

# SMD Power Chokes

AFSI Series - ISO9001 | ISO14001 | IATF16949



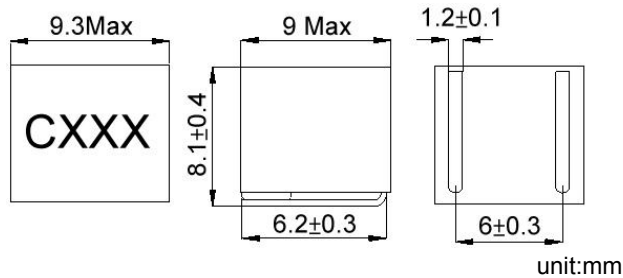
- Power Circuit
- Shield
- Wire Wound
- Metal
- Ultra High Current

## Part Numbering

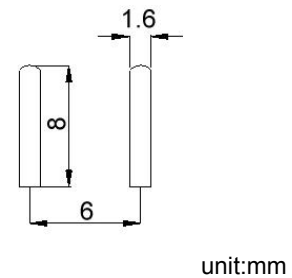
|       |             |              |                      |                 |           |               |
|-------|-------------|--------------|----------------------|-----------------|-----------|---------------|
| A     | FSI         | 00           | 090908               | 1R0             | M         | 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          |           |               |

## AFSI00090908 Type

### Dimensions



### Recommended Land Pattern



### Electrical Characteristics

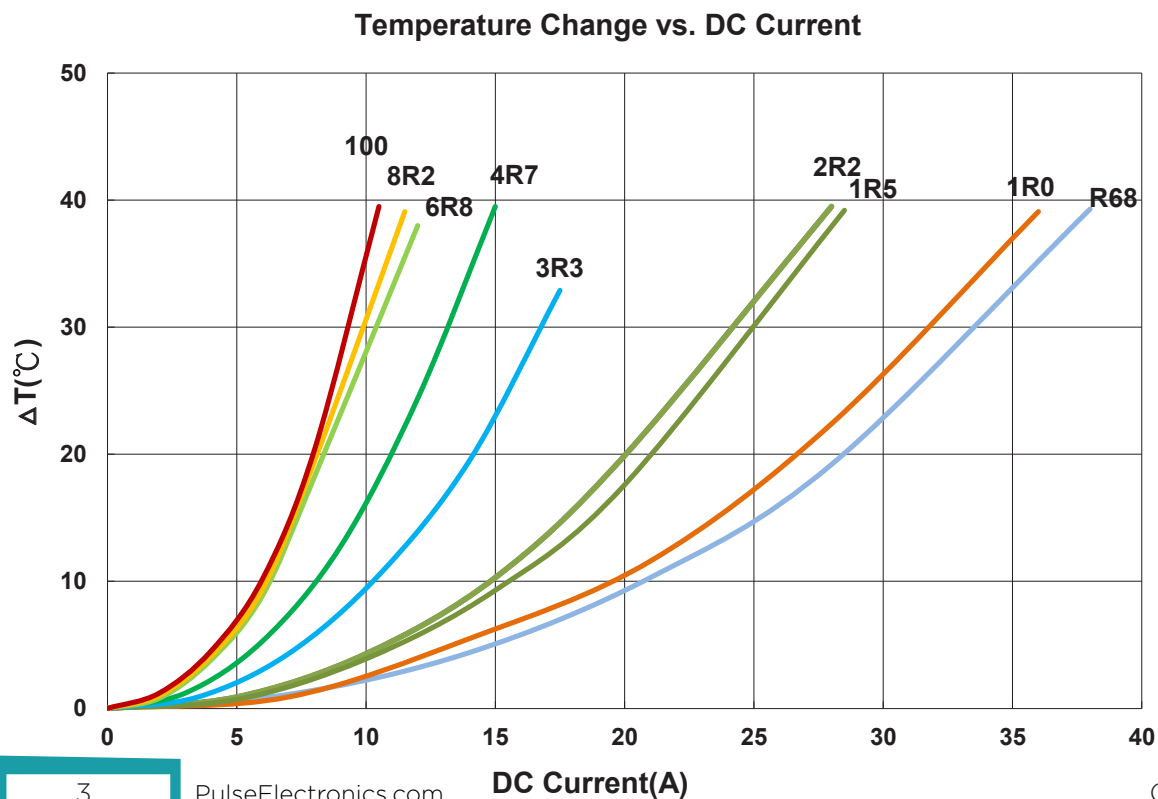
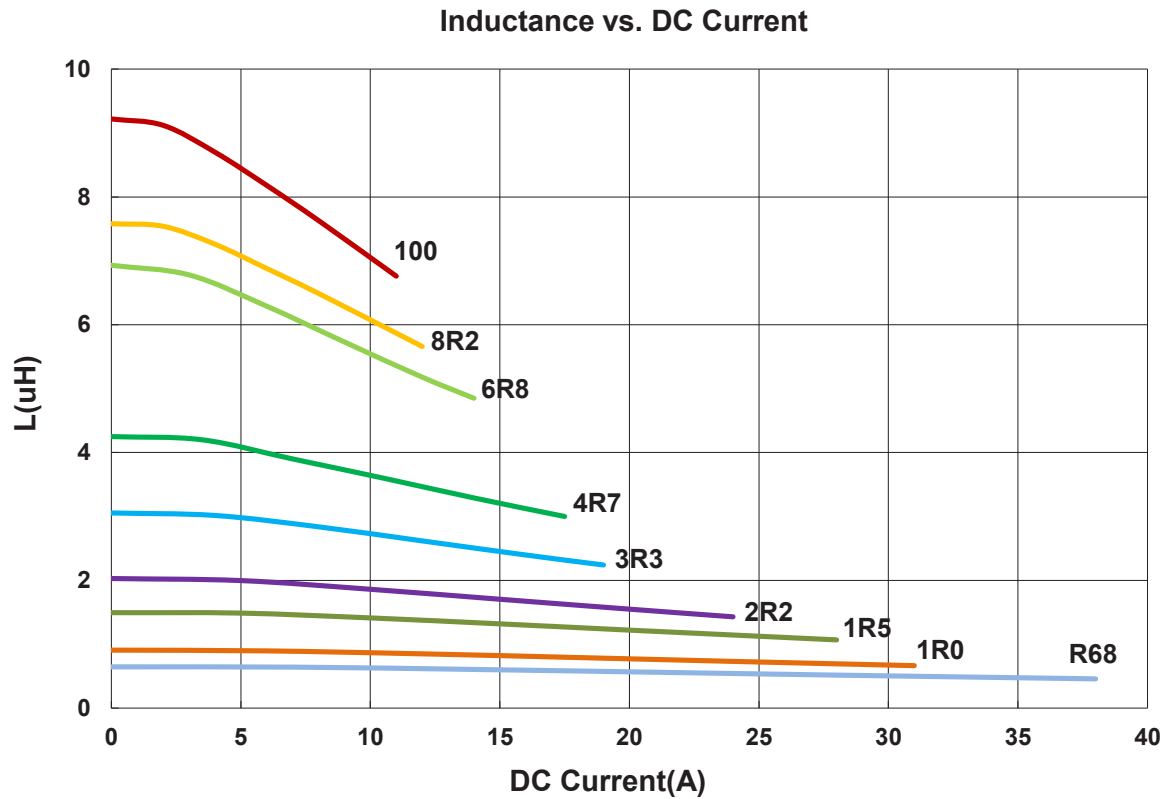
| Part No.           | Inductance (uH) | Test Freq. | RDC(mΩ) Typ(Max) | Isat (A)Typ. | Irms (A)Typ. | Tolerance (±%) | Marking |
|--------------------|-----------------|------------|------------------|--------------|--------------|----------------|---------|
| AFSI00090908R68M05 | 0.68            | 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

