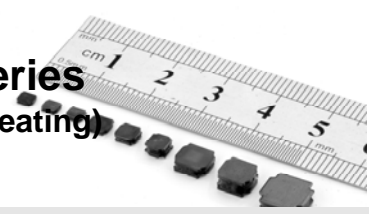


Wire Wound SMD Power Inductors – SWPA Series

Operating temperature range: -40°C~+125°C (Including self-heating)



FEATURES

- Magnetic-resin shielded construction reduces buzz noise to ultra-low levels
- Metallization on ferrite core results in excellent shock resistance and damage-free durability
- Closed magnetic circuit design reduces leakage flux and Electro Magnetic Interference (EMI)
- 30% higher current rating than conventional inductors of equal size
- Takes up less PCB real estate and save more power

APPLICATIONS

- LED Lighting
- Next-generation mobile devices with multifunction such as mobile TV and digital movie cameras
- Flat-screen TVs, blue-ray disc recorders, set top box
- Notebooks, desktop computers, servers, graphic cards cards
- Portable gaming devices, personal navigation systems, personal multimedia devices
- Automotive systems
- Telecomm base stations

PRODUCT IDENTIFICATION

SWPA

①

| ① Type | |
|--------|-------------------------------|
| SWPA | Wire Wound SMD Power Inductor |

3012

②

S

③

| ③ Feature Type | |
|----------------|----------|
| S | Standard |

| ④ Nominal Inductance | |
|----------------------|---------------|
| Example | Nominal Value |
| 1R0 | 1.0μH |
| 100 | 10μH |

| ⑤ Inductance Tolerance | |
|------------------------|------|
| M | ±20% |
| N | ±30% |

1R0

④

N

⑤

T

⑥

| External Dimensions (L×W×H) [mm] | |
|----------------------------------|-------------|
| 252010 | 2.5×2.0×1.0 |
| 252012 | 2.5×2.0×1.2 |
| 3010 | 3.0×3.0×1.0 |
| 3012 | 3.0×3.0×1.2 |
| 3015 | 3.0×3.0×1.5 |
| 4010 | 4.0×4.0×1.0 |
| 4018 | 4.0×4.0×1.8 |
| 4020 | 4.0×4.0×2.0 |
| 4026 | 4.0×4.0×2.6 |
| 4030 | 4.0×4.0×3.0 |
| 5012 | 5.0×5.0×1.2 |
| 5020 | 5.0×5.0×2.0 |
| 5040 | 5.0×5.0×4.0 |
| 6020 | 6.0×6.0×2.0 |
| 6028 | 6.0×6.0×2.8 |
| 6045 | 6.0×6.0×4.5 |
| 8040 | 8.0×8.0×4.0 |

| ⑥ Packing | |
|-----------|----------------------|
| T | Tape Carrier Package |

SHAPE AND DIMENSIONS

Fig.1

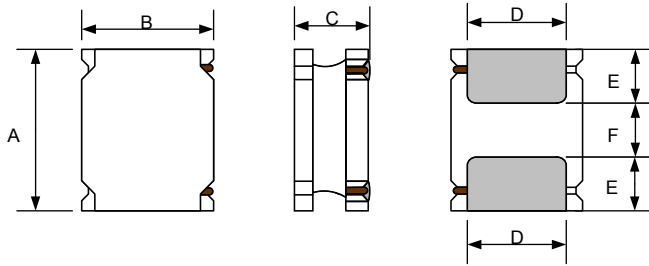


Fig.2

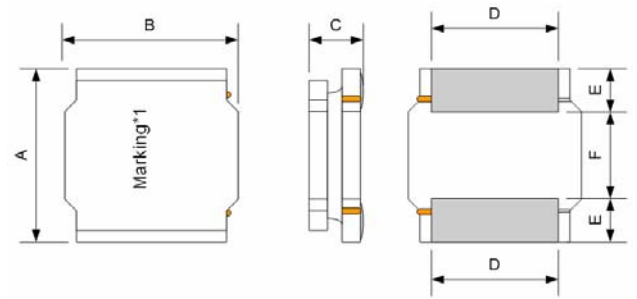
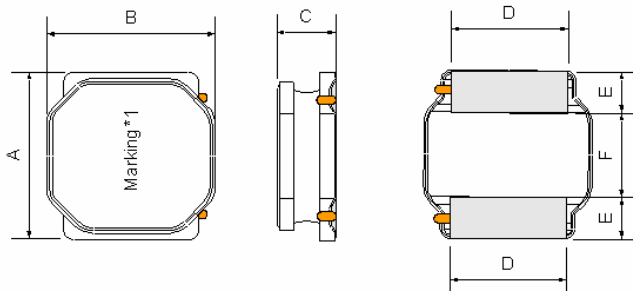
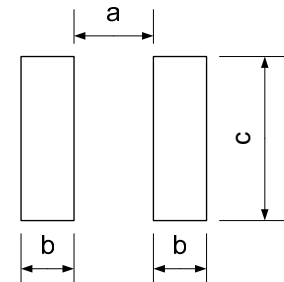


