Pulse a YAGEO company

CHILISIN ELECTRONICS CORP.

SMD Power Chokes – AFSI Series

Automotive AEC-Q200

RoHS Compliant
Halogen Free
REACH Compliant

Power Circuit | Shield | Wire Wound | Metal | Ultra High Current

■ Part Numbering

A	FSI	00	090908	1R0	M	05
Grade	Series Name	Control Code	Dimensions Code (mm)	Inductance (uH)	Tolerance	Internal Code

Dimensions Code (mm)		Inductance (uH)		Tolerance	
090908	9.3x9x8.1	R47	0.47	M	±20%
121109	12x11x8.8	4R7	4.7		
111010	12.1x10.8x10	100	10		
161508	16.8x15.8x8				
161510	16.8x15.8x10				

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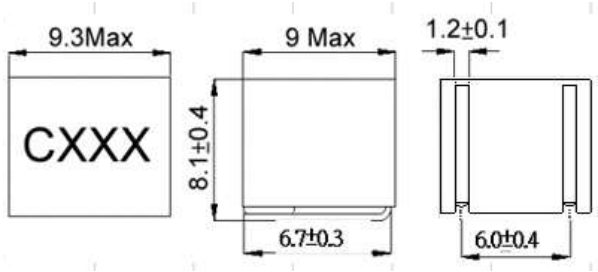
SMD Power Chokes – AFSI Series

Automotive AEC-Q200

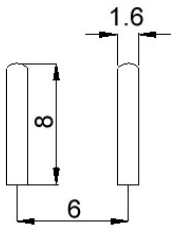
AFSI00090908 Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

■ Electrical Characteristics

Part No.	Inductance (uH)	Test Freq.	RDC(mΩ) Typ(Max)	Isat (A)Typ.	Irms (A)Typ.	Tolerance (±%)	Marking
AFSI00090908R68M05	0.68	100kHz,1V	1.3(2)	38	36	20	CR68
AFSI000909081R0M05	1	100kHz,1V	1.7(2.5)	31	34	20	C1R0
AFSI000909081R5M05	1.5	100kHz,1V	2.5(3.5)	28	28	20	C1R5
AFSI000909082R2M05	2.2	100kHz,1V	2.9(3.8)	24	25	20	C2R2
AFSI000909083R3M05	3.3	100kHz,1V	5.6(6.5)	19	17.5	20	C3R3
AFSI000909084R7M05	4.7	100kHz,1V	7(8.5)	17.5	15	20	C4R7
AFSI000909086R8M05	6.8	100kHz,1V	12(13)	14	12	20	C6R8
AFSI000909088R2M05	8.2	100kHz,1V	13.3(15)	12	11	20	C8R2
AFSI00090908100M05	10	100kHz,1V	13.8(15.5)	11	10	20	C100

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

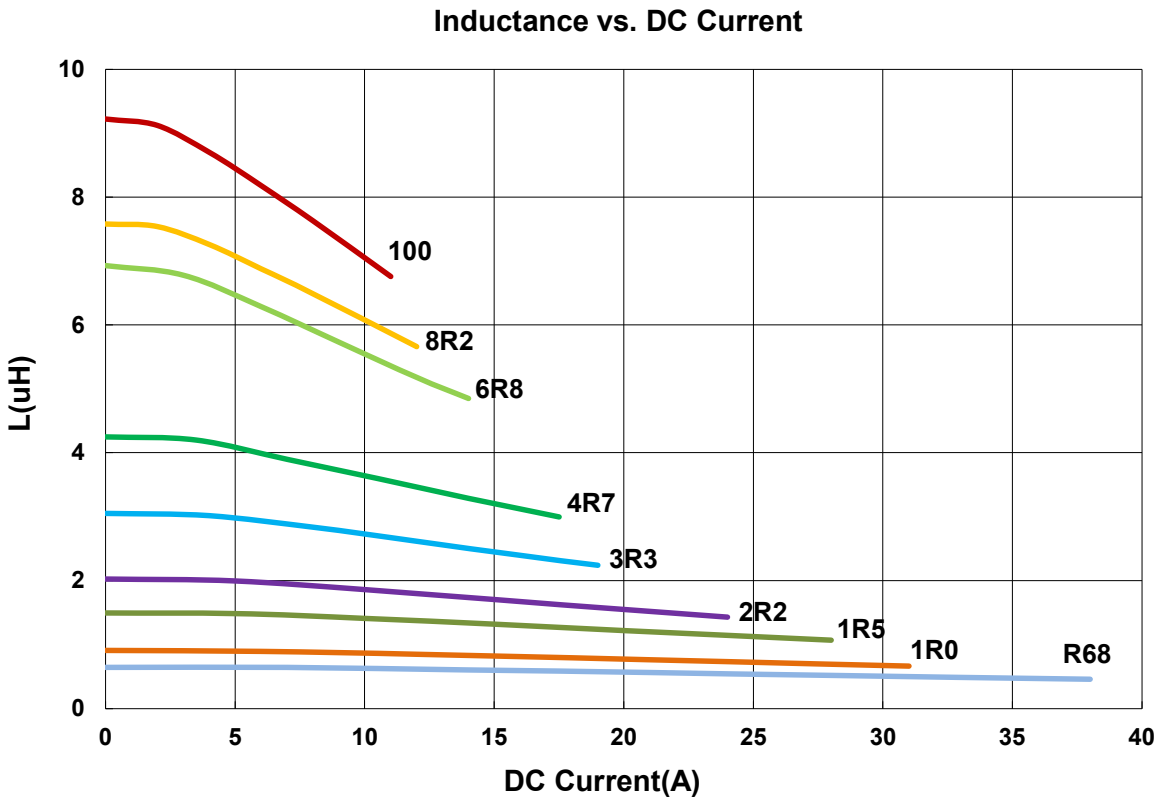
1. Customized Specifications are welcome
2. Operating temperature range －50℃～155℃(Including self - temperature rise)
3. Isat for Inductance drop 30% from its value without current
4. Irms for a 40℃ temprature rise from 25℃ ambient with current
5. Apply glue around the product to fix the product body after loading the plate
6. Measure Equipment:
   L: WK4237
   RDC: CHEN HWA502
   Isat: WK3260B/ 3265
   Irms: WK3260B/ 3265

