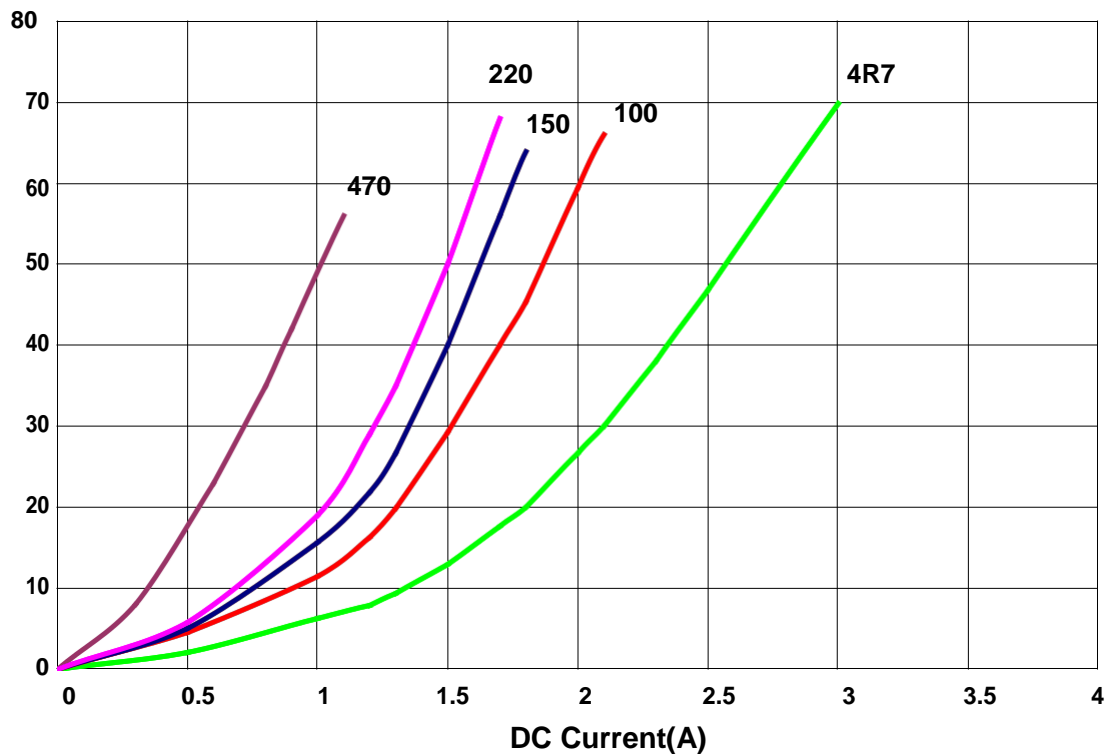
**AWVF00606020 Type**

**Characteristics Graph**

**Inductance vs. DC Current**



**Temperature Change vs. DC Current**

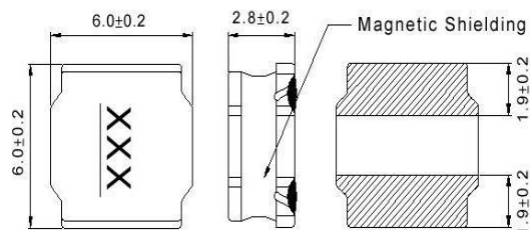


**Power Inductor AWVF Series**

**Automotive  
AEC-Q200**

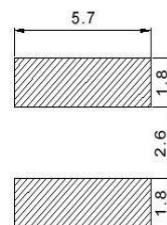
**AWVF00606028 Type**

**■ Dimensions**



unit:mm

**■ Recommended Land Pattern**



unit:mm

**■ Electrical Characteristics**

Part No.	Inductance (uH)	Test Freq.	RDC (Ω)±30%	Isat(A) Typ.(Max)	Irms(A) Typ.(Max)	Tolerance (±%)	Marking
AWVF006060281R0□00	1.0	100kHz,1V	0.012	7.9(7.10)	6.3(5.60)	20,30	1R0
AWVF006060281R5□00	1.5	100kHz,1V	0.015	7.0(6.30)	5.5(4.90)	20,30	1R5
AWVF006060282R2□00	2.2	100kHz,1V	0.020	6.0(5.40)	5.0(4.50)	20,30	2R2
AWVF006060284R7□00	4.7	100kHz,1V	0.036	4.0(3.60)	3.4(3.00)	20,30	4R7
AWVF006060286R8□00	6.8	100kHz,1V	0.048	3.2(2.80)	3.0(2.70)	20,30	6R8