Fig.3



Recommended Land Pattern



Unit: mm

| Series | Shape | A | B | C | D | E | F | a Typ. | b Typ. | c Typ. |
|-------------|-------|---------|---------|---------|---------|----------|----------|--------|--------|--------|
| SWPA252010S | Fig.1 | 2.5±0.1 | 2.0±0.1 | 1.0Max. | 1.5±0.2 | 0.80±0.2 | 0.80±0.2 | 0.80 | 0.85 | 2.0 |
| SWPA252012S | Fig.1 | 2.5±0.1 | 2.0±0.1 | 1.2Max. | 1.5±0.2 | 0.80±0.2 | 0.80±0.2 | 0.80 | 0.85 | 2.0 |
| SWPA3010S | Fig.2 | 3.0±0.2 | 3.0±0.2 | 1.0Max. | 2.5±0.2 | 0.75±0.2 | 1.5±0.2 | 1.5 | 0.8 | 2.7 |
| SWPA3012S | Fig.2 | 3.0±0.2 | 3.0±0.2 | 1.2Max. | 2.5±0.2 | 0.75±0.2 | 1.5±0.2 | 1.5 | 0.8 | 2.7 |
| SWPA3015S | Fig.2 | 3.0±0.2 | 3.0±0.2 | 1.5Max. | 2.5±0.2 | 0.75±0.2 | 1.5±0.2 | 1.5 | 0.8 | 2.7 |
| SWPA4010S | Fig.3 | 4.0±0.2 | 4.0±0.2 | 1.0Max. | 3.3±0.2 | 0.95±0.2 | 2.1±0.2 | 1.9 | 1.1 | 3.7 |
| SWPA4018S | Fig.2 | 4.0±0.2 | 4.0±0.2 | 1.8Max. | 3.3±0.2 | 0.95±0.2 | 2.1±0.2 | 1.9 | 1.1 | 3.7 |
| SWPA4020S | Fig.2 | 4.0±0.2 | 4.0±0.2 | 2.0Max. | 3.3±0.2 | 0.95±0.2 | 2.1±0.2 | 1.9 | 1.1 | 3.7 |
| SWPA4026S | Fig.3 | 4.0±0.2 | 4.0±0.2 | 2.6Max. | 3.3±0.2 | 0.95±0.2 | 2.1±0.2 | 1.9 | 1.1 | 3.7 |
| SWPA4030S | Fig.2 | 4.0±0.2 | 4.0±0.2 | 3.0Max. | 3.3±0.2 | 0.95±0.2 | 2.1±0.2 | 1.9 | 1.1 | 3.7 |
| SWPA5012S | Fig.3 | 5.0±0.2 | 5.0±0.2 | 1.2Max. | 4.0±0.2 | 1.25±0.2 | 2.5±0.2 | 2.3 | 1.4 | 4.2 |
| SWPA5020S | Fig.3 | 5.0±0.2 | 5.0±0.2 | 2.0Max. | 4.0±0.2 | 1.25±0.2 | 2.5±0.2 | 2.3 | 1.4 | 4.2 |
| SWPA5040S | Fig.3 | 5.0±0.2 | 5.0±0.2 | 4.0Max. | 4.0±0.2 | 1.25±0.2 | 2.5±0.2 | 2.3 | 1.4 | 4.2 |
| SWPA6020S | Fig.2 | 6.0±0.3 | 6.0±0.3 | 2.0Max. | 4.9±0.3 | 1.55±0.3 | 2.9±0.3 | 2.8 | 1.7 | 5.7 |
| SWPA6028S | Fig.2 | 6.0±0.3 | 6.0±0.3 | 2.8Max. | 4.9±0.3 | 1.55±0.3 | 2.9±0.3 | 2.8 | 1.7 | 5.7 |
| SWPA6045S | Fig.2 | 6.0±0.3 | 6.0±0.3 | 4.5Max. | 4.9±0.3 | 1.55±0.3 | 2.9±0.3 | 2.8 | 1.7 | 5.7 |
| SWPA8040S | Fig.2 | 8.0±0.3 | 8.0±0.3 | 4.2Max. | 6.3±0.3 | 2.00±0.3 | 4.0±0.3 | 3.8 | 2.2 | 7.5 |

※*1: All products are printed with Marking except the 252010S, 252012S, 3010S, 3012S and 3015S series.

SPECIFICATIONS

SWPA252010S Series

| Part Number | Inductance @100kHz,1V | DC Resistance (±20%) | | Min. Self-resonant Frequency | Saturation Current | | Heat Rating Current | |
|------------------|--------------------------|-------------------------|-------|------------------------------------|--------------------|------|------------------------|------|
| | | Max. | Typ. | | Max. | Typ. | Max. | Typ. |
| - | - | Ω | Ω | MHz | A | A | A | A |
| Units | μH | Ω | Ω | MHz | A | A | A | A |
| Symbol | L | DCR | | S.R.F | Isat | | Irms | |
| SWPA252010SR47NT | 0.47±30% | 0.056 | 0.047 | 202 | 2.50 | 3.35 | 2.35 | 2.56 |
| SWPA252010SR56NT | 0.56±30% | 0.072 | 0.060 | 150 | 2.90 | 3.20 | 2.00 | 2.18 |
| SWPA252010SR68NT | 0.68±30% | 0.074 | 0.062 | 138 | 2.20 | 2.75 | 2.00 | 2.18 |
| SWPA252010S1R0NT | 1.0±30% | 0.108 | 0.090 | 100 | 1.85 | 2.20 | 1.65 | 1.80 |
| SWPA252010S1R5NT | 1.5±30% | 0.182 | 0.152 | 79 | 1.80 | 2.10 | 1.30 | 1.42 |
| SWPA252010S2R2NT | 2.2±30% | 0.209 | 0.174 | 61 | 1.20 | 1.60 | 1.20 | 1.31 |
| SWPA252010S3R3MT | 3.3±20% | 0.328 | 0.273 | 48 | 1.05 | 1.30 | 0.90 | 0.98 |
| SWPA252010S4R7MT | 4.7±20% | 0.563 | 0.469 | 40 | 0.95 | 1.15 | 0.70 | 0.76 |
| SWPA252010S5R6MT | 5.6±20% | 0.563 | 0.469 | 37 | 0.80 | 0.95 | 0.73 | 0.80 |
| SWPA252010S6R8MT | 6.8±20% | 0.896 | 0.747 | 32 | 0.78 | 0.92 | 0.59 | 0.64 |
| SWPA252010S100MT | 10±20% | 1.092 | 0.910 | 26 | 0.65 | 0.78 | 0.50 | 0.55 |

