

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
			090908 9.3x9x8.1	R47 0.47	M ±20%	
			121109 12x11x8.8	4R7 4.7		
				100 10		

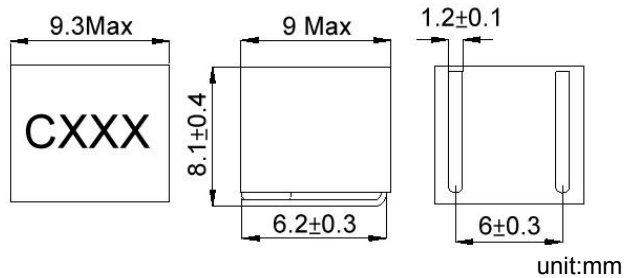
This specification applies to Power Choke for Automotive Electronics based on AEC-Q200 except for Power train and Safety.

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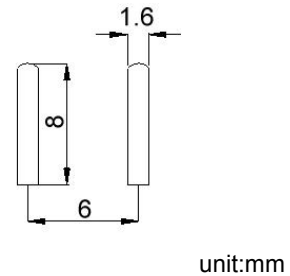
**Automotive
AEC-Q200**

AFSI00090908 Type

■ Dimensions



■ Recommended Land Pattern



■ 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°C ~ 155°C(Including self - temperature rise)
3. Isat for Inductance drop 30% from its value without current
4. I rms for a 40°C temprature rise from 25°C ambient with current
5. Measure Equipment:
 L: WK4237
 RDC: CHEN HWA502
 Isat: WK3260B/ 3265
 I rms: WK3260B/ 3265

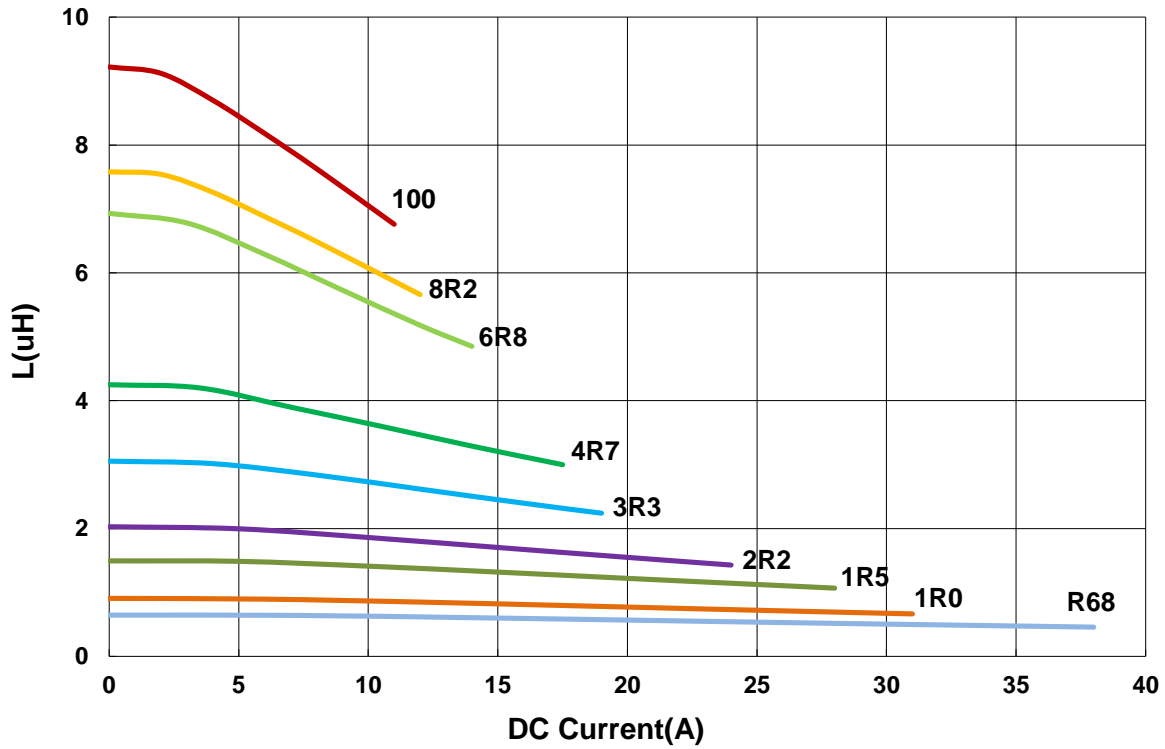
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**Automotive
AEC-Q200**

