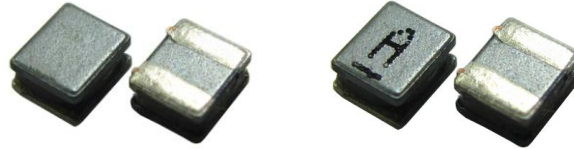


Power Inductor

AWVH Series - ISO9001 | ISO14001 | IATF16949

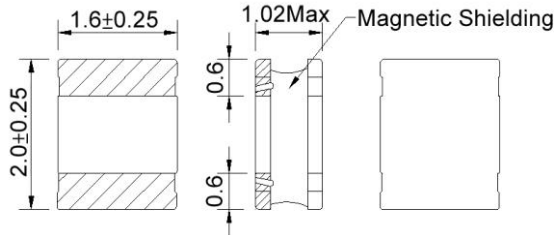


Part Numbering

A	WVH	00	252012	1R0	M	00
Grade	Series Name	Control Code	Dimensions Code (mm)	Inductance (uH)	Tolerance	Internal Code
			201610 2.0x1.6x1.02	R47 0.47	M ±20%	00 General
			252010 2.5x2.0x1.0	1R0 1.0	T ±30%	H1 High Current
			252012 2.5x2.0x1.2	101 100		
			404030 4.0x4.0x3.0			

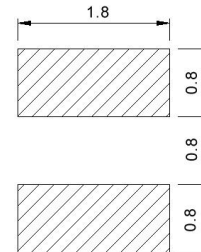
AWVH00201610-H1 Type

■ 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 (±%)
AWVH00201610R24□H1	0.24	1MHz,200mV	0.048	3.70(3.30)	2.50(2.10)	20,30
AWVH00201610R33□H1	0.33	1MHz,200mV	0.048	3.40(3.00)	2.50(2.10)	20,30
AWVH00201610R47□H1	0.47	1MHz,200mV	0.072	2.90(2.60)	2.10(1.80)	20,30
AWVH00201610R56□H1	0.56	1MHz,200mV	0.072	2.70(2.40)	2.10(1.80)	20,30
AWVH00201610R68□H1	0.68	1MHz,200mV	0.092	2.50(2.20)	1.80(1.50)	20,30
AWVH002016101R0□H1	1.0	1MHz,200mV	0.110	2.20(2.00)	1.50(1.20)	20,30
AWVH002016102R2□H1	2.2	1MHz,200mV	0.205	1.40(1.20)	1.15(0.97)	20,30
AWVH002016103R3□H1	3.3	1MHz,200mV	0.380	1.05(0.94)	0.90(0.80)	20,30
AWVH002016104R7□H1	4.7	1MHz,200mV	0.520	0.90(0.80)	0.80(0.68)	20,30
AWVH00201610100□H1	10	1MHz,200mV	1.100	0.62(0.55)	0.45(0.38)	20,30

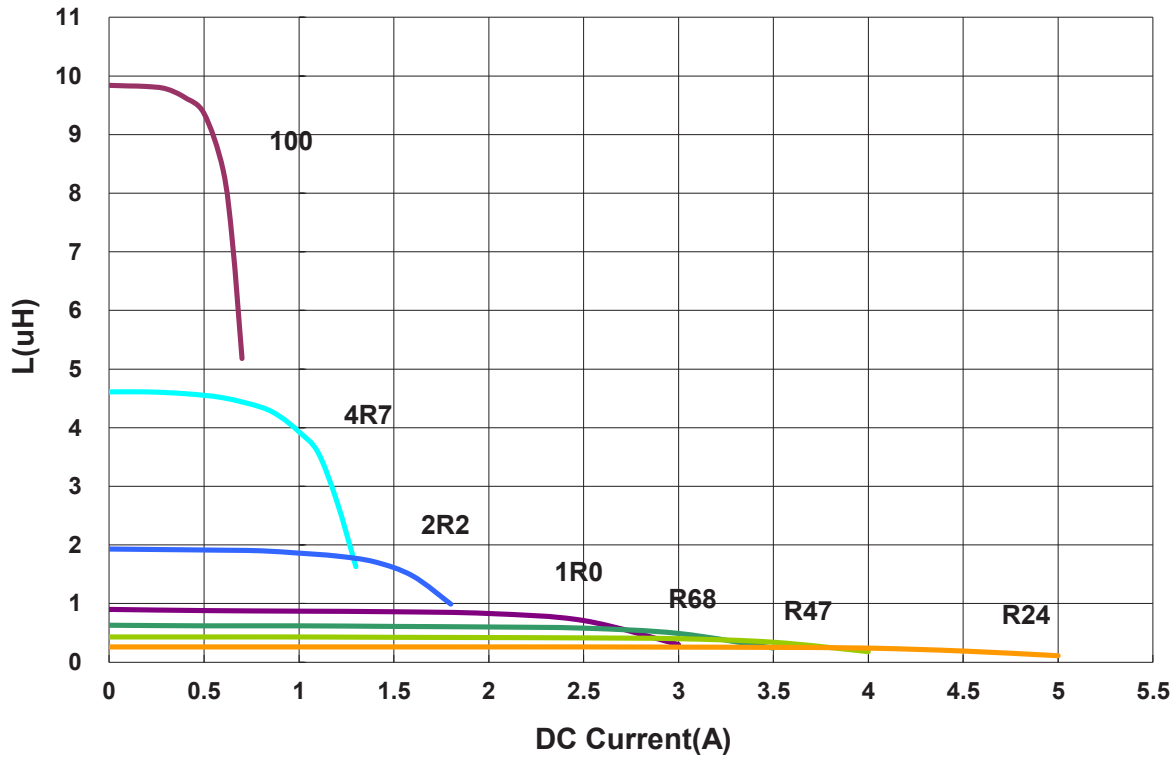
Note: When ordering, please specify tolerance code. Tolerance: M=±20% / T=±30%