SWPA252012S Series

| Part Number | Inductance @100kHz,1V | DC Resistance (±30%) | | Min. Self-resonant Frequency | Saturation Current | | Heat Rating Current | |
|---------------------|--------------------------|-------------------------|-------|------------------------------------|--------------------|------|------------------------|------|
| | | Max. | Typ. | | Max. | Typ. | Max. | Typ. |
| - | - | Ω | Ω | MHz | A | A | A | A |
| Units | μH | Ω | Ω | MHz | A | A | A | A |
| Symbol | L | DCR | | S.R.F | Isat | | Irms | |
| SWPA252012SR47NT | 0.47±30% | 0.056 | 0.047 | 160 | 3.82 | 4.27 | 2.15 | 2.34 |
| SWPA252012SR68NT | 0.68±30% | 0.068 | 0.057 | 140 | 3.28 | 3.68 | 1.95 | 2.13 |
| SWPA252012S1R0NT | 1.0±30% | 0.083 | 0.069 | 110 | 2.59 | 2.90 | 1.93 | 2.10 |
| SWPA252012S1R2NT | 1.2±30% | 0.119 | 0.099 | 100 | 2.38 | 2.67 | 1.46 | 1.59 |
| SWPA252012S1R5MT | 1.5±20% | 0.136 | 0.113 | 97 | 2.24 | 2.51 | 1.4 | 1.53 |
| SWPA252012S1R5NTY01 | 1.5±30% | 0.120 | 0.100 | 63 | 1.80 | 2.00 | 1.45 | 1.58 |
| SWPA252012S2R2MT | 2.2±20% | 0.199 | 0.166 | 69 | 1.85 | 2.07 | 1.15 | 1.25 |
| SWPA252012S2R2NTY02 | 2.2±30% | 0.142 | 0.118 | 53 | 1.55 | 1.75 | 1.3 | 1.42 |
| SWPA252012S2R7MT | 2.7±20% | 0.221 | 0.184 | 63 | 1.72 | 1.92 | 1.09 | 1.19 |
| SWPA252012S3R3MT | 3.3±20% | 0.244 | 0.203 | 62 | 1.61 | 1.80 | 1.04 | 1.13 |
| SWPA252012S3R6MT | 3.6±20% | 0.322 | 0.268 | 53 | 1.46 | 1.64 | 0.9 | 0.98 |
| SWPA252012S4R3MT | 4.3±20% | 0.348 | 0.290 | 51 | 1.37 | 1.53 | 0.87 | 0.95 |
| SWPA252012S4R7MT | 4.7±20% | 0.348 | 0.290 | 47 | 1.12 | 1.25 | 0.84 | 0.92 |
| SWPA252012S5R1MT | 5.1±20% | 0.462 | 0.385 | 44 | 1.23 | 1.37 | 0.75 | 0.82 |
| SWPA252012S5R6MT | 5.6±20% | 0.497 | 0.414 | 38 | 1.11 | 1.25 | 0.73 | 0.80 |
| SWPA252012S6R2MT | 6.2±20% | 0.500 | 0.417 | 38 | 1.03 | 1.16 | 0.73 | 0.80 |
| SWPA252012S6R8MT | 6.8±20% | 0.536 | 0.447 | 38 | 0.98 | 1.09 | 0.69 | 0.75 |
| SWPA252012S7R5MT | 7.5±20% | 0.564 | 0.470 | 35 | 0.97 | 1.09 | 0.68 | 0.74 |
| SWPA252012S8R2MT | 8.2±20% | 0.607 | 0.506 | 36 | 0.98 | 1.10 | 0.65 | 0.71 |
| SWPA252012S9R1MT | 9.1±20% | 0.637 | 0.531 | 34 | 0.91 | 1.02 | 0.62 | 0.68 |
| SWPA252012S100MT | 10±20% | 0.637 | 0.531 | 34 | 0.79 | 0.88 | 0.62 | 0.68 |
| SWPA252012S120MT | 12±20% | 0.992 | 0.827 | 28 | 0.78 | 0.88 | 0.51 | 0.56 |
| SWPA252012S150MT | 15±20% | 1.469 | 1.224 | 25 | 0.68 | 0.77 | 0.42 | 0.46 |
| SWPA252012S220MT | 22±20% | 1.824 | 1.520 | 20 | 0.53 | 0.59 | 0.38 | 0.41 |