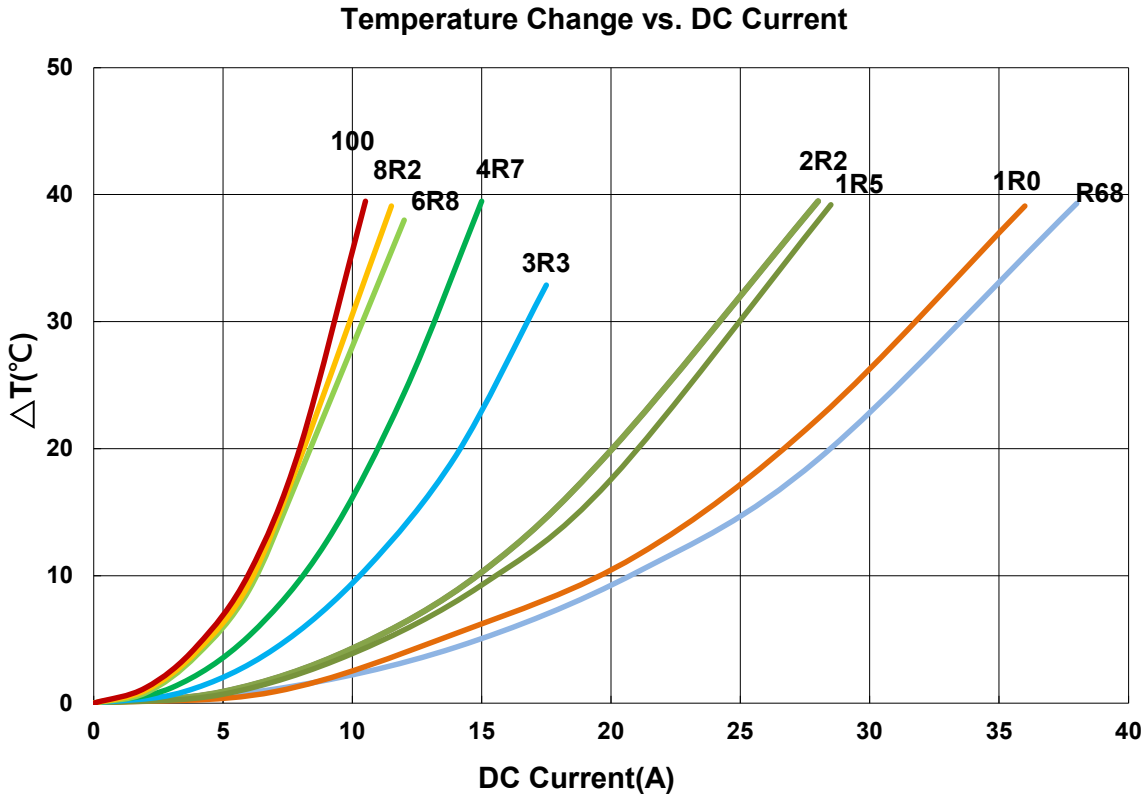
SMD Power Chokes – AFSI Series

Automotive
AEC-Q200

AFSI00090908 Type

■ Characteristics Graph





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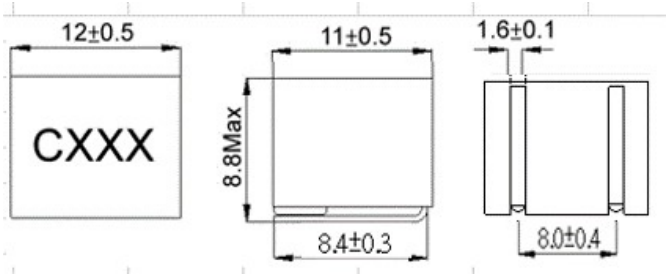
CHILISIN ELECTRONICS CORP.

SMD Power Chokes – AFSI Series

Automotive
AEC-Q200

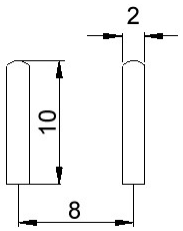
AFSI00121109 Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

■ Electrical Characteristics

Part No.	Inductance (uH)	Test Freq.	RDC(mΩ) Typ(Max)	Isat (A)Typ.	Irms (A)Typ.	Tolerance (±%)	Marking
AFSI00121109R47M05	0.47	100kHz,1V	1.1(1.5)	65	50	20	CR47
AFSI001211091R0M05	1	100kHz,1V	1.5(2.0)	45	40	20	C1R0
AFSI001211091R5M05	1.5	100kHz,1V	2.0(2.5)	36	33	20	C1R5
AFSI001211092R2M05	2.2	100kHz,1V	2.4(2.8)	30	30	20	C2R2
AFSI001211093R3M05	3.3	100kHz,1V	3.3(3.8)	26	26	20	C3R3
AFSI001211094R7M05	4.7	100kHz,1V	5.7(6.2)	23	20	20	C4R7
AFSI001211095R6M05	5.6	100kHz,1V	6.4(7.0)	21	18	20	C5R6
AFSI001211096R8M05	6.8	100kHz,1V	6.8(7.8)	19	17	20	C6R8
AFSI001211098R2M05	8.2	100kHz,1V	8.2(9.0)	18	16	20	C8R2
AFSI00121109100M05	10	100kHz,1V	11.3(12)	17.5	13	20	C100
AFSI00121109150M05	15	100kHz,1V	14.3(15)	13.5	11	20	C150