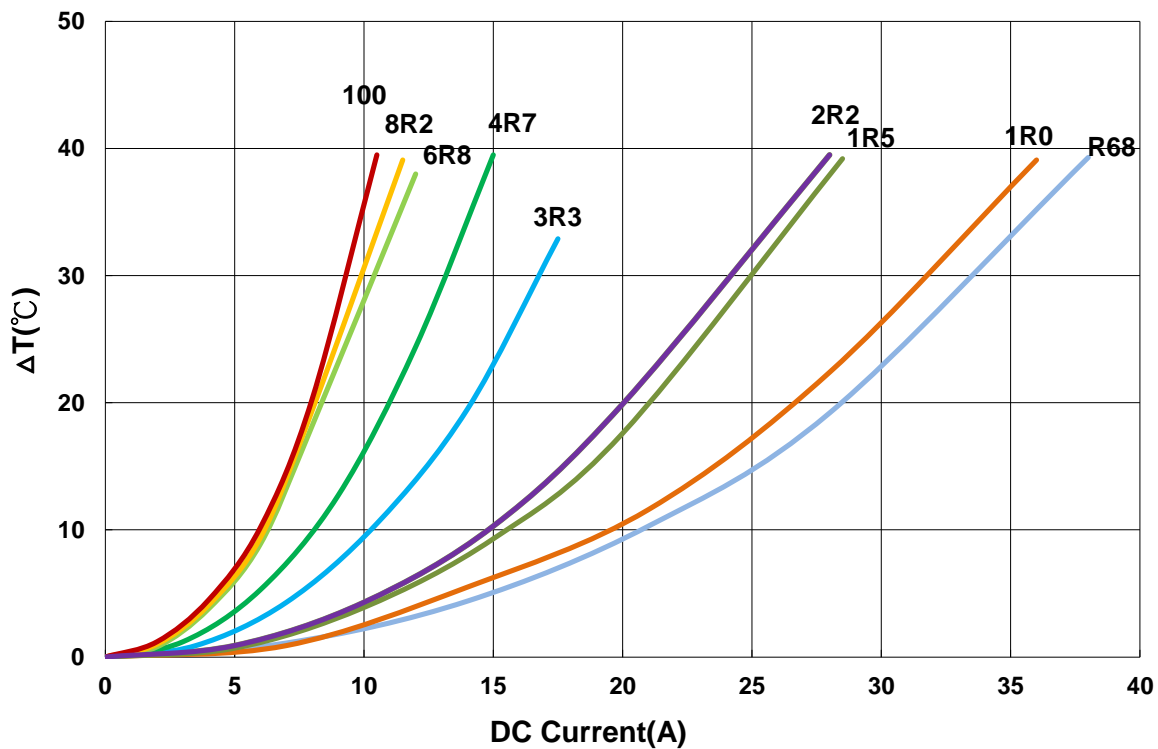
AFSI00090908 Type

Characteristics Graph

Inductance vs. DC Current



Temperature Change vs. DC Current

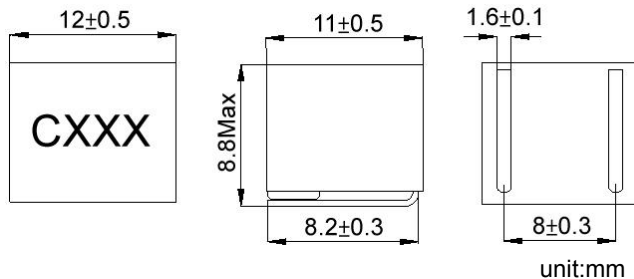


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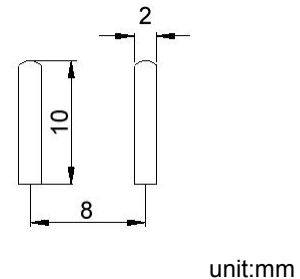
**Automotive
AEC-Q200**