SPECIFICATIONS

SWPA3010S Series

| Part Number | Inductance @100kHz,1V | DC Resistance (±30%) | Min. Self-resonant Frequency | Saturation Current | Heat Rating Current |
|----------------|--------------------------|-------------------------|------------------------------------|-----------------------|------------------------|
| Units | μH | Ω | MHz | A | A |
| Symbol | L | DCR | S.R.F | Isat | Irms |
| SWPA3010S1R0NT | 1.0±30% | 0.065 | 180 | 1.40 | 1.45 |
| SWPA3010S1R2NT | 1.2±30% | 0.065 | 137 | 1.25 | 1.45 |
| SWPA3010S1R5NT | 1.5±30% | 0.080 | 120 | 1.27 | 1.30 |
| SWPA3010S2R2NT | 2.2±30% | 0.110 | 100 | 1.15 | 1.09 |
| SWPA3010S2R7NT | 2.7±30% | 0.130 | 90 | 1.00 | 1.02 |
| SWPA3010S3R3NT | 3.3±30% | 0.145 | 74 | 0.97 | 0.96 |
| SWPA3010S3R6MT | 3.6±20% | 0.165 | 67 | 0.95 | 0.90 |
| SWPA3010S4R7MT | 4.7±20% | 0.225 | 59 | 0.75 | 0.77 |
| SWPA3010S6R8MT | 6.8±20% | 0.305 | 42 | 0.55 | 0.66 |
| SWPA3010S100MT | 10±20% | 0.400 | 39 | 0.55 | 0.58 |
| SWPA3010S120MT | 12±20% | 0.505 | 36 | 0.43 | 0.52 |
| SWPA3010S150MT | 15±20% | 0.610 | 30 | 0.42 | 0.47 |
| SWPA3010S220MT | 22±20% | 0.930 | 28 | 0.35 | 0.38 |
| SWPA3010S270MT | 27±20% | 1.080 | 25 | 0.30 | 0.35 |
| SWPA3010S330MT | 33±20% | 1.550 | 18 | 0.29 | 0.30 |
| SWPA3010S390MT | 39±20% | 1.750 | 18 | 0.28 | 0.28 |
| SWPA3010S430MT | 43±20% | 1.800 | 18 | 0.23 | 0.27 |
| SWPA3010S470MT | 47±20% | 1.950 | 18 | 0.22 | 0.26 |
| SWPA3010S510MT | 51±20% | 2.200 | 18 | 0.21 | 0.25 |
| SWPA3010S560MT | 56±20% | 2.320 | 16 | 0.21 | 0.24 |

SWPA3012S Series

| Part Number | Inductance @100kHz,1V | DC Resistance (±30%) | Min. Self-resonant Frequency | Saturation Current | Heat Rating Current |
|----------------|--------------------------|-------------------------|------------------------------------|-----------------------|------------------------|
| Units | μH | Ω | MHz | A | A |
| Symbol | L | DCR | S.R.F | Isat | Irms |
| SWPA3012SR82NT | 0.82±30% | 0.030 | 180 | 2.05 | 2.47 |
| SWPA3012S1R0NT | 1.0±30% | 0.040 | 120 | 1.87 | 2.20 |
| SWPA3012S1R2NT | 1.2±30% | 0.045 | 120 | 2.22 | 2.01 |
| SWPA3012S1R5NT | 1.5±30% | 0.045 | 110 | 1.62 | 2.01 |
| SWPA3012S1R8NT | 1.8±30% | 0.063 | 90 | 1.30 | 1.65 |
| SWPA3012S2R2NT | 2.2±30% | 0.075 | 84 | 1.20 | 1.55 |
| SWPA3012S2R4NT | 2.4±30% | 0.068 | 100 | 1.15 | 1.60 |
| SWPA3012S2R7NT | 2.7±30% | 0.085 | 65 | 1.14 | 1.48 |
| SWPA3012S3R3MT | 3.3±20% | 0.100 | 64 | 1.05 | 1.36 |
| SWPA3012S3R9MT | 3.9±20% | 0.145 | 61 | 1.00 | 1.24 |
| SWPA3012S4R7MT | 4.7±20% | 0.120 | 61 | 0.90 | 1.24 |
| SWPA3012S6R8MT | 6.8±20% | 0.190 | 61 | 0.75 | 0.98 |
| SWPA3012S100MT | 10±20% | 0.265 | 42 | 0.60 | 0.83 |
| SWPA3012S120MT | 12±20% | 0.345 | 32 | 0.48 | 0.73 |
| SWPA3012S150MT | 15±20% | 0.360 | 27 | 0.45 | 0.71 |
| SWPA3012S180MT | 18±20% | 0.545 | 25 | 0.43 | 0.58 |
| SWPA3012S220MT | 22±20% | 0.645 | 23 | 0.42 | 0.53 |
| SWPA3012S270MT | 27±20% | 0.870 | 21 | 0.35 | 0.47 |
| SWPA3012S330MT | 33±20% | 0.875 | 18 | 0.36 | 0.46 |
| SWPA3012S360MT | 36±20% | 0.950 | 18 | 0.34 | 0.44 |

SPECIFICATIONS

SWPA3012S Series

| Part Number | Inductance @100kHz,1V | DC Resistance (±30%) | Min. Self-resonant Frequency | Saturation Current | Heat Rating Current |
|----------------|--------------------------|-------------------------|------------------------------------|-----------------------|------------------------|
| Units | μH | Ω | MHz | A | A |
| Symbol | L | DCR | S.R.F | Isat | Irms |
| SWPA3012S390MT | 39±20% | 1.330 | 18 | 0.30 | 0.37 |
| SWPA3012S470MT | 47±20% | 1.450 | 14 | 0.27 | 0.35 |
| SWPA3012S680MT | 68±20% | 1.670 | 12 | 0.24 | 0.33 |
| SWPA3012S820MT | 82±20% | 2.540 | 12 | 0.17 | 0.27 |
| SWPA3012S101MT | 100±20% | 2.860 | 12 | 0.21 | 0.25 |

