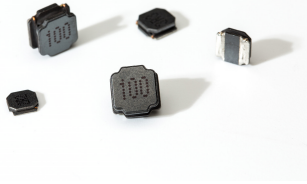


SMD Power Inductors—SFNR201610-252012 Series REV.B

SFNR Series



Features

RoHS, Halogen Free and REACH Compliance
 Shielded and miniature design
 Shielded power inductor
 Side soldering process

Applications

Smartphones, tablets and wearable devices
 DSC, camcorders
 DC/DC converters etc.

Product Identification

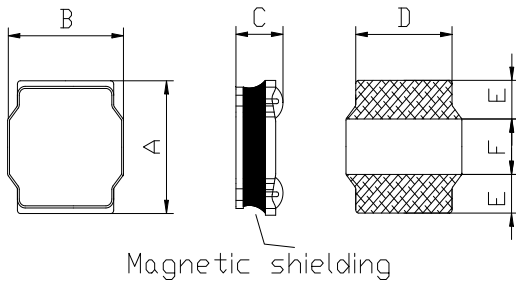
SFNR XXXXXX TL - XXXX
 For example: SFNR201610TL-100M

General Specifications

Test Frequency.....1MHz
 Test Voltage.....1V
 Parameters Test Temp..... 25°C
 Operation Temp.....-40°C to +125°C
 (Including temperature Rise)
 Storage Temp.....0~40°C
 Storage Humidity.....<70% RH
 Resistance to Soldering Heat.....260°C for 10 sec
 Rated Current.....Ind. drops of 35%typ at Isat
 Temperature Rise.....40°Ctyp. at Irms

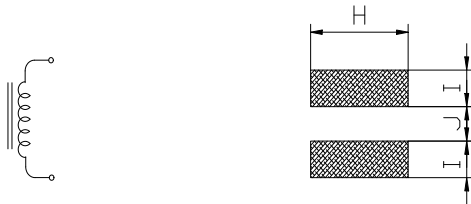
Shape And Dimensions

Dimensions In mm



| TYPE | A | B | C | D | E | F | H | I | J |
|--------|------|------|------|------|------|------|------|------|------|
| | ±0.2 | ±0.2 | Max | Ref | Ref | Ref | Ref | Ref | Ref |
| 201610 | 2.00 | 1.70 | 1.05 | 1.50 | 0.60 | 0.80 | 1.95 | 1.00 | 0.40 |
| 252010 | 2.50 | 2.20 | 1.05 | 1.65 | 0.80 | 0.90 | 1.95 | 1.10 | 0.60 |
| 252012 | 2.50 | 2.20 | 1.25 | 1.65 | 0.80 | 0.90 | 1.95 | 1.10 | 0.60 |

Electrical Schematic & PAD Lavout



Standard Specifications

| Stamp | Inductance (uH) | SFNR201610 | | | SFNR252010 | | | SFNR252012 | | |
|-------|-----------------|--------------|----------|----------|--------------|----------|----------|--------------|----------|----------|
| | | DCR (mΩ) Max | Isat (A) | Irms (A) | DCR (mΩ) Max | Isat (A) | Irms (A) | DCR (mΩ) Max | Isat (A) | Irms (A) |
| R24 | 0.24 | 40.0 | 4.50 | 3.15 | 26.0 | 5.00 | 4.40 | 30.0 | 6.50 | 4.50 |
| R33 | 0.33 | 50.0 | 4.20 | 3.10 | 35.0 | 4.80 | 4.00 | 36.0 | 5.30 | 3.20 |
| R47 | 0.47 | 55.0 | 4.00 | 3.00 | 45.0 | 4.40 | 3.40 | 40.0 | 4.90 | 3.10 |
| R56 | 0.56 | | | | 48.0 | 3.80 | 3.10 | | | |
| R68 | 0.68 | 65.0 | 3.50 | 2.80 | 59.0 | 3.20 | 3.00 | 50.0 | 3.85 | 3.00 |
| 1R0 | 1.00 | 96.0 | 3.35 | 2.20 | 76.0 | 3.10 | 2.60 | 60.0 | 3.80 | 2.90 |
| 1R5 | 1.50 | 130 | 1.95 | 1.80 | 106 | 2.60 | 2.00 | 86.0 | 2.90 | 2.10 |
| 2R2 | 2.20 | 195 | 1.90 | 1.50 | 155 | 1.90 | 1.80 | 115 | 2.60 | 2.00 |
| 3R3 | 3.30 | 310 | 1.40 | 1.20 | 235 | 1.60 | 1.50 | 190 | 1.90 | 1.70 |
| 4R7 | 4.70 | 440 | 1.20 | 1.00 | 276 | 1.30 | 1.20 | 235 | 1.80 | 1.50 |
| 6R8 | 6.80 | 540 | 0.90 | 0.85 | 430 | 1.10 | 1.00 | 380 | 1.15 | 1.10 |
| 100 | 10.0 | 826 | 0.80 | 0.70 | 520 | 0.90 | 0.85 | 480 | 1.10 | 1.00 |
| 220 | 22.0 | | | | | | | 1080 | 0.70 | 0.65 |

Note: When ordering, please specify tolerance code. Tolerance: M=±20%, P=±25%, N=±30%

*All the data listed in this catalogue are for reference only, reserves the right to alter or revise the specifications without prior notification.