AFSI00121109 Type

■ Dimensions



■ Recommended Land Pattern



■ 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%

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5. Measure Equipment:
 - L: WK4237
 - RDC: CHEN HWA502
 - Isat: WK3260B/ 3265
 - I rms: WK3260B/ 3265

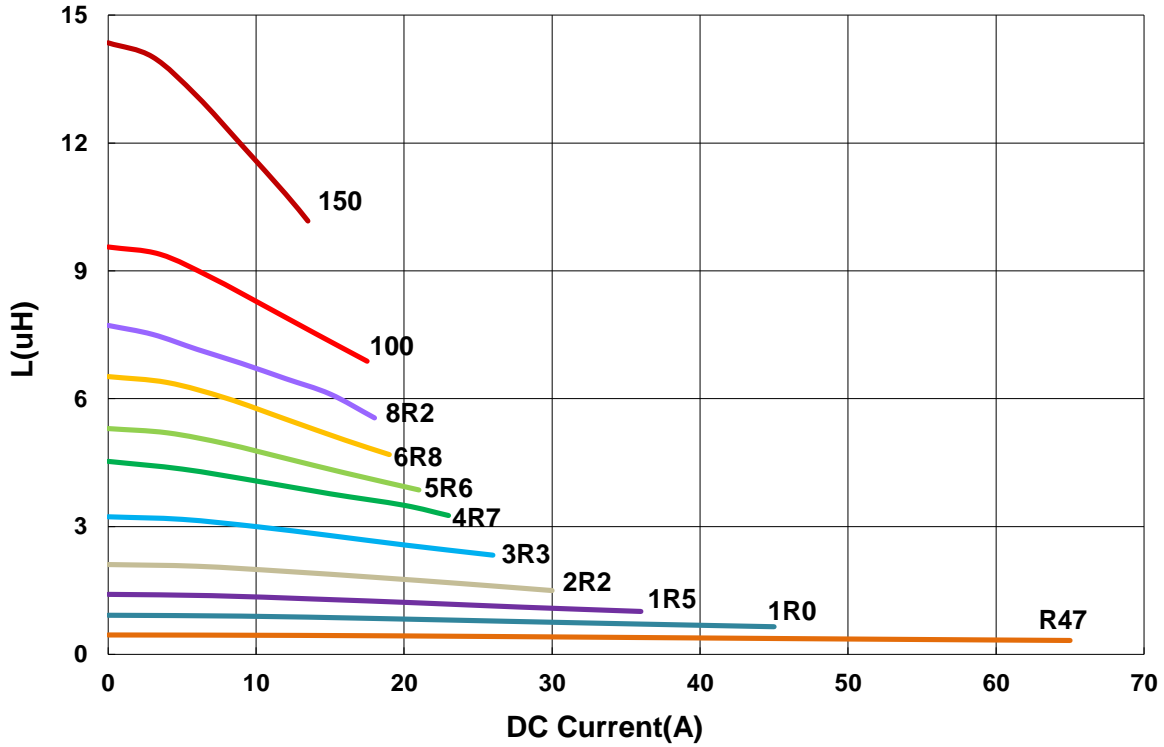
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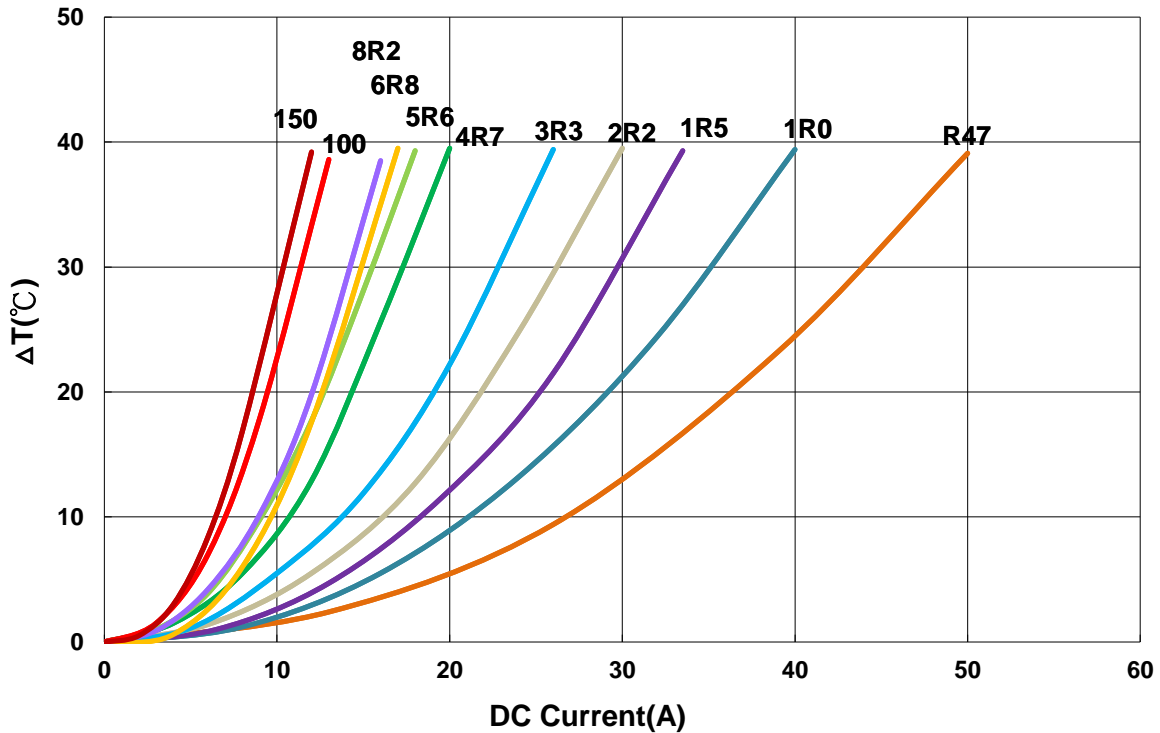
AFSI00121109 Type