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

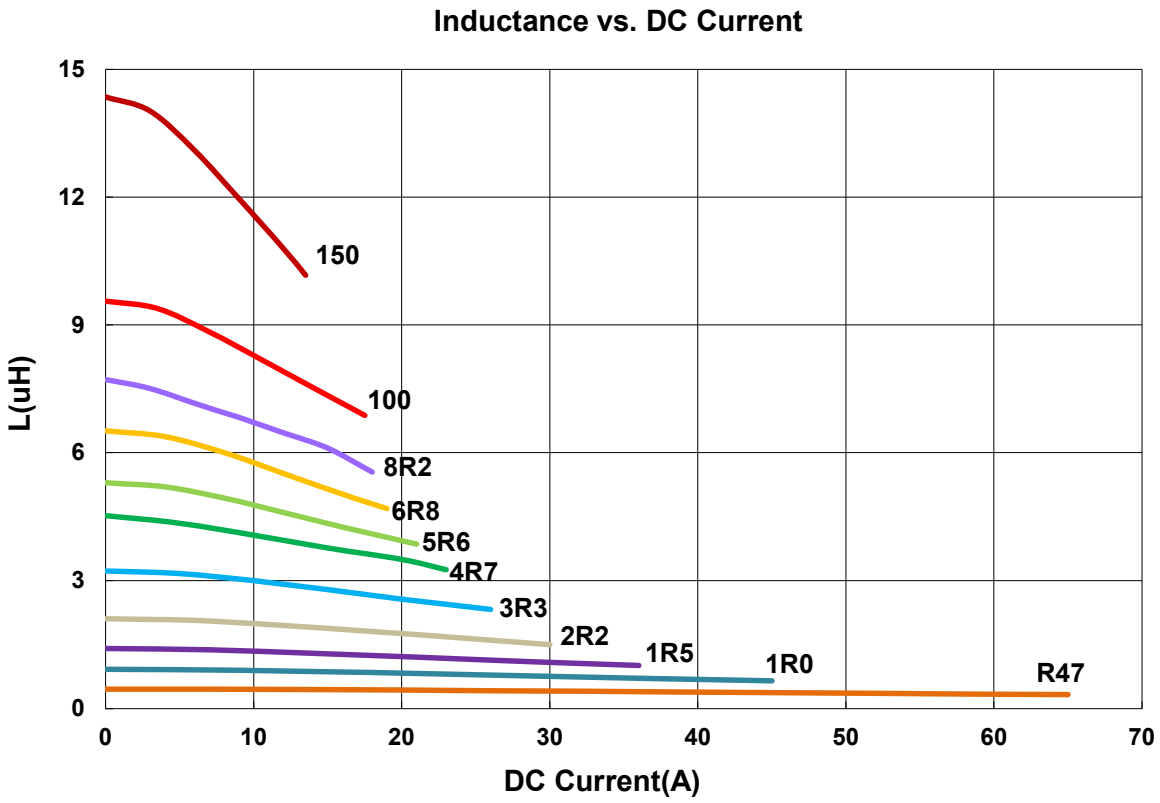
1. Customized Specifications are welcome
2. Operating temperature range －50℃～155℃(Including self - temperature rise)
3. Isat for Inductance drop 30% from its value without current
4. Irms for a 40℃ temprature rise from 25℃ ambient with current
5. Apply glue around the product to fix the product body after loading the plate
6. Measure Equipment:
   L: WK4237
   RDC: CHEN HWA502
   Isat: WK3260B/ 3265
   Irms: WK3260B/ 3265