SWPA3015S Series

| Part Number | Inductance @100kHz,1V | DC Resistance (±30%) | Min. Self-resonant Frequency | Saturation Current | Heat Rating Current |
|----------------|--------------------------|-------------------------|------------------------------------|-----------------------|------------------------|
| Units | μH | Ω | MHz | A | A |
| Symbol | L | DCR | S.R.F | Isat | Irms |
| SWPA3015S1R0NT | 1.0±30% | 0.030 | 150 | 2.32 | 2.35 |
| SWPA3015S1R2NT | 1.2±30% | 0.040 | 110 | 2.21 | 1.95 |
| SWPA3015S1R5NT | 1.5±30% | 0.050 | 100 | 2.30 | 1.70 |
| SWPA3015S1R8NT | 1.8±30% | 0.050 | 92 | 1.75 | 1.70 |
| SWPA3015S2R2NT | 2.2±30% | 0.060 | 86 | 1.60 | 1.60 |
| SWPA3015S2R7NT | 2.7±30% | 0.075 | 64 | 1.52 | 1.43 |
| SWPA3015S3R3MT | 3.3±20% | 0.080 | 68 | 1.32 | 1.36 |
| SWPA3015S3R6MT | 3.6±20% | 0.105 | 59 | 1.28 | 1.20 |
| SWPA3015S4R3MT | 4.3±20% | 0.115 | 53 | 1.20 | 1.14 |
| SWPA3015S4R7MT | 4.7±20% | 0.125 | 46 | 1.10 | 1.09 |
| SWPA3015S5R1MT | 5.1±20% | 0.133 | 49 | 1.00 | 1.05 |
| SWPA3015S6R2MT | 6.2±20% | 0.195 | 46 | 1.00 | 0.86 |
| SWPA3015S6R8MT | 6.8±20% | 0.200 | 39 | 0.85 | 0.85 |
| SWPA3015S100MT | 10±20% | 0.250 | 41 | 0.72 | 0.77 |
| SWPA3015S120MT | 12±20% | 0.320 | 32 | 0.70 | 0.68 |
| SWPA3015S150MT | 15±20% | 0.350 | 30 | 0.66 | 0.65 |
| SWPA3015S180MT | 18±20% | 0.430 | 23 | 0.56 | 0.59 |
| SWPA3015S220MT | 22±20% | 0.460 | 23 | 0.52 | 0.57 |
| SWPA3015S270MT | 27±20% | 0.730 | 22 | 0.48 | 0.45 |
| SWPA3015S330MT | 33±20% | 0.820 | 20 | 0.44 | 0.43 |
| SWPA3015S390MT | 39±20% | 0.995 | 14 | 0.41 | 0.39 |
| SWPA3015S430MT | 43±20% | 1.060 | 16 | 0.37 | 0.37 |
| SWPA3015S470MT | 47±20% | 1.250 | 14 | 0.35 | 0.35 |
| SWPA3015S560MT | 56±20% | 1.280 | 13 | 0.33 | 0.34 |
| SWPA3015S620MT | 62±20% | 1.610 | 13 | 0.30 | 0.30 |
| SWPA3015S680MT | 68±20% | 2.700 | 11 | 0.28 | 0.23 |

SPECIFICATIONS

SWPA4010S Series

| Part Number | Inductance @100kHz,1V | DC Resistance (±30%) | Min. Self-resonant Frequency | Saturation Current | Heat Rating Current |
|----------------|--------------------------|-------------------------|------------------------------------|-----------------------|------------------------|
| Units | μH | Ω | MHz | A | A |
| Symbol | L | DCR | S.R.F | Isat | Irms |
| SWPA4010S1R0NT | 1.0±30% | 0.056 | 116 | 2.00 | 1.90 |
| SWPA4010S1R5NT | 1.5±30% | 0.070 | 94 | 1.68 | 1.70 |
| SWPA4010S2R2MT | 2.2±20% | 0.085 | 73 | 1.20 | 1.50 |
| SWPA4010S3R3MT | 3.3±20% | 0.100 | 58 | 1.10 | 1.40 |
| SWPA4010S4R7MT | 4.7±20% | 0.140 | 47 | 0.95 | 1.20 |
| SWPA4010S6R8MT | 6.8±20% | 0.200 | 38 | 0.80 | 1.00 |
| SWPA4010S100MT | 10±20% | 0.300 | 31 | 0.62 | 0.75 |
| SWPA4010S150MT | 15±20% | 0.430 | 24 | 0.54 | 0.60 |
| SWPA4010S220MT | 22±20% | 0.570 | 19 | 0.45 | 0.50 |

SWPA4018S Series

| Part Number | Inductance @100kHz,1V | DC Resistance (±30%) | Min. Self-resonant Frequency | Saturation Current | Heat Rating Current |
|----------------|--------------------------|-------------------------|------------------------------------|-----------------------|------------------------|
| Units | μH | Ω | MHz | A | A |
| Symbol | L | DCR | S.R.F | Isat | Irms |
| SWPA4018S1R0NT | 1.0±30% | 0.025 | 80 | 4.80 | 2.00 |
| SWPA4018S1R5NT | 1.5±30% | 0.030 | 65 | 3.35 | 1.80 |
| SWPA4018S2R2MT | 2.2±20% | 0.045 | 52 | 2.70 | 1.65 |
| SWPA4018S3R3MT | 3.3±20% | 0.070 | 44 | 2.45 | 1.23 |
| SWPA4018S4R7MT | 4.7±20% | 0.090 | 34 | 1.70 | 1.20 |
| SWPA4018S6R8MT | 6.8±20% | 0.110 | 29 | 1.45 | 1.06 |
| SWPA4018S100MT | 10±20% | 0.180 | 24 | 1.30 | 0.84 |
| SWPA4018S150MT | 15±20% | 0.250 | 19 | 0.94 | 0.65 |
| SWPA4018S220MT | 22±20% | 0.360 | 16 | 0.80 | 0.59 |
| SWPA4018S330MT | 33±20% | 0.530 | 12 | 0.56 | 0.49 |
| SWPA4018S470MT | 47±20% | 0.650 | 10 | 0.57 | 0.42 |
| SWPA4018S680MT | 68±20% | 1.000 | 8.3 | 0.47 | 0.32 |
| SWPA4018S101MT | 100±20% | 1.750 | 6.5 | 0.40 | 0.25 |
| SWPA4018S151MT | 150±20% | 2.500 | 5.5 | 0.31 | 0.22 |
| SWPA4018S221MT | 220±20% | 4.000 | 4.0 | 0.27 | 0.17 |