*Beyond the above specification also can meet the special requirements. Need detailed content Please to the website query or contact us.

SMD Power Inductors—SFNR3012-4020 Series

SFNR Series



Features

RoHS, Halogen Free and REACH Compliance
 Shielded and miniature design
 Shielded power inductor
 Ultra-high saturation current

Applications

Smartphones, tablets and wearable devices
 DSC, camcorders
 DC/DC converters etc.

Product Identification

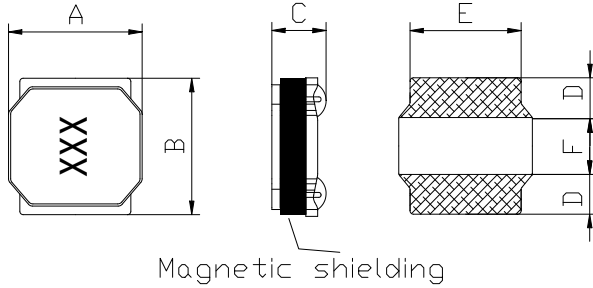
SFNR XXXXTL - XXXX
 For example: SFNR3012TL-100M

General Specifications

Test frequency.....100KHZ
 Test Voltage.....0.25V
 Parameters Test Temp..... 25°C
 Operation Temp.....-40°C to +125°C
 (Including temperature Rise)
 Storage Temp.....0~-40°C
 Storage Humidity.....<70% RH
 Resistance to Soldering Heat.....260°C for 10 sec
 Rated Current.....Ind. drops of 30% typ at Isat
 Temperature Rise......40°C typ. at Irms

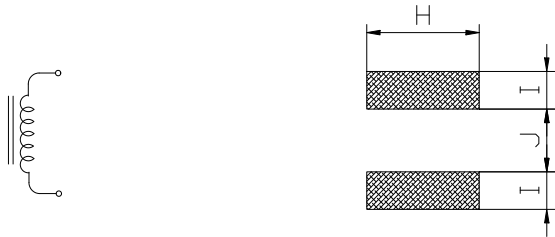
Shape And Dimensions

Dimensions In mm



| TYPE | A | B | C | D | E | F | H | I | J |
|------|------|------|------|------|------|------|------|------|------|
| | ±0.2 | ±0.2 | Max | Ref | Ref | Ref | Ref | Ref | Ref |
| 3012 | 3.00 | 3.00 | 1.35 | 1.13 | 2.60 | 0.82 | 2.90 | 1.50 | 0.50 |
| 4012 | 4.00 | 4.00 | 1.35 | 1.30 | 3.50 | 1.40 | 3.80 | 1.70 | 1.10 |
| 4020 | 4.00 | 4.00 | 2.05 | 1.00 | 3.50 | 2.00 | 3.80 | 1.40 | 1.70 |

Electrical Schematic & PAD Layout



Standard Specifications

| Stamp | Inductance (uH) | SFNR3012 | | | | SFNR4012 | | | | SFNR4020 | | | |
|-------|-----------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|---------------|
| | | DCR (mΩ) Max | Isat (A) Max | Irms (A) Max | SRF (MHZ) Min | DCR (mΩ) Max | Isat (A) Max | Irms (A) Max | SRF (MHZ) Min | DCR (mΩ) Max | Isat (A) Max | Irms (A) Max | SRF (MHZ) Min |
| R33 | 0.33 | 30 | 7.20 | 4.20 | 107 | 32 | 10.30 | 4.30 | 113 | | | | |
| R47 | 0.47 | 36 | 6.80 | 3.90 | 86 | 41 | 9.10 | 3.80 | 96 | | | | |
| R68 | 0.68 | 44 | 5.80 | 3.40 | 63 | 41 | 5.50 | 3.80 | 70 | | | | |
| 1R0 | 1.00 | 58 | 4.20 | 2.70 | 51 | 59 | 5.70 | 3.20 | 55 | 28 | 8.70 | 5.80 | 37 |
| 1R2 | 1.20 | | | | | 59 | 4.00 | 3.20 | 48 | | | | |
| 1R5 | 1.50 | 77 | 3.40 | 2.50 | 37 | 70 | 3.90 | 2.8 | 38 | 38 | 7.70 | 5.20 | 30 |
| 2R2 | 2.20 | 110 | 2.80 | 2.05 | 28 | 79 | 2.80 | 2.70 | 28 | 50 | 6.10 | 4.30 | 25 |
| 3R3 | 3.30 | 158 | 2.20 | 1.70 | 25 | 125 | 2.80 | 2.10 | 23 | 74 | 4.70 | 3.45 | 19 |
| 4R7 | 4.70 | 235 | 2.00 | 1.30 | 20 | 166 | 2.30 | 1.90 | 19 | 110 | 4.00 | 2.85 | 17 |
| 6R8 | 6.80 | 340 | 1.60 | 1.10 | 16 | 226 | 1.60 | 1.60 | 17 | 158 | 3.00 | 2.40 | 13 |
| 100 | 10.00 | 474 | 1.20 | 1.00 | 12 | 335 | 1.55 | 1.30 | 12 | 218 | 2.80 | 2.00 | 11 |
| 220 | 22.00 | | | | | 720 | 1.05 | 0.90 | 7 | | | | |

Note: When ordering, please specify tolerance code. Tolerance: M=±20%, P=±25%, N=±30%

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