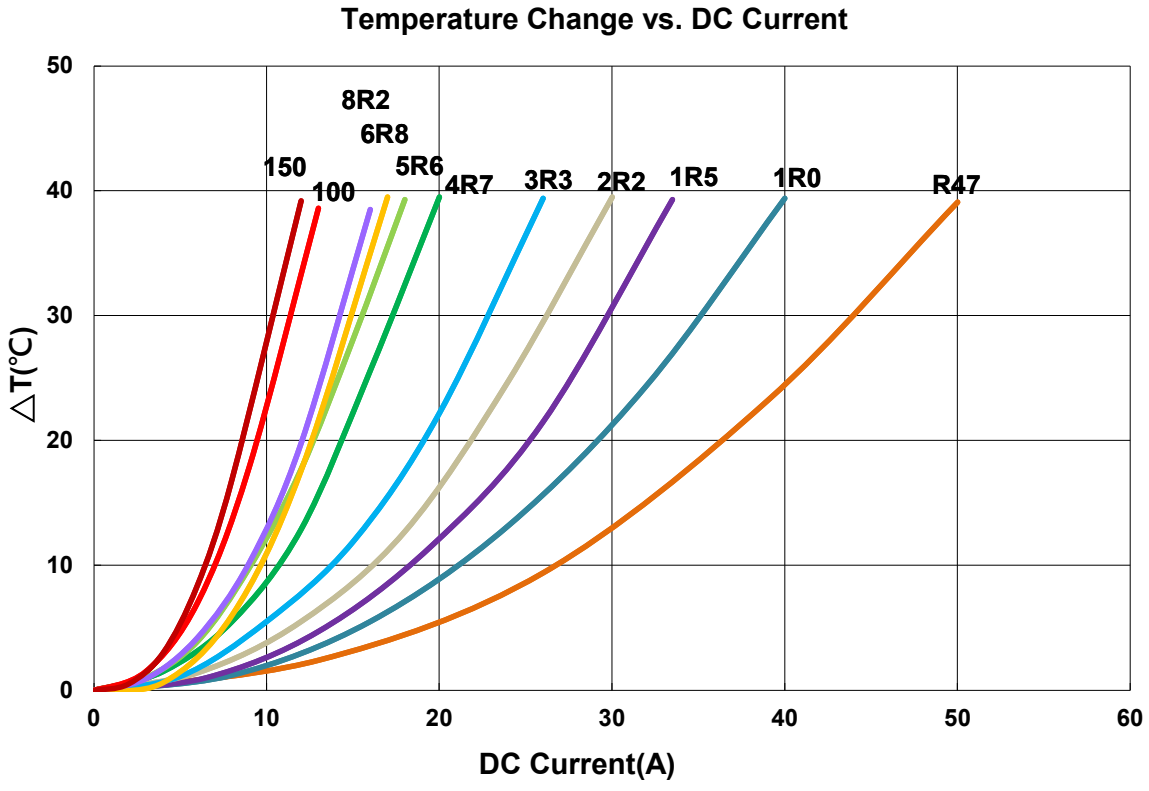
SMD Power Chokes – AFSI Series

Automotive
AEC-Q200

AFSI00121109 Type

■ Characteristics Graph





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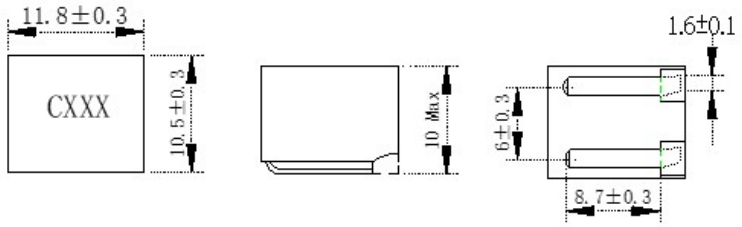
CHILISIN ELECTRONICS CORP.

SMD Power Chokes – AFSI Series

Automotive AEC-Q200

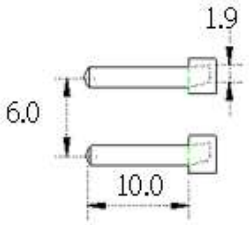
AFSI00111010 Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

■ Electrical Characteristics

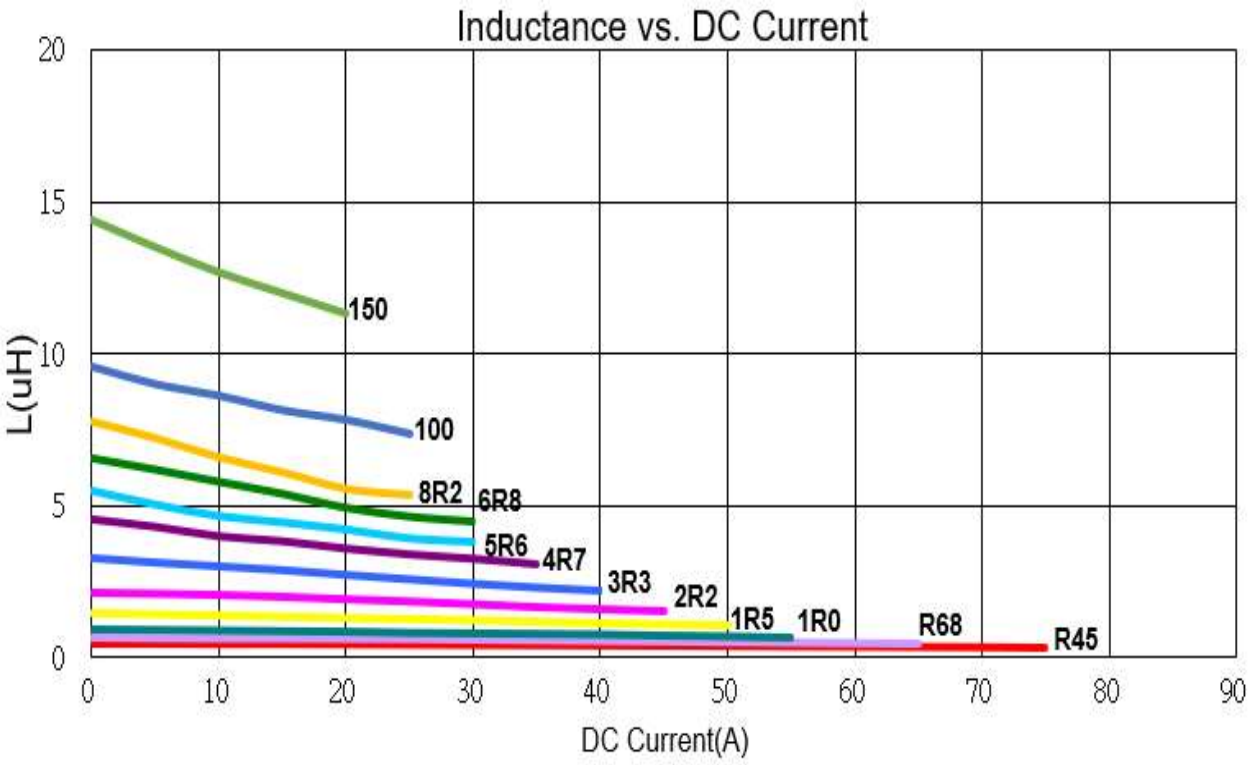
Part No.	Inductance (uH)	Test Freq.	RDC(mΩ) Typ(Max)	Isat (A)Typ.	Irms (A)Typ.	Tolerance (±%)	Marking
AFSI00111010R45M17	0.45	100kHz,1V	0.86	71	52	20	CR45
AFSI00111010R68M17	0.68	100kHz,1V	1.05	62	47	20	CR68
AFSI001110101R0M17	1	100kHz,1V	1.3	55	42	20	C1R0
AFSI001110101R5M17	1.5	100kHz,1V	1.8	45	41	20	C1R5
AFSI001110102R2M17	2.2	100kHz,1V	2.8	38	33	20	C2R2
AFSI001110103R3M17	3.3	100kHz,1V	4.1	37	25	20	C3R3
AFSI001110104R7M17	4.7	100kHz,1V	5.7	33	24	20	C4R7
AFSI001110105R6M17	5.6	100kHz,1V	6.9	28	21	20	C5R6
AFSI001110106R8M17	6.8	100kHz,1V	8.9	27	19	20	C6R8
AFSI001110108R2M17	8.2	100kHz,1V	10	26	18	20	C8R2
AFSI00111010100M17	10	100kHz,1V	12.7	22	16	20	C100
AFSI00111010150M17	15	100kHz,1V	14.6	20	15	20	C150