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

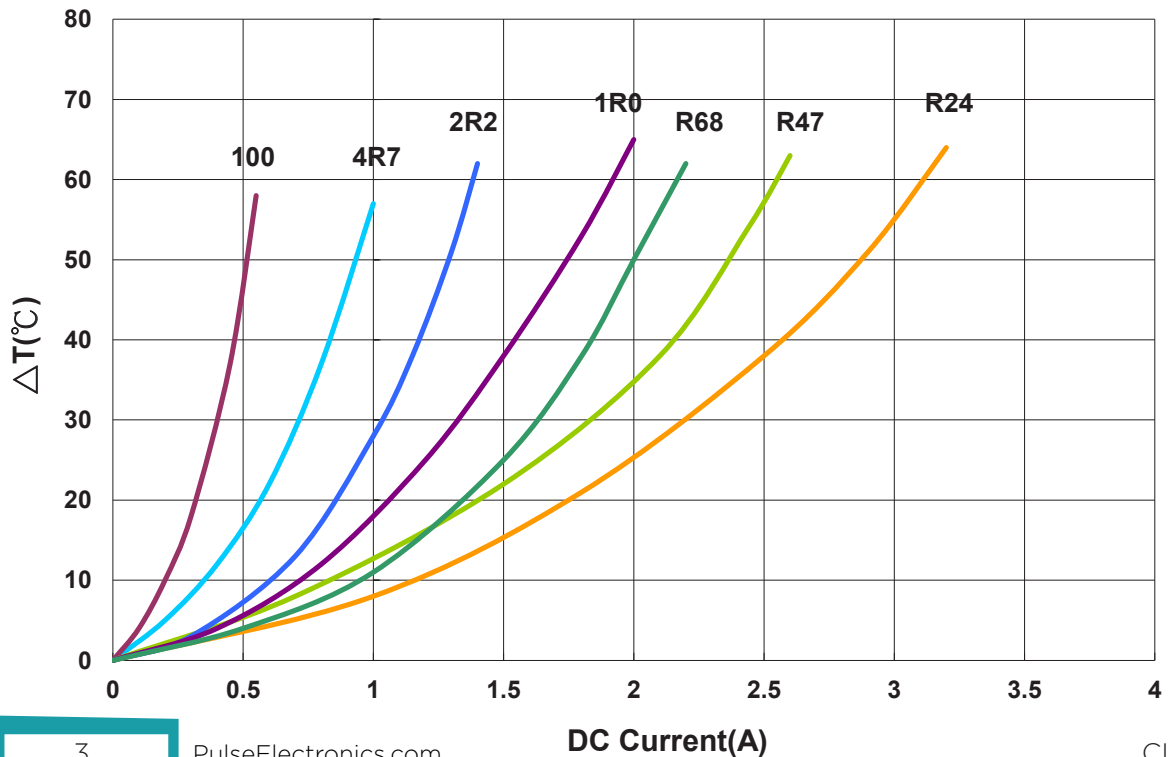
AWVH00201610-H1 Type

Characteristics Graph

Inductance vs. DC Current

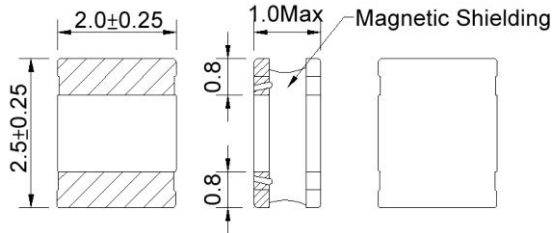


Temperature Change vs. DC Current



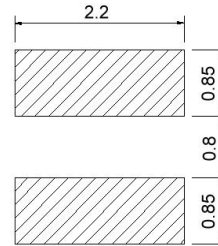
AWVH00252010-H1 Type

■ 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 (±%)
AWVH00252010R24□H1	0.24	1MHz,200mV	0.030	4.70(4.20)	3.60(3.00)	20,30
AWVH00252010R47□H1	0.47	1MHz,200mV	0.043	3.30(2.90)	2.70(2.30)	20,30
AWVH00252010R68□H1	0.7	1MHz,200mV	0.062	2.80(2.00)	2.30(1.90)	20,30
AWVH002520101R0□H1	1	1MHz,200mV	0.080	2.30(2.00)	1.90(1.60)	20,30
AWVH002520102R2□H1	2.2	1MHz,200mV	0.135	1.60(1.40)	1.40(1.10)	20,30
AWVH002520104R7□H1	4.7	1MHz,200mV	0.330	1.00(0.90)	0.85(0.72)	20,30
AWVH00252010100□H1	10	1MHz,200mV	0.670	0.72(0.64)	0.58(0.49)	20,30