**Note: When ordering, please specify tolerance code. Tolerance: M=±20% / T=±30%**

1. Operating temperature range - 40°C ~ 125°C
2. Isat for Inductance drop 30% from its value without current
3. Irms for a 40°C temperature rise from 25°C ambient with current
4. Measure Equipment:

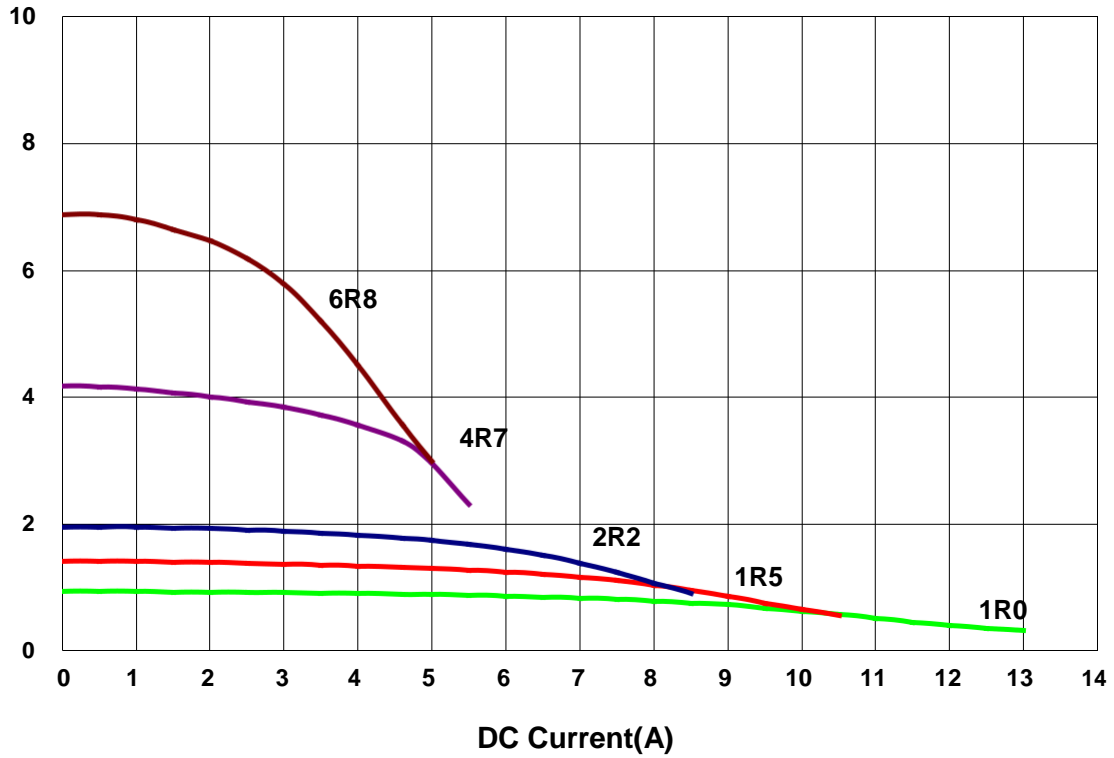
L: Agilent HP4284A+Agilent HP42841A  
 RDC: DIGITAL MILLINHM METER CHROMA 16502, or equivalent  
 Isat: Agilent HP4284A  
 Irms: Agilent HP4284A