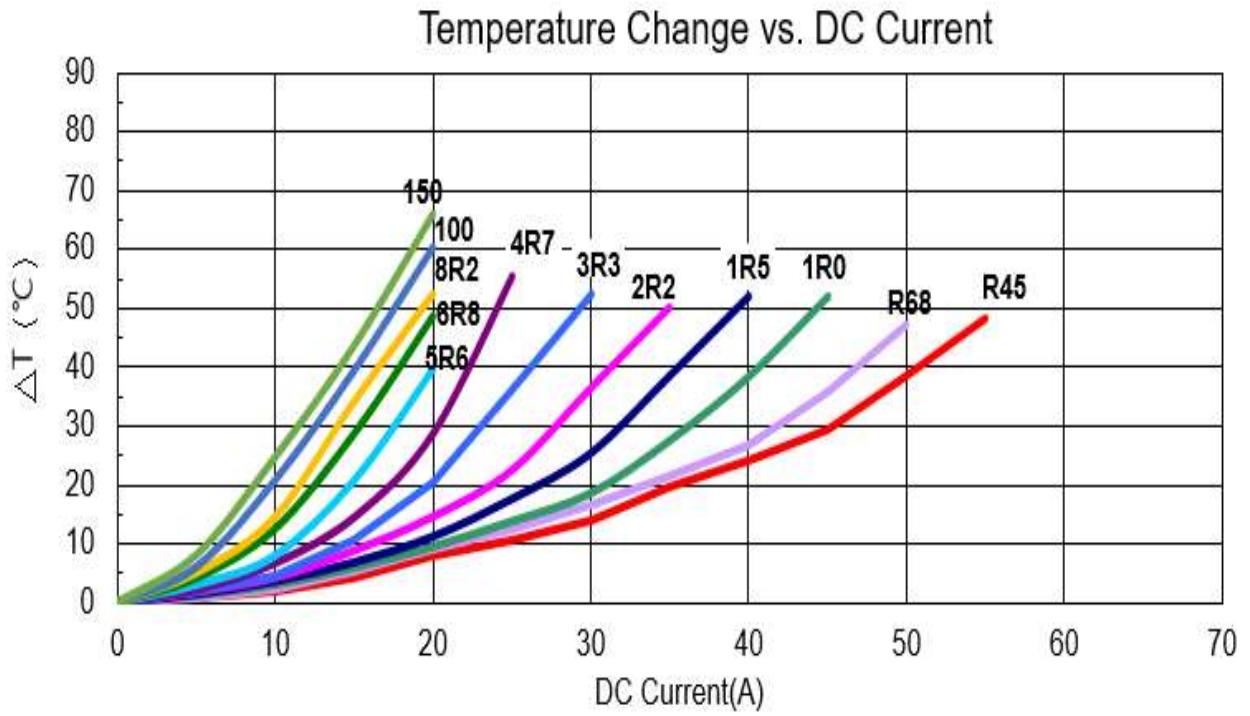
Note: When ordering, please specify tolerance code. Tolerance: M=±20%

1. Operating temperature range －40℃～125℃(Including self - temperature rise)
2. Isat for Inductance drop 30% from its value without current
3. Irms for a 40°C temprature rise from 25°C ambient with current
4. The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating conditions. Circuit design125°C under worst case operating conditions. Component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
5. Apply glue around the product to fix the product body after loading the plate

AFSI00111010 Type

■ Characteristics Graph





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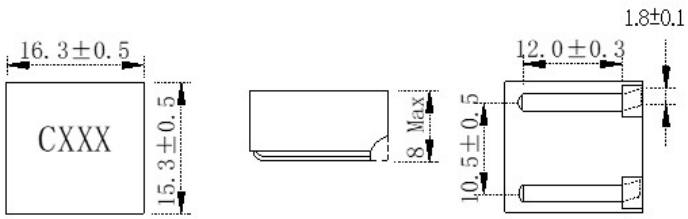
CHILISIN ELECTRONICS CORP.

SMD Power Chokes – AFSI Series

Automotive AEC-Q200

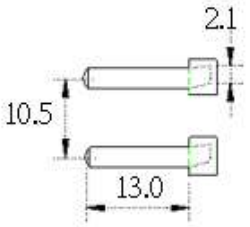
AFSI00161508 Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