SPECIFICATIONS

SWPA4020S Series

| Part Number | Inductance @100kHz, 1V | DC Resistance (±30%) | Min. Self-resonant Frequency | Saturation Current | Heat Rating Current |
|----------------|---------------------------|-------------------------|------------------------------------|-----------------------|------------------------|
| Units | μH | Ω | MHz | A | A |
| Symbol | L | DCR | S.R.F | Isat | Irms |
| SWPA4020S1R0NT | 1.0±30% | 0.029 | 75 | 4.78 | 2.15 |
| SWPA4020S1R2NT | 1.2±30% | 0.029 | 72 | 5.10 | 2.15 |
| SWPA4020S1R5NT | 1.5±30% | 0.035 | 71 | 4.45 | 1.98 |
| SWPA4020S2R2NT | 2.2±30% | 0.040 | 49 | 3.40 | 1.85 |
| SWPA4020S3R3MT | 3.3±20% | 0.070 | 44 | 3.20 | 1.40 |
| SWPA4020S3R6MT | 3.6±20% | 0.055 | 49 | 2.80 | 1.54 |
| SWPA4020S4R7MT | 4.7±20% | 0.075 | 42 | 2.35 | 1.34 |
| SWPA4020S5R1MT | 5.1±20% | 0.085 | 42 | 2.30 | 1.27 |
| SWPA4020S5R6MT | 5.6±20% | 0.090 | 30 | 2.20 | 1.22 |
| SWPA4020S6R2MT | 6.2±20% | 0.115 | 36 | 2.15 | 1.08 |
| SWPA4020S6R8MT | 6.8±20% | 0.125 | 33 | 2.20 | 1.04 |
| SWPA4020S7R5MT | 7.5±20% | 0.115 | 30 | 1.85 | 1.08 |
| SWPA4020S8R2MT | 8.2±20% | 0.125 | 27 | 1.75 | 1.04 |
| SWPA4020S100MT | 10±20% | 0.165 | 26 | 1.60 | 0.90 |
| SWPA4020S120MT | 12±20% | 0.175 | 26 | 1.50 | 0.88 |
| SWPA4020S150MT | 15±20% | 0.230 | 24 | 1.35 | 0.77 |
| SWPA4020S220MT | 22±20% | 0.350 | 15 | 1.05 | 0.62 |
| SWPA4020S270MT | 27±20% | 0.545 | 14 | 1.02 | 0.50 |
| SWPA4020S330MT | 33±20% | 0.550 | 11 | 0.85 | 0.49 |
| SWPA4020S390MT | 39±20% | 0.650 | 11 | 0.82 | 0.46 |
| SWPA4020S430MT | 43±20% | 0.660 | 10 | 0.77 | 0.45 |
| SWPA4020S470MT | 47±20% | 0.710 | 10 | 0.74 | 0.44 |
| SWPA4020S510MT | 51±20% | 0.750 | 10 | 0.70 | 0.42 |
| SWPA4020S560MT | 56±20% | 0.800 | 10 | 0.66 | 0.41 |
| SWPA4020S620MT | 62±20% | 0.900 | 9.6 | 0.65 | 0.39 |
| SWPA4020S680MT | 68±20% | 1.060 | 7.7 | 0.61 | 0.36 |

SWPA4020S Series

| Part Number | Inductance @100kHz, 1V | DC Resistance (±30%) | Min. Self-resonant Frequency | Saturation Current | Heat Rating Current |
|----------------|---------------------------|-------------------------|------------------------------------|-----------------------|------------------------|
| Units | μH | Ω | MHz | A | A |
| Symbol | L | DCR | S.R.F | Isat | Irms |
| SWPA4020S750MT | 75±20% | 1.160 | 7.7 | 0.70 | 0.35 |
| SWPA4020S820MT | 82±20% | 1.170 | 7.2 | 0.50 | 0.34 |
| SWPA4020S101MT | 100±20% | 1.550 | 6.3 | 0.48 | 0.31 |

SPECIFICATIONS

SWPA4026S Series

| Part Number | Inductance @100kHz,1V | DC Resistance (±30%) | Min. Self-resonant Frequency | Saturation Current | Heat Rating Current |
|----------------|--------------------------|-------------------------|------------------------------------|-----------------------|------------------------|
| Units | μH | Ω | MHz | A | A |
| Symbol | L | DCR | S.R.F | Isat | Irms |
| SWPA4026S1R2NT | 1.2±30% | 0.030 | 120 | 3.10 | 2.30 |
| SWPA4026S1R5NT | 1.5±30% | 0.030 | 100 | 2.40 | 2.30 |
| SWPA4026S2R2MT | 2.2±20% | 0.040 | 96 | 2.10 | 2.00 |
| SWPA4026S3R3MT | 3.3±20% | 0.050 | 58 | 1.80 | 1.70 |
| SWPA4026S4R7MT | 4.7±20% | 0.055 | 46 | 1.45 | 1.60 |
| SWPA4026S6R8MT | 6.8±20% | 0.065 | 33 | 1.30 | 1.50 |
| SWPA4026S100MT | 10±20% | 0.085 | 26 | 1.00 | 1.30 |
| SWPA4026S150MT | 15±20% | 0.110 | 19 | 0.90 | 1.10 |
| SWPA4026S220MT | 22±20% | 0.165 | 13 | 0.60 | 0.90 |
| SWPA4026S330MT | 33±20% | 0.270 | 9 | 0.55 | 0.70 |
| SWPA4026S470MT | 47±20% | 0.300 | 6 | 0.40 | 0.65 |