**Power Inductor AWVF Series** **Automotive AEC-Q200**

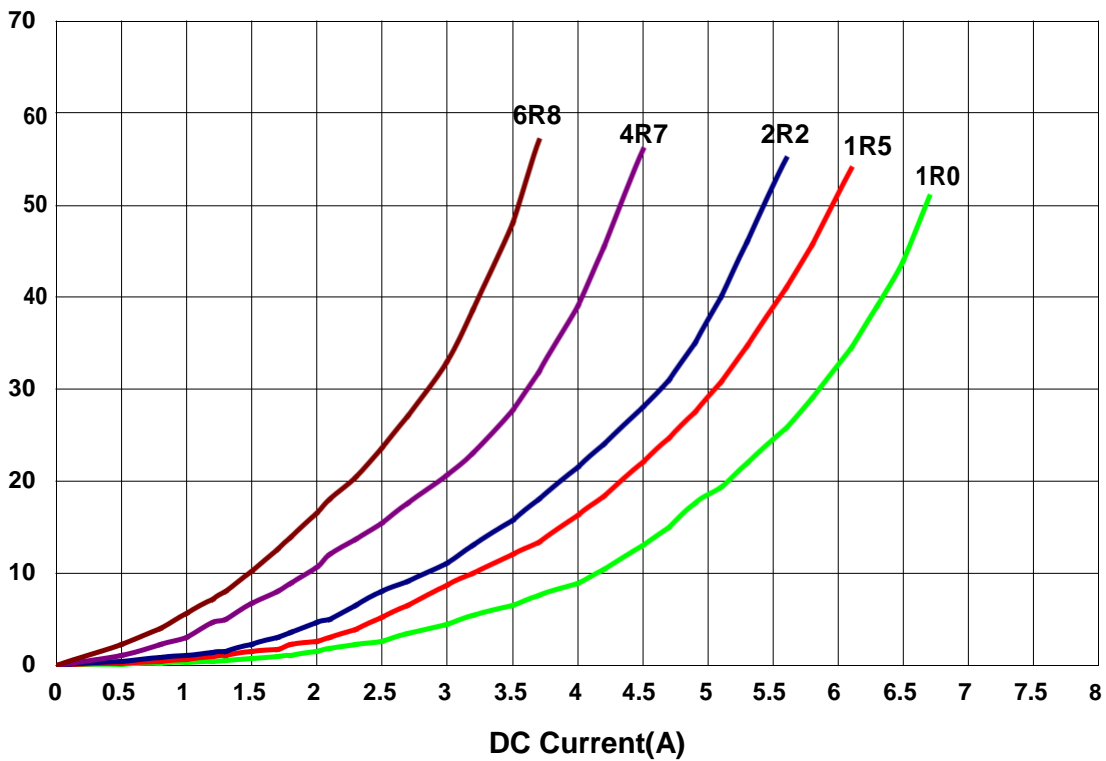
**AWVF00606028 Type**

**Characteristics Graph**

**Inductance vs. DC Current**



**Temperature Change vs. DC Current**

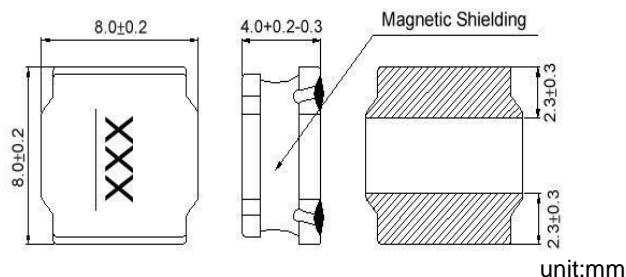


Power Inductor AWVF Series

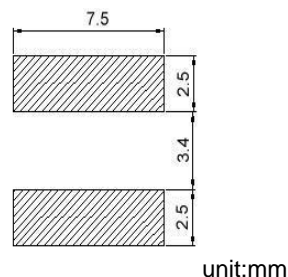
Automotive  
AEC-Q200

AWVF00808040 Type

■ Dimensions



■ Recommended Land Pattern



■ Electrical Characteristics

Part No.	Inductance (uH)	Test Freq.	RDC (Ω)±30%	Isat(A) Typ.(Max)	Irms(A) Typ.(Max)	Tolerance (±%)	Marking
AWVF008080404R7□00	4.7	100kHz,1V	0.020	6.8(6.00)	5.5(4.80)	20,30	4R7