■ Electrical Characteristics

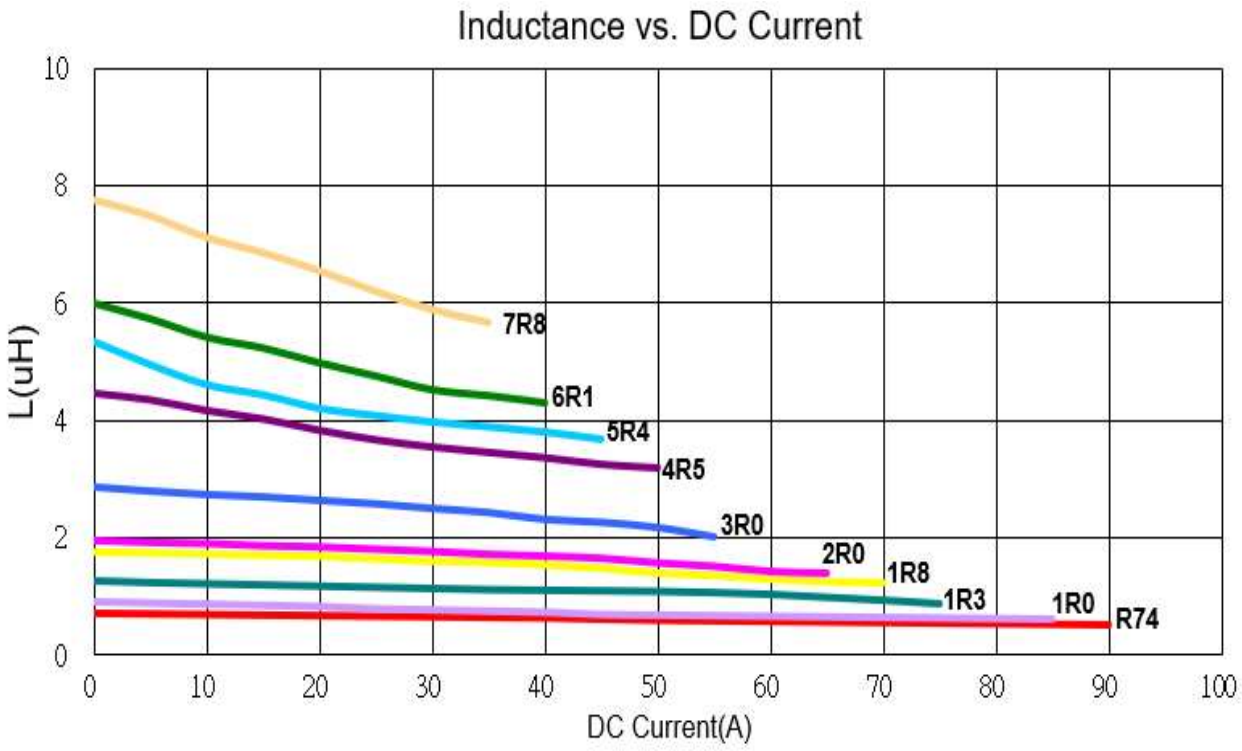
Part No.	Inductance (uH)	Test Freq.	RDC(mΩ) Typ(Max)	Isat (A)Typ.	Irms (A)Typ.	Tolerance (±%)	Marking
AFSI00161508R74M17	0.74	100kHz,1V	0.96	86	59	20	CR74
AFSI001615081R0M17	1	100kHz,1V	1.15	74	57	20	C1R0
AFSI001615081R3M17	1.3	100kHz,1V	1.45	70	46	20	C1R3
AFSI001615081R8M17	1.8	100kHz,1V	1.93	65	44	20	C1R8
AFSI001615082R0M17	2	100kHz,1V	2.3	60	39	20	C2R0
AFSI001615083R0M17	3	100kHz,1V	3.1	50	35	20	C3R0
AFSI001615084R5M17	4.5	100kHz,1V	4.5	42	28	20	C4R5
AFSI001615085R4M17	5.4	100kHz,1V	5	37	27	20	C5R4
AFSI001615086R1M17	6.1	100kHz,1V	5.8	36	23	20	C6R1
AFSI001615087R8M17	7.8	100kHz,1V	6.8	33	21	20	C7R8

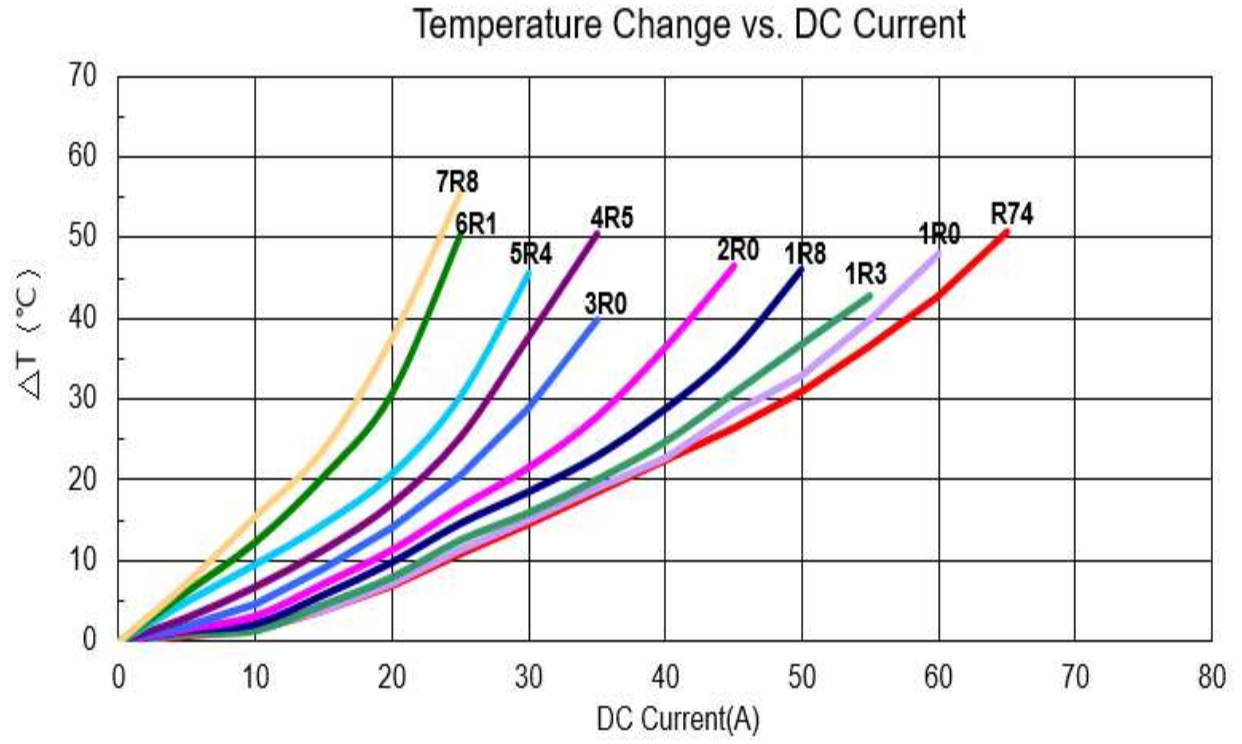
Note: When ordering, please specify tolerance code. Tolerance: M=±20%