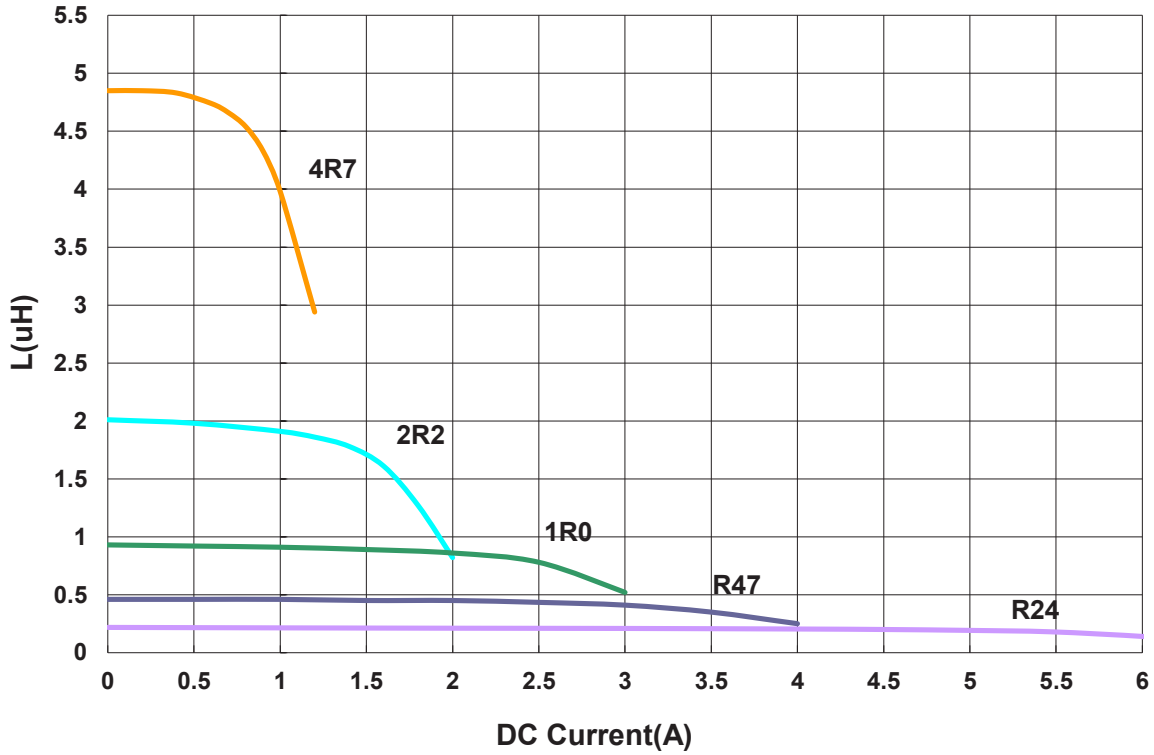
Note: When ordering, please specify tolerance code. Tolerance: M=±20% / T=±30%