AWVF00808040100□00	10	100kHz,1V	0.038	5.0(4.40)	3.8(3.30)	20,30	100
AWVF00808040150□00	15	100kHz,1V	0.057	4.0(3.50)	3.2(2.70)	20,30	150
AWVF00808040220□00	22	100kHz,1V	0.082	3.4(2.90)	2.7(2.30)	20,30	220

Note: When ordering, please specify tolerance code. Tolerance: M=±20% / T=±30%

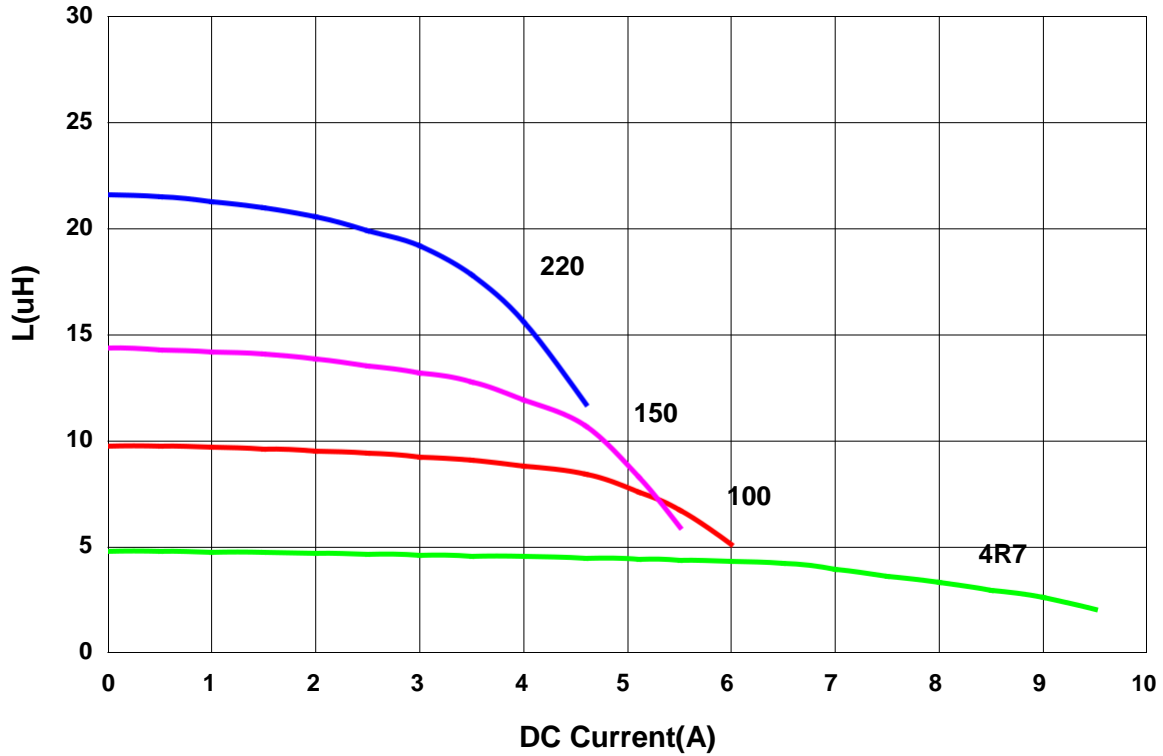
- Operating temperature range - 40°C ~ 125°C
- Isat for Inductance drop 30% from its value without current
- Irms for a 40°C temperature rise from 25°C ambient with current
- Measure Equipment:
  - L: Agilent HP4284A+Agilent HP42841A
  - RDC: DIGITAL MILLINHM METER CHROMA 16502, or equivalent
  - Isat: Agilent HP4284A
  - Irms: Agilent HP4284A