1. Operating temperature range －40℃～125℃(Including self - temperature rise)
2. Isat for Inductance drop 30% from its value without current
3. Irms for a 40℃ temprature rise from 25℃ ambient with current
4. The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating conditions. Circuit design125°C under worst case operating conditions. Component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
5. Apply glue around the product to fix the product body after loading the plate

AFSI00161508 Type

■ Characteristics Graph





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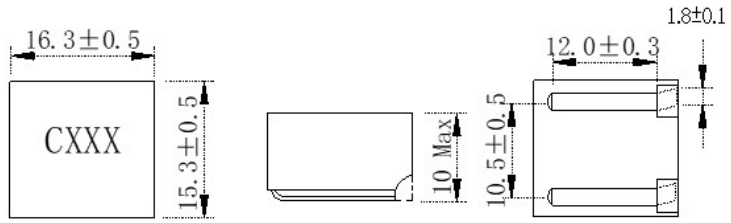
SMD Power Chokes – AFSI Series

Automotive AEC-Q200

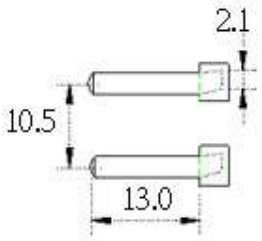
AFSI001615010 Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

■ Electrical Characteristics

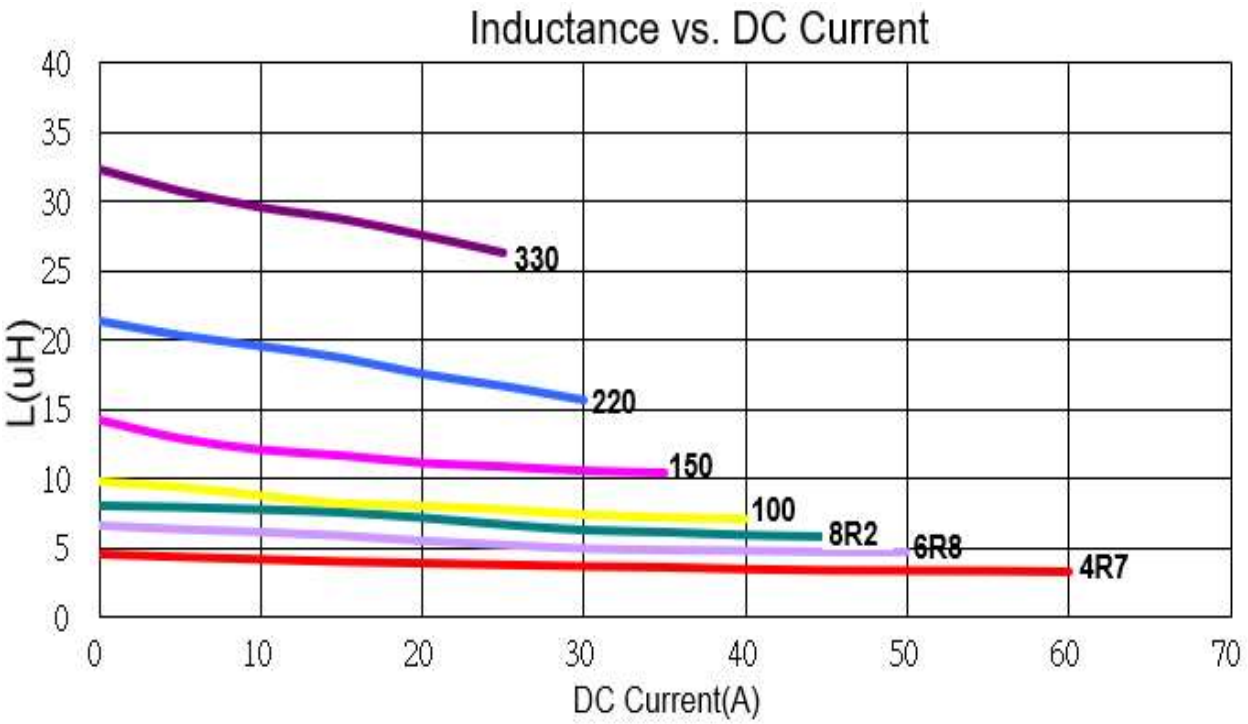
Part No.	Inductance (uH)	Test Freq.	RDC(mΩ) Typ(Max)	Isat (A)Typ.	Irms (A)Typ.	Tolerance (±%)	Marking
AFSI001615104R7M17	4.7	100kHz,1V	3.8	60	30	20	C4R7
AFSI001615106R8M17	6.8	100kHz,1V	4.6	50	26	20	C6R8
AFSI001615108R2M17	8.2	100kHz,1V	6	43	25	20	C8R2
AFSI00161510100M17	10	100kHz,1V	8	40	22	20	C100
AFSI00161510150M17	15	100kHz,1V	11.4	32	18	20	C150
AFSI00161510220M17	22	100kHz,1V	14	28	15	20	C220
AFSI00161510330M17	33	100kHz,1V	19	24	12	20	C330