Characteristics Graph

Inductance vs. DC Current



Temperature Change vs. DC Current

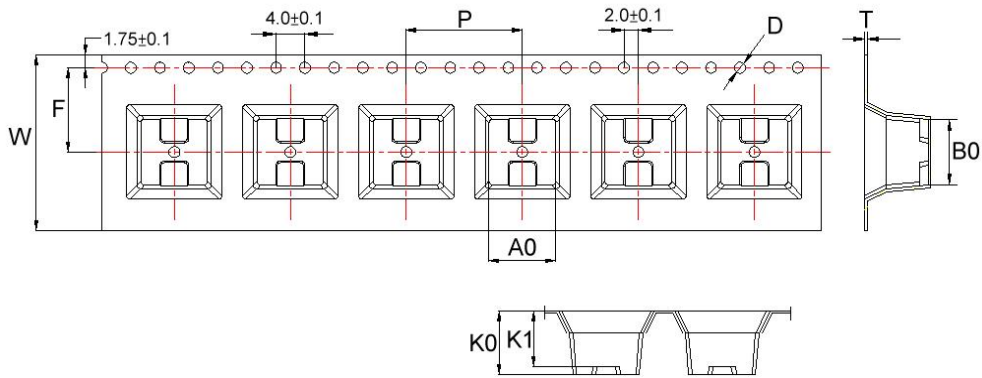


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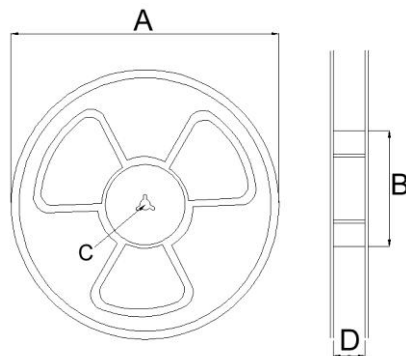
**Automotive
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■ Packaging

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