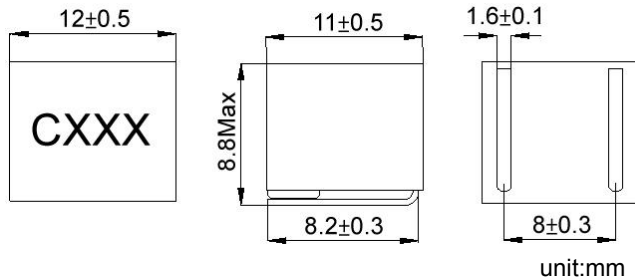
## AFSI00090908 Type

### Characteristics Graph

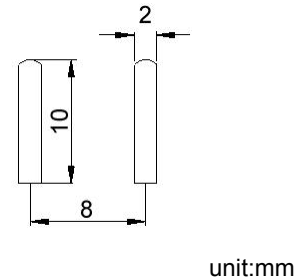


## AFSI00121109 Type

### 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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4. I rms for a 40°C temprature rise from 25°C ambient with current
5. Measure Equipment:

L: WK4237

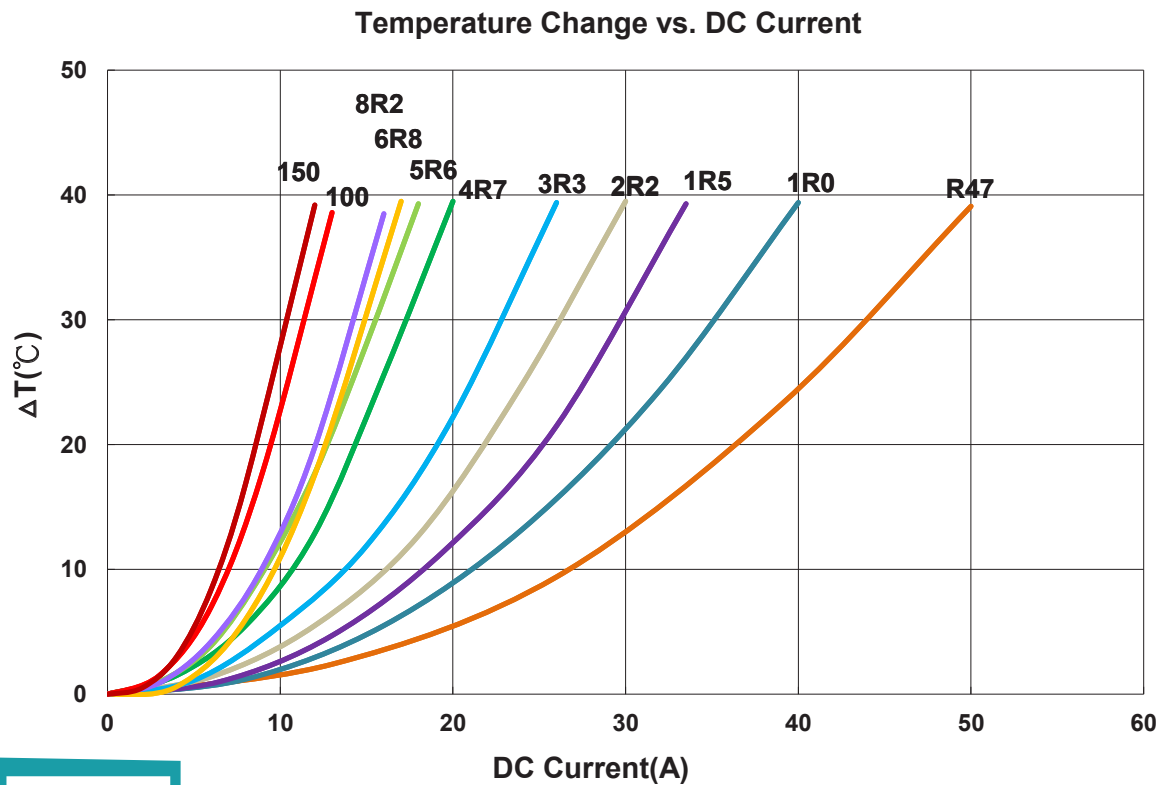
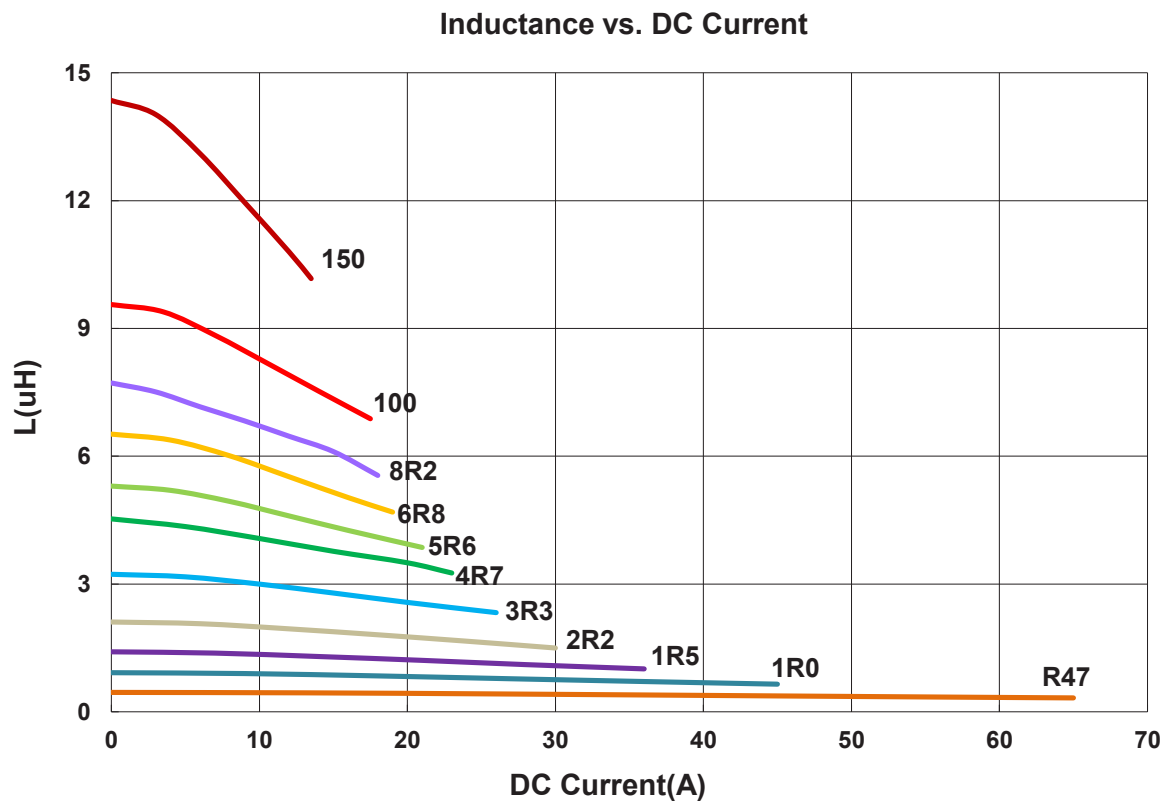
RDC: CHEN HWA502