SWPA4030S Series

| Part Number | Inductance @100kHz,1V | DC Resistance (±30%) | Min. Self-resonant Frequency | Saturation Current | Heat Rating Current |
|----------------|--------------------------|-------------------------|------------------------------------|-----------------------|------------------------|
| Units | μH | Ω | MHz | A | A |
| Symbol | L | DCR | S.R.F | Isat | Irms |
| SWPA4030SR68NT | 0.68±30% | 0.010 | 130 | 6.80 | 4.56 |
| SWPA4030SR91NT | 0.91±30% | 0.013 | 100 | 6.25 | 4.00 |
| SWPA4030S1R0NT | 1.0±30% | 0.014 | 70 | 5.26 | 4.15 |
| SWPA4030S1R2NT | 1.2±30% | 0.015 | 80 | 5.80 | 3.82 |
| SWPA4030S1R5NT | 1.5±30% | 0.020 | 62 | 4.84 | 3.34 |
| SWPA4030S1R8NT | 1.8±30% | 0.028 | 60 | 5.40 | 3.20 |
| SWPA4030S2R2NT | 2.2±30% | 0.030 | 52 | 4.90 | 2.95 |
| SWPA4030S3R3MT | 3.3±20% | 0.040 | 38 | 3.30 | 2.40 |
| SWPA4030S3R9MT | 3.9±20% | 0.057 | 32 | 3.00 | 2.10 |
| SWPA4030S4R3MT | 4.3±20% | 0.055 | 37 | 2.95 | 2.10 |
| SWPA4030S4R7MT | 4.7±20% | 0.060 | 31 | 2.90 | 2.00 |
| SWPA4030S5R6MT | 5.6±20% | 0.065 | 30 | 2.60 | 1.95 |
| SWPA4030S6R8MT | 6.8±20% | 0.090 | 24 | 2.75 | 1.60 |
| SWPA4030S7R5MT | 7.5±20% | 0.085 | 26 | 2.20 | 1.65 |
| SWPA4030S8R2MT | 8.2±20% | 0.090 | 26 | 2.10 | 1.60 |
| SWPA4030S100MT | 10±20% | 0.100 | 21 | 1.95 | 1.50 |
| SWPA4030S120MT | 12±20% | 0.135 | 18 | 1.70 | 1.30 |
| SWPA4030S150MT | 15±20% | 0.190 | 16 | 1.65 | 1.11 |
| SWPA4030S180MT | 18±20% | 0.200 | 10 | 1.40 | 1.10 |
| SWPA4030S220MT | 22±20% | 0.225 | 10 | 1.30 | 1.00 |
| SWPA4030S330MT | 33±20% | 0.330 | 10 | 1.10 | 0.84 |
| SWPA4030S360MT | 36±20% | 0.335 | 9.8 | 1.05 | 0.83 |
| SWPA4030S390MT | 39±20% | 0.435 | 10 | 1.03 | 0.73 |
| SWPA4030S470MT | 47±20% | 0.445 | 8.4 | 0.95 | 0.72 |

SPECIFICATIONS

SWPA4030S Series

| Part Number | Inductance @100kHz,1V | DC Resistance (±30%) | Min. Self-resonant Frequency | Saturation Current | Heat Rating Current |
|----------------|--------------------------|-------------------------|------------------------------------|-----------------------|------------------------|
| Units | μH | Ω | MHz | A | A |
| Symbol | L | DCR | S.R.F | Isat | Irms |
| SWPA4030S510MT | 51±20% | 0.470 | 8.4 | 0.90 | 0.70 |
| SWPA4030S560MT | 56±20% | 0.555 | 8.4 | 0.85 | 0.65 |
| SWPA4030S620MT | 62±20% | 0.585 | 7 | 0.80 | 0.63 |
| SWPA4030S680MT | 68±20% | 0.868 | 7 | 0.72 | 0.52 |
| SWPA4030S750MT | 75±20% | 1.020 | 6.3 | 0.70 | 0.48 |
| SWPA4030S820MT | 82±20% | 1.060 | 5.6 | 0.66 | 0.47 |
| SWPA4030S910MT | 91±20% | 1.100 | 5.6 | 0.65 | 0.46 |
| SWPA4030S101MT | 100±20% | 1.150 | 5.6 | 0.60 | 0.45 |
| SWPA4030S121MT | 120±20% | 1.350 | 5.4 | 0.55 | 0.42 |
| SWPA4030S151MT | 150±20% | 1.800 | 4.00 | 0.50 | 0.30 |
| SWPA4030S471KT | 470±10% | 7.200 | 2.0 | 0.30 | 0.2 |
| SWPA4030S501MT | 500±20% | 6.944 | 2 | 0.28 | 0.15 |
| SWPA4030S681MT | 680±20% | 7.580 | 1.2 | 0.19 | 0.14 |

SWPA5012S Series

| Part Number | Inductance @100kHz,1V | DC Resistance (±30%) | | Min. Self-resonant Frequency | Saturation Current | | Heat Rating Current | |
|----------------|--------------------------|-------------------------|-------|------------------------------------|--------------------|------|---------------------|------|
| | | Max. | Typ. | | Max. | Typ. | Max. | Typ. |
| Units | μH | Ω | Ω | MHz | A | A | A | A |
| Symbol | L | DCR | | S.R.F | Isat | | Irms | |
| SWPA5012S1R0NT | 1.0±30% | 0.068 | 0.057 | 103 | 4.40 | 4.70 | 2.00 | 2.40 |
| SWPA5012S1R5NT | 1.5±30% | 0.086 | 0.072 | 68 | 3.70 | 3.80 | 1.90 | 2.20 |
| SWPA5012S2R2NT | 2.2±30% | 0.108 | 0.090 | 50 | 3.10 | 3.20 | 1.70 | 2.00 |
| SWPA5012S3R3NT | 3.3±30% | 0.151 | 0.126 | 34 | 2.40 | 2.60 | 1.40 | 1.70 |
| SWPA5012S4R7NT | 4.7±30% | 0.197 | 0.164 | 31 | 2.20 | 2.30 | 1.30 | 1.50 |
| SWPA5012S6R8MT | 6.8±20% | 0.294 | 0.245 | 22 | 1.70 | 1.90 | 1.00 | 1.20 |
| SWPA5012S100MT | 10±20% | 0.413 | 0.344 | 17 | 1.40 | 1.50 | 0.85 | 1.00 |
| SWPA5012S150MT | 15±20% | 0.523 | 0.436 | 13 | 1.20 | 1.30 | 0.80 | 0.92 |