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

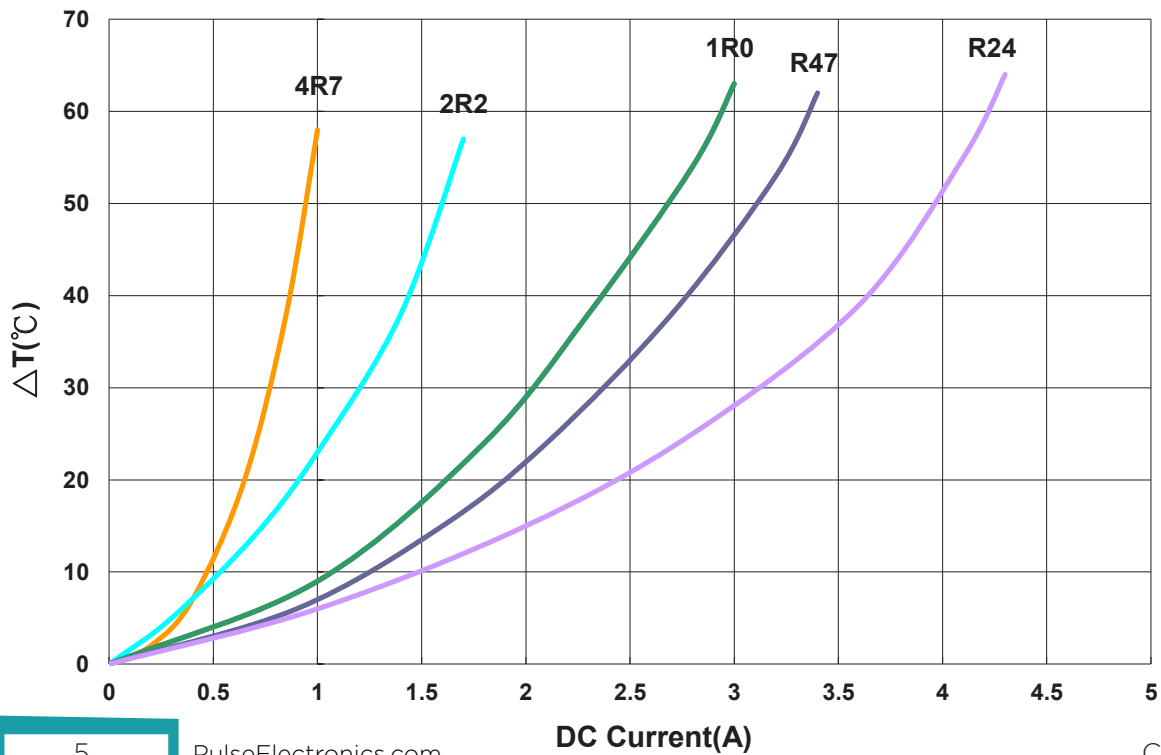
AWVH00252010-H1 Type

Characteristics Graph

Inductance vs. DC Current

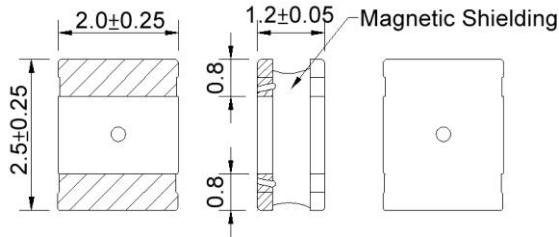


Temperature Change vs. DC Current



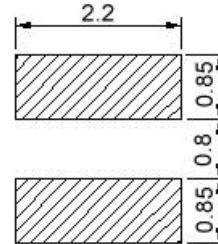
AWVH00252012-H1 Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

■ Electrical Characteristics

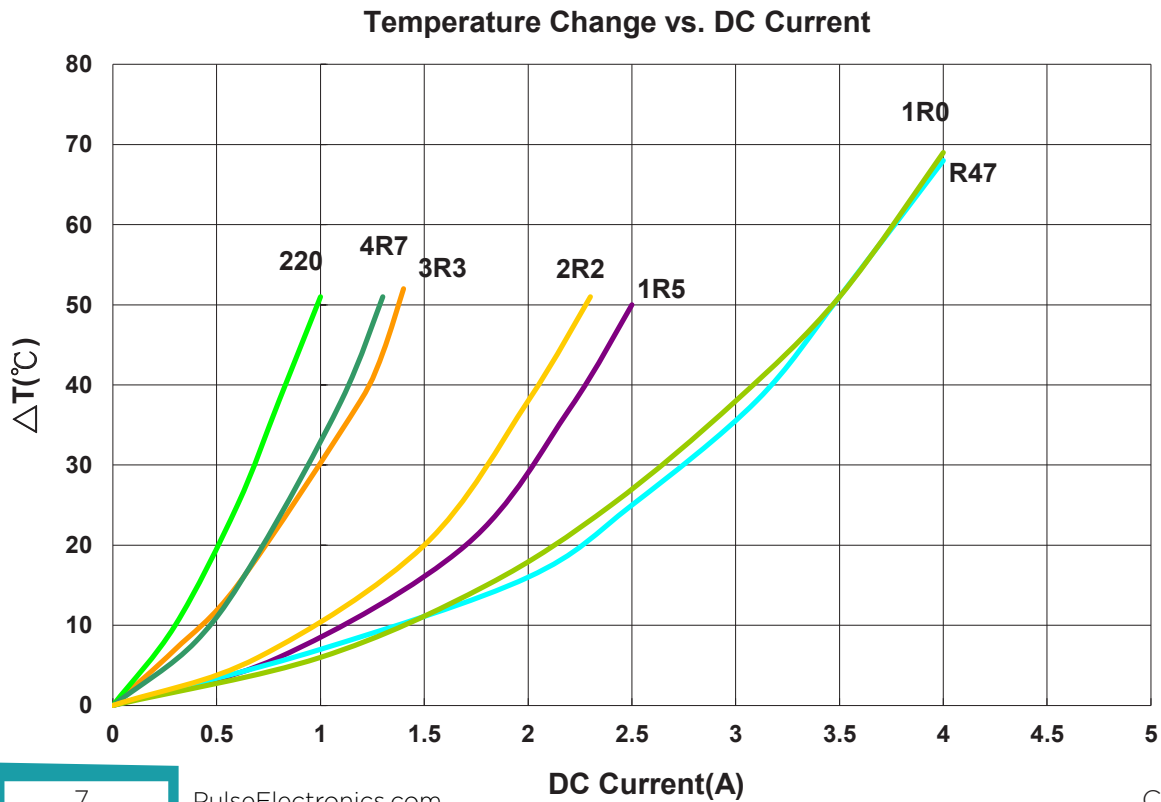
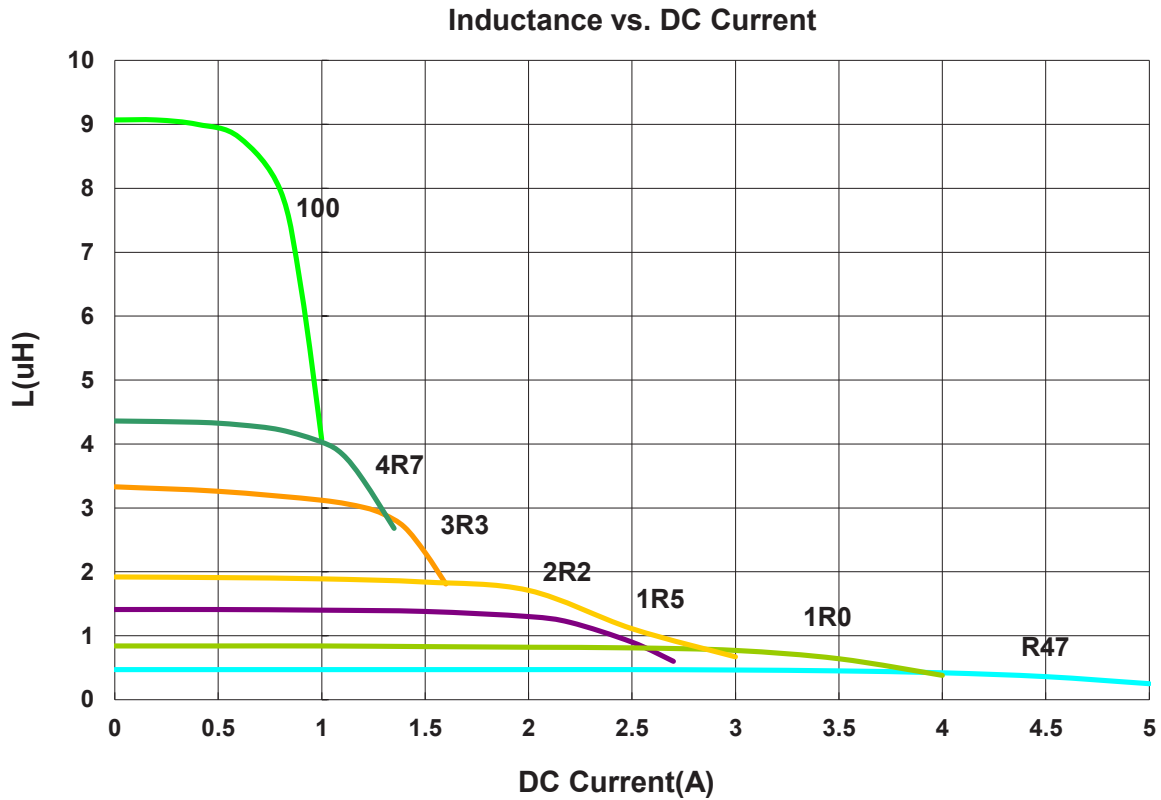
Part No.	Inductance (uH)	Test Freq.	RDC (Ω)±30%	Isat(A) Typ.(Max)	Irms(A) Typ.(Max)	Tolerance (±%)
AWVH00252012R47□H1	0.47	1MHz,200mV	0.031	4.10(3.60)	3.10(2.60)	20,30
AWVH00252012R68□H1	0.68	1MHz,200mV	0.031	3.10(2.70)	3.10(2.60)	20,30
AWVH002520121R0□H1	1.0	1MHz,200mV	0.049	3.20(2.80)	3.00(2.50)	20,30
AWVH002520121R5□H1	1.5	1MHz,200mV	0.088	2.30(2.00)	2.20(1.80)	20,30
AWVH002520122R2□H1	2.2	1MHz,200mV	0.099	2.20(1.90)	2.00(1.7.0)	20,30
AWVH002520123R3□H1	3.3	1MHz,200mV	0.190	1.40(1.20)	1.20(1.00)	20,30
AWVH002520124R7□H1	4.7	1MHz,200mV	0.235	1.30(1.10)	1.10(0.93)	20,30
AWVH00252012100□H1	10	1MHz,200mV	0.510	0.92(0.82)	0.80(0.68)	20,30