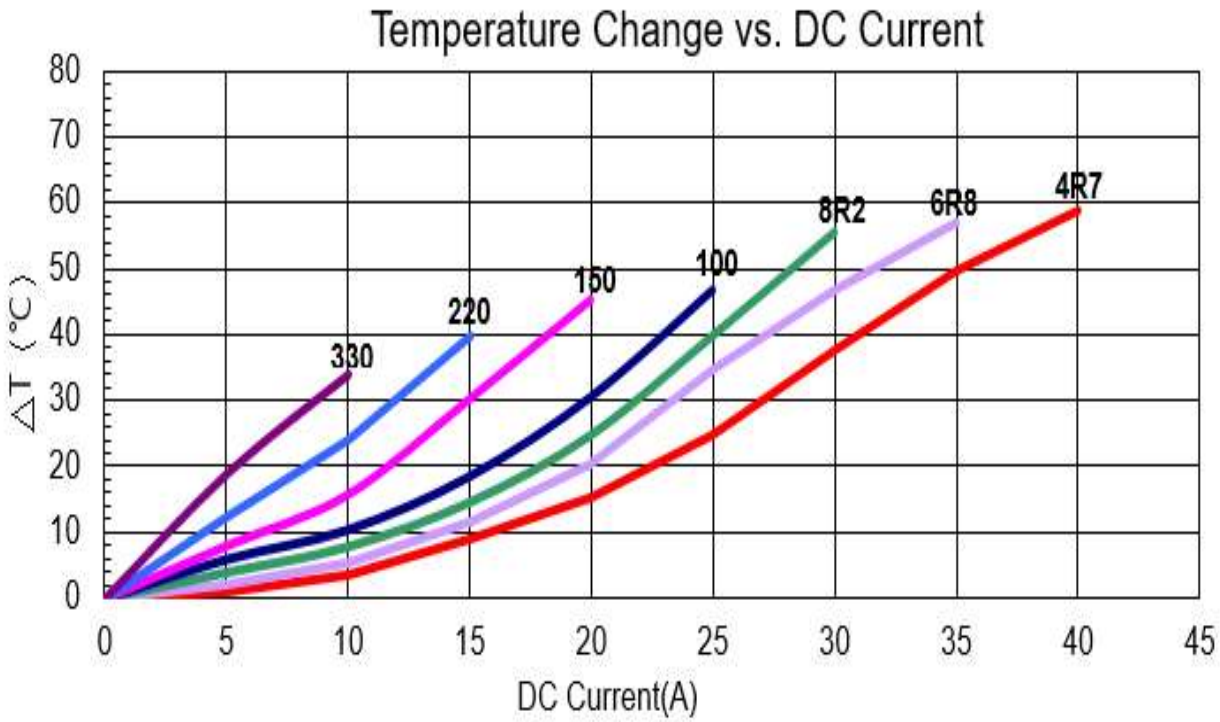
Note: When ordering, please specify tolerance code. Tolerance: M=±20%

1. Operating temperature range －40℃～125℃(Including self - temperature rise)
2. Isat for Inductance drop 30% from its value without current
3. Irms for a 40℃ temprature rise from 25℃ ambient with current
4. The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating conditions. Circuit design125°C under worst case operating conditions. Component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
5. Apply glue around the product to fix the product body after loading the plate

AFSI00161510 Type

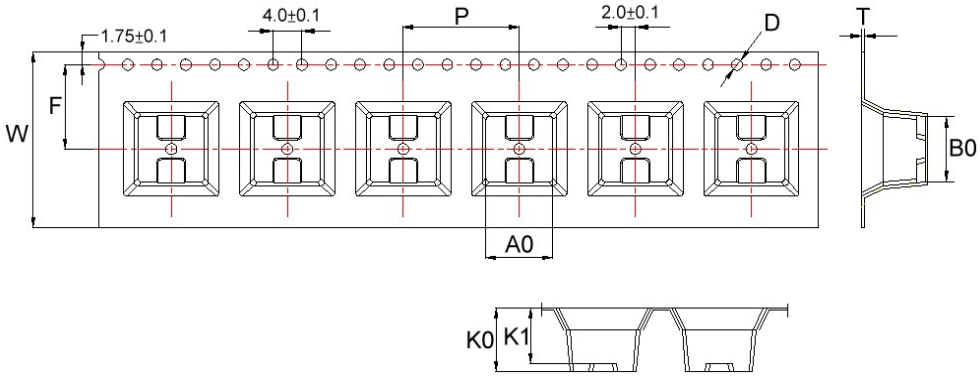
■ Characteristics Graph



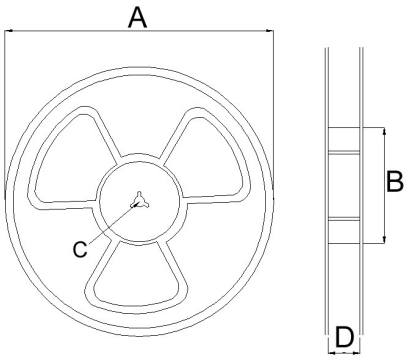


■ Packaging

Tape Dimensions



Reel Dimensions



Dimensions in mm

TYPE	Tape Dimensions									Reel Dimensions				Quantity
	A0	B0	K0	K1	D	F	W	T	P	A	B	C	D	PCS / REEL
AFSI00090908	9.2	9	8.8	7.6	1.5	11.5	24	0.4	16	330	100	13	24.3	300
AFSI00121109	12.2	11	9	8.07	1.5	11.5	24	0.5	20	330	100	13	24.3	240
AFSI00111010	12.15	10.9	10.5		1.5	11.5	24	0.5	20	330	100	13	24.3	240
AFSI00161508	16.75	15.7	8.8		1.5	14.2	32	0.5	24	330	100	13	33.4	200
AFSI00161510	16.75	15.7	10.5		1.5	14.2	32	0.5	24	330	100	13	33.4	150