**Power Inductor AWVF Series** **Automotive AEC-Q200**

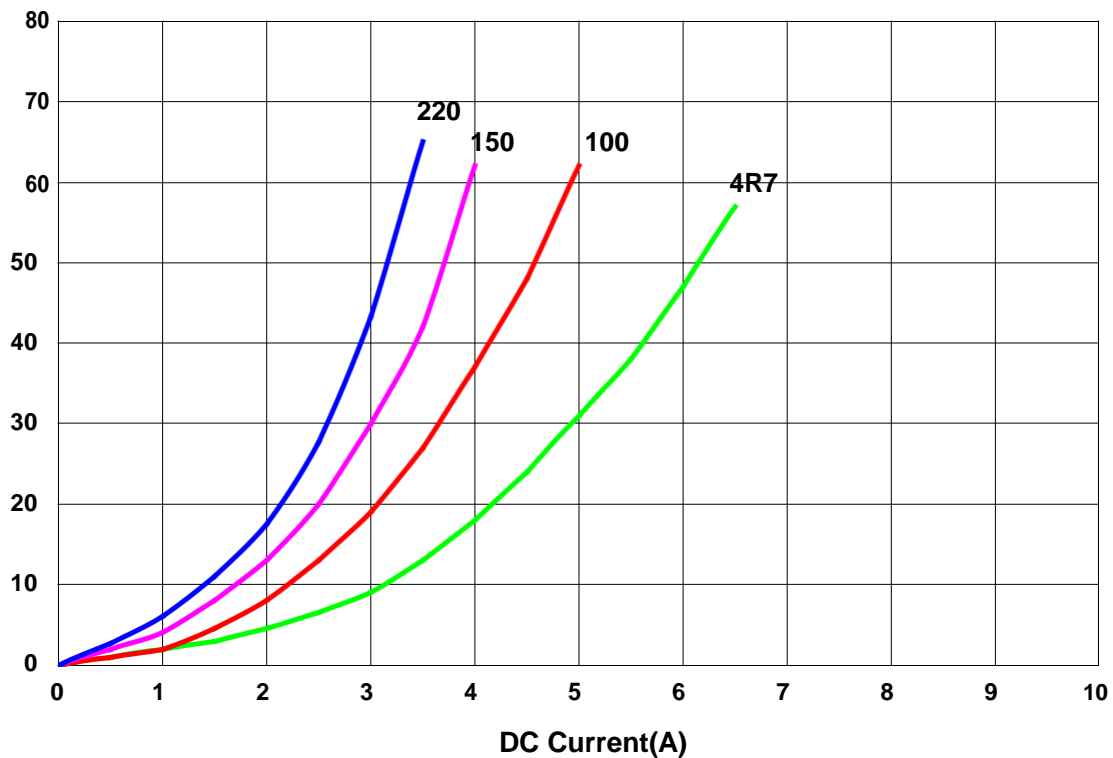
**AWVF00808040 Type**

**Characteristics Graph**

**Inductance vs. DC Current**



**Temperature Change vs. DC Current**

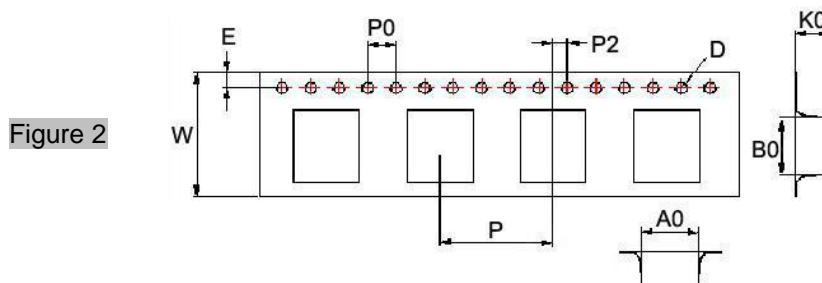
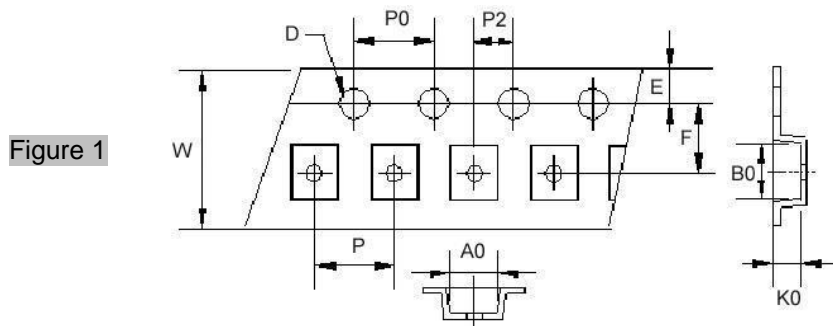