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

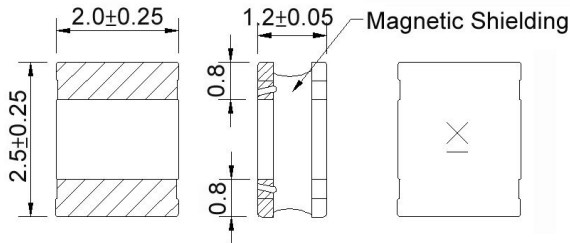
AWVH00252012-H1 Type

Characteristics Graph



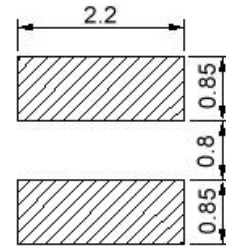
AWVH00252012 Type

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
AWVH00252012R24□00	0.24	1MHz,200mV	0.021	4.70(4.20)	3.80(3.20)	20,30	E
AWVH00252012R33□00	0.33	1MHz,200mV	0.027	4.20(3.70)	3.00(2.50)	20,30	G
AWVH00252012R47□00	0.47	1MHz,200mV	0.027	3.60(3.30)	3.00(2.50)	20,30	J
AWVH00252012R50□00	0.50	1MHz,200mV	0.027	3.60(3.30)	3.00(2.50)	20,30	D
AWVH00252012R68□00	0.68	1MHz,200mV	0.036	2.90(2.60)	2.80(2.30)	20,30	H
AWVH002520121R0□00	1.0	1MHz,200mV	0.037	2.70(2.40)	2.60(2.20)	20,30	A
AWVH002520121R5□00	1.5	1MHz,200mV	0.075	2.20(1.90)	1.90(1.60)	20,30	I
AWVH002520122R2□00	2.2	1MHz,200mV	0.080	1.90(1.80)	1.80(1.50)	20,30	B
AWVH002520124R7□00	4.7	1MHz,200mV	0.195	1.20(1.00)	1.10(0.93)	20,30	C
AWVH00252012100□00	10	1MHz,200mV	0.400	0.90(0.78)	0.80(0.68)	20,30	F
AWVH00252012330□00	33	1MHz,200mV	1.550	0.43(0.38)	0.38(0.34)	20,30	L
AWVH00252012470□00	47	1MHz,200mV	1.700	0.39(0.35)	0.34(0.30)	20,30	K