Isat: WK3260B/ 3265

I rms: WK3260B/ 3265

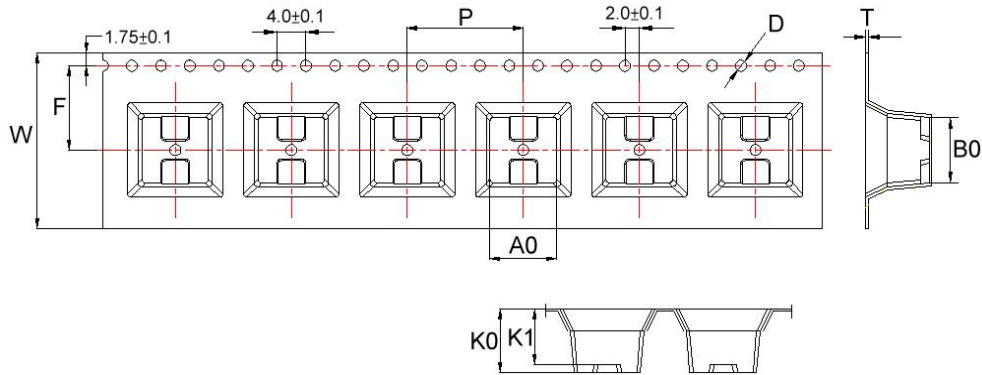
## AFSI00121109 Type

### Characteristics Graph

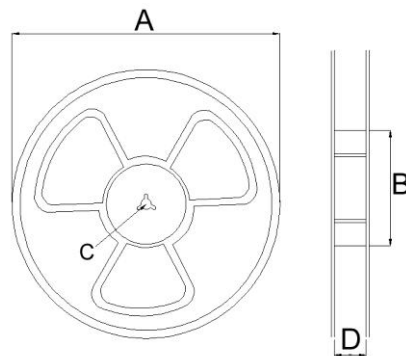


## ■ Packaging

### Tape Dimensions



### Reel Dimensions



### Dimensions in mm

| TYPE         | Tape Dimensions |    |     |      |     |      |    |     |    | Reel Dimensions |     |    |      | Quantity<br>PCS / REEL |
|--------------|-----------------|----|-----|------|-----|------|----|-----|----|-----------------|-----|----|------|------------------------|
|              | A0              | B0 | K0  | K1   | D   | F    | W  | T   | P  | A               | B   | C  | D    |                        |
| 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                    |

### For More Information:

Americas - [prodinfo\\_power\\_americas@yageo.com](mailto:prodinfo_power_americas@yageo.com) | Europe - [prodinfo\\_power\\_emea@yageo.com](mailto:prodinfo_power_emea@yageo.com) | Asia - [prodinfo\\_power\\_asia@yageo.com](mailto:prodinfo_power_asia@yageo.com)

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| <a href="#"><u>AFSI000909083R3M05</u></a> | <a href="#"><u>AFSI000909084R7M05</u></a> | <a href="#"><u>AFSI000909086R8M05</u></a> | <a href="#"><u>AFSI000909088R2M05</u></a> |
| <a href="#"><u>AFSI00090908R68M05</u></a> | <a href="#"><u>AFSI00121109100M05</u></a> | <a href="#"><u>AFSI001211091R0M05</u></a> | <a href="#"><u>AFSI001211091R5M05</u></a> |
| <a href="#"><u>AFSI001211092R2M05</u></a> | <a href="#"><u>AFSI001211093R3M05</u></a> | <a href="#"><u>AFSI001211094R7M05</u></a> | <a href="#"><u>AFSI001211095R6M05</u></a> |
| <a href="#"><u>AFSI001211096R8M05</u></a> | <a href="#"><u>AFSI001211098R2M05</u></a> | <a href="#"><u>AFSI00121109R47M05</u></a> |                                           |