**Power Inductor AWVF Series**

**Automotive  
AEC-Q200**

**■ Packaging**

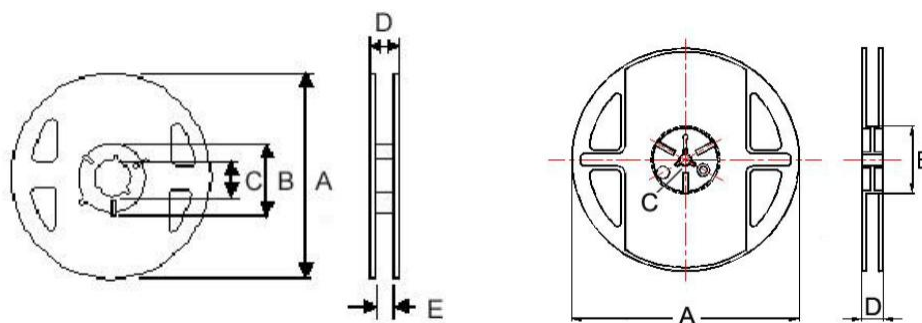
Tape Dimensions



Reel Dimensions

Figure 1

Figure 2



Dimensions in mm

TYPE	Fig	Tape Dimensions										Reel Dimensions					Quantity PCS / Reel
		A0	B0	K0	D	E	F	W	P	P0	P2	A	B	C	D	E	
AWVF00201612	1	1.9	2.2	1.3	1.55	1.75	3.5	8	4	4	2	180	60	13	14.4	8.4	2000
AWVF00252010	1	2.4	2.7	1.15	1.55	1.75	3.5	8	4	4	2	180	60	13	14.4	8.4	2000
AWVF00252012	1	2.40	2.70	1.35	1.55	1.75	3.5	8	4	4	2	180	60	13	14.4	8.4	2000
AWVF00303010	1	3.2	3.2	1.4	1.55	1.75	3.5	8	4	4	2	180	60	13	14.4	8.4	2000
AWVF00303012	1	3.20	3.20	1.40	1.55	1.75	3.5	8	4	4	2	180	60	13	14.4	8.4	2000
AWVF00303015	1	3.15	3.15	1.60	1.55	1.75	3.5	8	4	4	2	180	60	13	14.4	8.4	2000
AWVF00404012	2	4.25	4.25	1.3	1.55	1.75	5.5	12	8	4	2	178	60	13	13.2	-	1000
AWVF00404015	2	4.25	4.25	1.7	1.55	1.75	5.5	12	8	4	2	178	60	13	13.2	-	1000
AWVF00404018	2	4.25	4.25	2.10	1.55	1.75	5.5	12	8	4	2	178	60	13	13.2	-	800
AWVF00404026	2	4.25	4.25	3	1.55	1.75	5.5	12	8	4	2	178	60	13	13.2	-	500
AWVF00505020	2	5.25	5.25	2.2	1.55	1.75	5.5	12	8	4	2	330	100	13	13.4	-	2000
AWVF00606020	2	6.25	6.25	2.2	1.55	1.75	7.5	16	12	4	2	330	100	13	16	-	2000
AWVF00606028	2	6.25	6.25	3.00	1.55	1.75	7.5	16	12	4	2	330	100	13	16	-	1500
AWVF00808040	2	8.25	8.25	4.15	1.55	1.75	7.5	16	12	4	2	330	100	13	16	-	1000