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

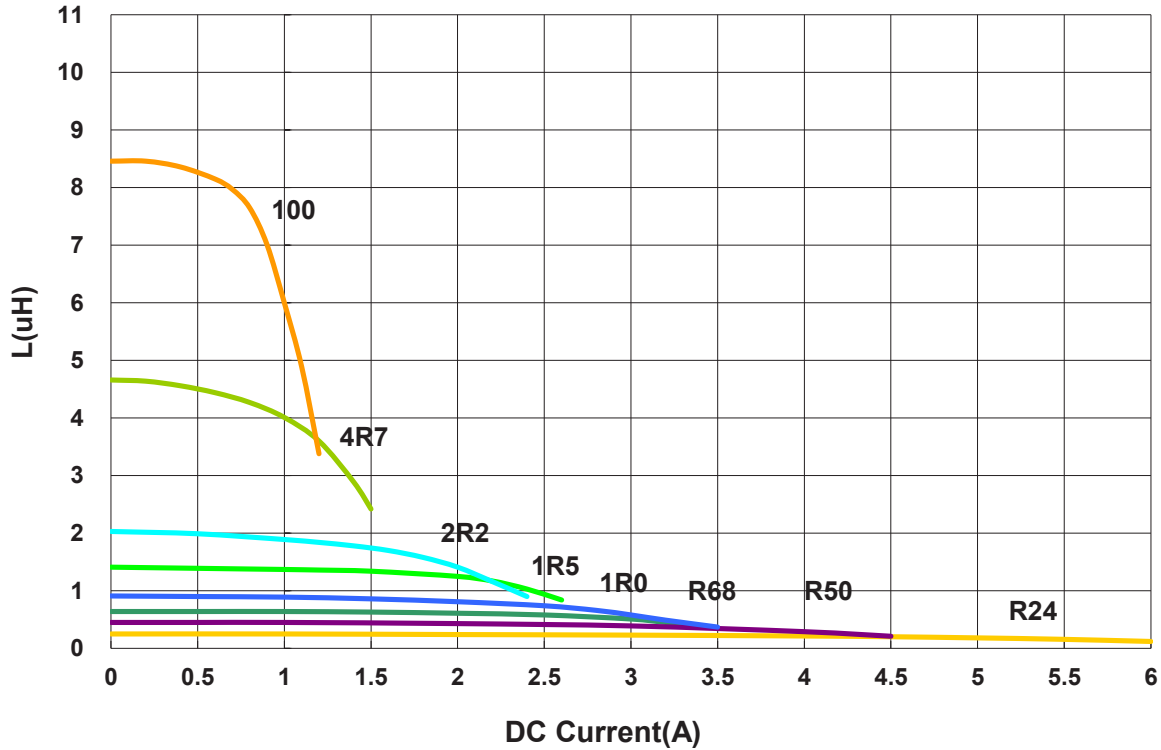
Isat: Agilent HP4284A

Irms: Agilent HP4284A

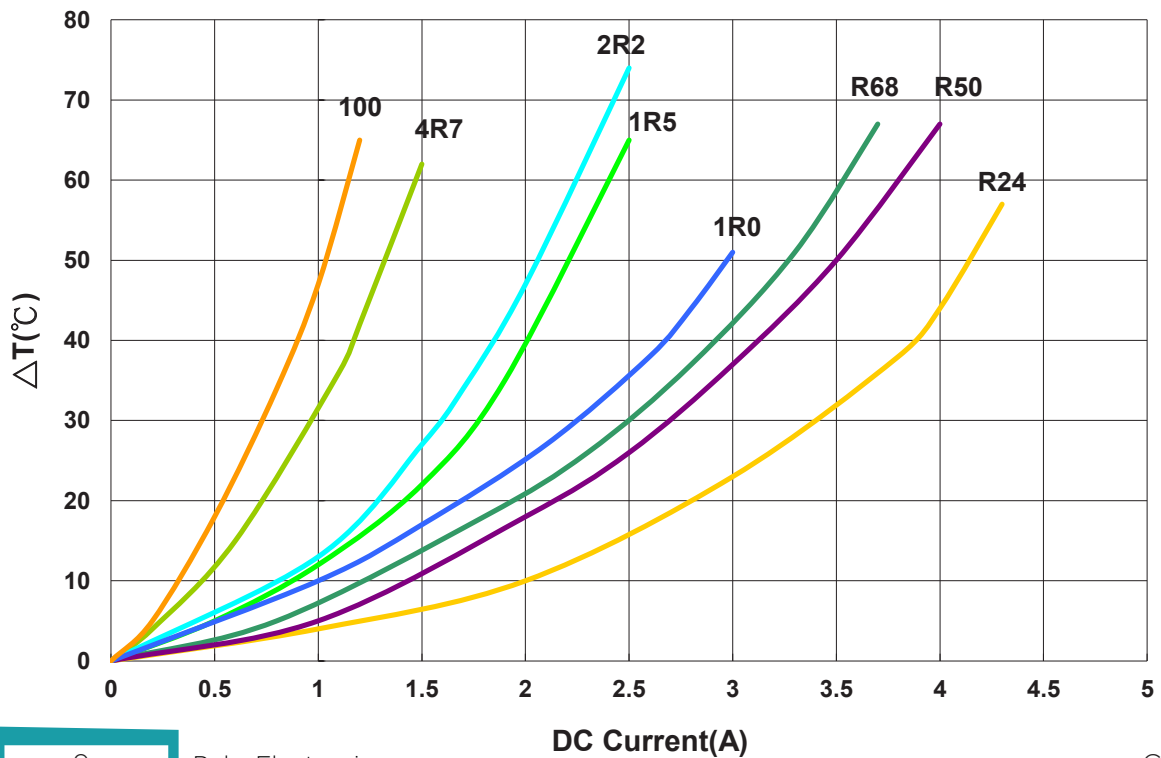
AWVH00252012 Type

Characteristics Graph

Inductance vs. DC Current

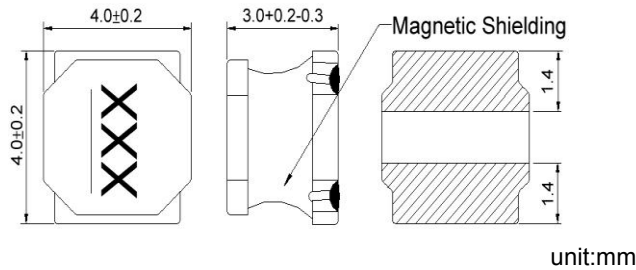


Temperature Change vs. DC Current

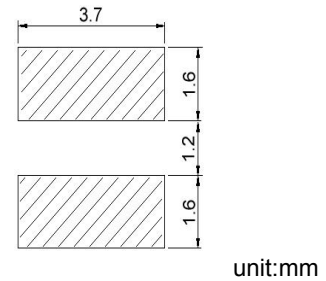


AWVH00404030 Type

■ Dimensions



■ Recommended Land Pattern



■ Electrical Characteristics

Part No.	Inductance (uH)	Test Freq.	RDC (Ω) $\pm 30\%$	Isat(A) Typ.(Max)	Irms(A) Typ.(Max)	Tolerance ($\pm\%$)	Marking
AWVH00404030R47□00	0.47	100kHz, 1V	0.014	9.0(8.0)	5.2(4.6)	30	R47
AWVH004040302R2□00	2.2	100kHz, 1V	0.042	4.4(3.9)	2.8(2.5)	20,30	2R2

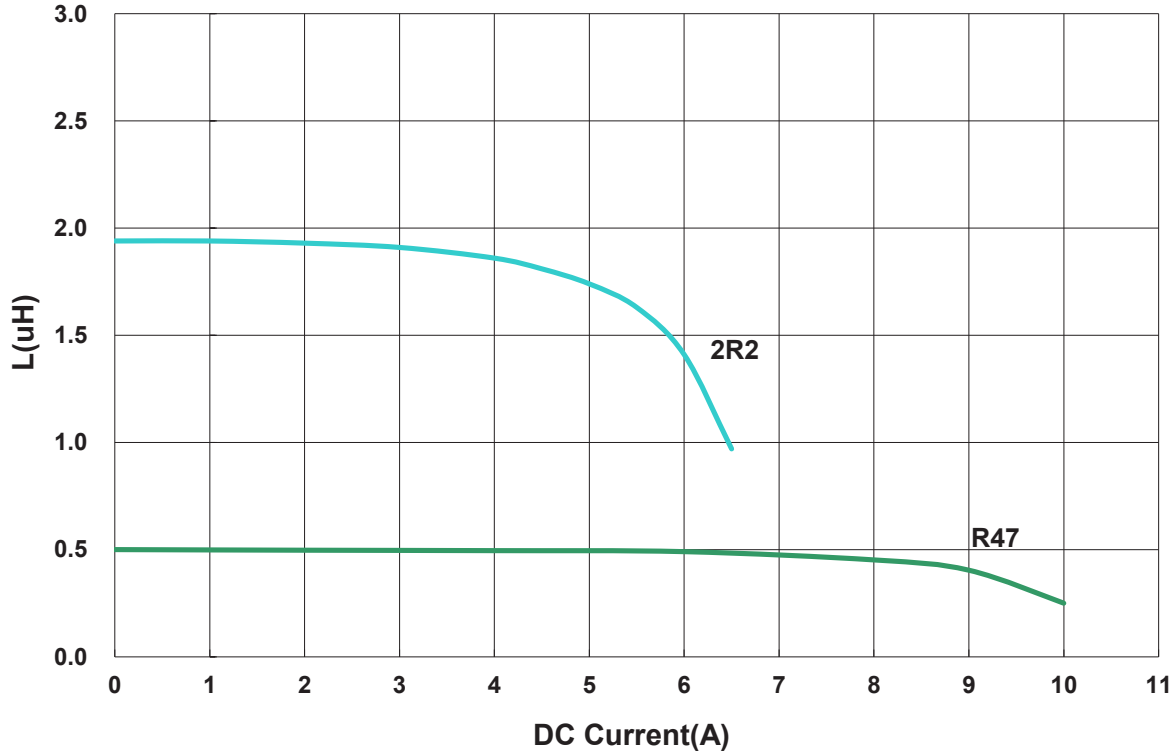
Note: When ordering, please specify tolerance code. Tolerance: M= $\pm 20\%$ / T= $\pm 30\%$