# Mouser Electronics

Authorized Distributor

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## Pulse:

[AWVF002016121R5M00](#) [AWVF002016121R5T00](#) [AWVF002016126R8M00](#) [AWVF002016126R8T00](#)  
[AWVF00201612R47M00](#) [AWVF00201612R47T00](#) [AWVF00201612R68M00](#) [AWVF00201612R68T00](#)  
[AWVF00252010100M00](#) [AWVF00252010100T00](#) [AWVF00252010150M00](#) [AWVF00252010150T00](#)  
[AWVF002520101R0M00](#) [AWVF002520101R0T00](#) [AWVF002520101R5M00](#) [AWVF002520101R5T00](#)  
[AWVF00252010220M00](#) [AWVF00252010220T00](#) [AWVF002520104R7M00](#) [AWVF002520104R7T00](#)  
[AWVF00252010R47M00](#) [AWVF00252010R47T00](#) [AWVF00252012100T00](#) [AWVF00252012150M00](#)  
[AWVF00252012150T00](#) [AWVF002520121R0M00](#) [AWVF002520121R0T00](#) [AWVF002520121R2M00](#)  
[AWVF002520121R2T00](#) [AWVF002520121R5M00](#) [AWVF002520121R5T00](#) [AWVF00252012220M00](#)  
[AWVF00252012220T00](#) [AWVF002520122R2M00](#) [AWVF002520122R2T00](#) [AWVF002520123R3M00](#)  
[AWVF002520123R3T00](#) [AWVF002520124R7M00](#) [AWVF002520124R7T00](#) [AWVF002520125R6M00](#)  
[AWVF002520125R6T00](#) [AWVF002520126R8M00](#) [AWVF002520126R8T00](#) [AWVF00252012R50M00](#)  
[AWVF00252012R50T00](#) [AWVF00303010100M00](#) [AWVF00303010100T00](#) [AWVF00303010150M00](#)  
[AWVF00303010150T00](#) [AWVF003030101R5M00](#) [AWVF003030101R5T00](#) [AWVF00303010220M00](#)  
[AWVF00303010220T00](#) [AWVF003030102R2M00](#) [AWVF003030102R2T00](#) [AWVF00303010470M00](#)  
[AWVF00303010470T00](#) [AWVF003030104R7M00](#) [AWVF003030104R7T00](#) [AWVF003030106R8M00](#)  
[AWVF003030106R8T00](#) [AWVF00303012100M00](#) [AWVF00303012100T00](#) [AWVF00303012150M00](#)  
[AWVF00303012150T00](#) [AWVF00303012220M00](#) [AWVF00303012220T00](#) [AWVF003030122R2M00](#)  
[AWVF003030122R2T00](#) [AWVF003030123R3M00](#) [AWVF003030123R3T00](#) [AWVF00303012470M00](#)  
[AWVF00303012470T00](#) [AWVF003030124R7M00](#) [AWVF003030124R7T00](#) [AWVF003030126R8M00](#)  
[AWVF003030126R8T00](#) [AWVF00303015100M00](#) [AWVF00303015100T00](#) [AWVF00303015101M00](#)  
[AWVF00303015101T00](#) [AWVF00303015150M00](#) [AWVF00303015150T00](#) [AWVF003030151R0M00](#)  
[AWVF003030151R0T00](#) [AWVF003030151R5M00](#) [AWVF003030151R5T00](#) [AWVF00303015220M00](#)  
[AWVF00303015220T00](#) [AWVF003030152R2M00](#) [AWVF003030152R2T00](#) [AWVF00303015330M00](#)  
[AWVF00303015330T00](#) [AWVF003030153R3M00](#) [AWVF003030153R3T00](#) [AWVF00303015470M00](#)  
[AWVF00303015470T00](#) [AWVF003030154R7M00](#) [AWVF003030154R7T00](#) [AWVF003030156R8M00](#)