- 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

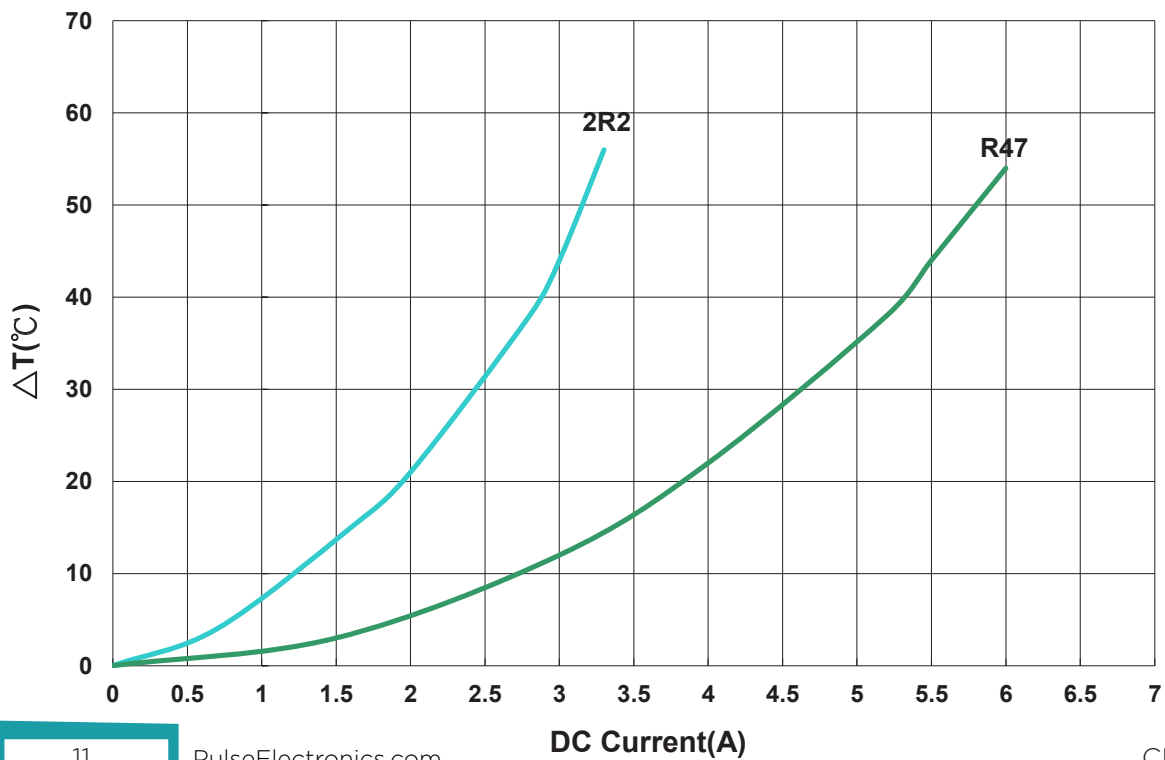
AWVH00404030 Type

Characteristics Graph

Inductance vs. DC Current

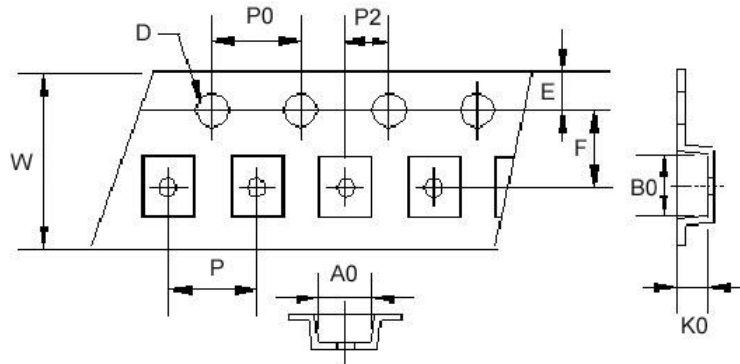


Temperature Change vs. DC Current



■ Packaging

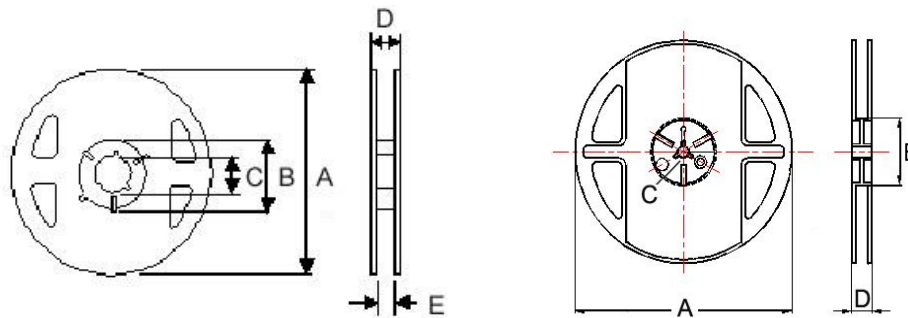
Tape Dimensions



Reel Dimensions

Figure 1

Figure 2



TYPE	Fig	Tape Dimensions										Reel Dimensions					Quantity PCS / Reel
		A0	B0	K0	D	E	F	W	P	P0	P2	A	B	C	D	E	
AWVH00201610	1	1.9	2.2	1.15	1.55	1.75	3.5	8	4	4	2	180	60	13	14.4	8.4	2000
AWVH00252010	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
AWVH00252012	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
AWVH00404030	2	4.25	4.25	3.2	1.55	1.75	5.5	12	8	4	2	178	60	13	13.2	-	500

For More Information:

Americas - prodinfo_power_americas@yageo.com | Europe - prodinfo_power_emea@yageo.com | Asia - prodinfo_power_asia@yageo.com

Performance warranty of products offered on this data sheet is limited to the parameters specified. Data is subject to change without notice. Other brand and product names mentioned herein may be trademarks or registered trademarks of their respective owners. © Copyright, 2022. Pulse Electronics, Inc. All rights reserved.