SWPA5020S Series

| Part Number | Inductance @100kHz,1V | DC Resistance (±30%) | Min. Self-resonant Frequency | Saturation Current | Heat Rating Current |
|----------------|--------------------------|-------------------------|------------------------------------|-----------------------|------------------------|
| Units | μH | Ω | MHz | A | A |
| Symbol | L | DCR | S.R.F | Isat | Irms |
| SWPA5020SR47NT | 0.47±30% | 0.013 | 160 | 6.15 | 4.60 |
| SWPA5020SR75NT | 0.75±30% | 0.017 | 117 | 5.50 | 4.00 |
| SWPA5020S1R0NT | 1.0±30% | 0.020 | 114 | 4.10 | 3.80 |
| SWPA5020S1R2NT | 1.2±30% | 0.022 | 83 | 4.50 | 3.55 |
| SWPA5020S1R5NT | 1.5±30% | 0.026 | 68 | 4.10 | 3.20 |
| SWPA5020S2R2NT | 2.2±30% | 0.032 | 57 | 3.20 | 2.90 |
| SWPA5020S2R7NT | 2.7±30% | 0.038 | 52 | 2.90 | 2.70 |
| SWPA5020S3R0NT | 3.0±30% | 0.038 | 49 | 2.55 | 2.70 |
| SWPA5020S3R3NT | 3.3±30% | 0.043 | 46 | 2.55 | 2.50 |
| SWPA5020S3R6NT | 3.6±30% | 0.043 | 43 | 2.80 | 2.50 |
| SWPA5020S3R9NT | 3.9±30% | 0.043 | 40 | 2.30 | 2.50 |
| SWPA5020S4R3MT | 4.3±20% | 0.057 | 37 | 2.50 | 2.20 |
| SWPA5020S4R7MT | 4.7±20% | 0.057 | 37 | 2.50 | 2.20 |

SPECIFICATIONS

SWPA5020S Series

| Part Number | Inductance @100kHz, 1V | DC Resistance (±30%) | Min. Self-resonant Frequency | Saturation Current | Heat Rating Current |
|----------------|---------------------------|-------------------------|------------------------------------|-----------------------|------------------------|
| Units | μH | Ω | MHz | A | A |
| Symbol | L | DCR | S.R.F | Isat | Irms |
| SWPA5020S5R1MT | 5.1±20% | 0.064 | 32 | 2.25 | 2.05 |
| SWPA5020S5R6MT | 5.6±20% | 0.064 | 32 | 2.30 | 2.05 |
| SWPA5020S6R8MT | 6.8±20% | 0.083 | 30 | 2.05 | 1.80 |
| SWPA5020S7R5MT | 7.5±20% | 0.090 | 26 | 1.85 | 1.75 |
| SWPA5020S8R2MT | 8.2±20% | 0.098 | 26 | 1.85 | 1.65 |
| SWPA5020S9R1MT | 9.1±20% | 0.110 | 24 | 1.70 | 1.55 |
| SWPA5020S100MT | 10±20% | 0.110 | 24 | 1.70 | 1.55 |
| SWPA5020S120MT | 12±20% | 0.140 | 22 | 1.50 | 1.40 |
| SWPA5020S150MT | 15±20% | 0.165 | 20 | 1.35 | 1.25 |
| SWPA5020S180MT | 18±20% | 0.200 | 16 | 1.25 | 1.15 |
| SWPA5020S220MT | 22±20% | 0.226 | 14 | 1.15 | 1.10 |
| SWPA5020S330MT | 33±20% | 0.390 | 10 | 0.92 | 0.90 |
| SWPA5020S470MT | 47±20% | 0.523 | 7 | 0.77 | 0.77 |
| SWPA5020S560MT | 56±20% | 0.630 | 6 | 0.77 | 0.70 |
| SWPA5020S101MT | 100±20% | 1.100 | 6 | 0.53 | 0.53 |

SWPA5040S Series

| Part Number | Inductance @100kHz, 1V | DC Resistance (±30%) | Min. Self-resonant Frequency | Saturation Current | Heat Rating Current |
|----------------|---------------------------|-------------------------|------------------------------------|-----------------------|------------------------|
| Units | μH | Ω | MHz | A | A |
| Symbol | L | DCR | S.R.F | Isat | Irms |
| SWPA5040S1R0NT | 1.0±30% | 0.012 | 117 | 7.35 | 4.90 |
| SWPA5040S1R2NT | 1.2±30% | 0.016 | 110 | 6.50 | 4.15 |
| SWPA5040S1R5NT | 1.5±30% | 0.015 | 86 | 6.30 | 4.30 |
| SWPA5040S2R2NT | 2.2±30% | 0.019 | 50 | 4.90 | 3.80 |
| SWPA5040S2R7NT | 2.7±30% | 0.022 | 37 | 4.30 | 3.60 |
| SWPA5040S3R3NT | 3.3±30% | 0.024 | 32 | 3.95 | 3.40 |
| SWPA5040S3R9NT | 3.9±30% | 0.027 | 29 | 3.55 | 3.20 |
| SWPA5040S4R7NT | 4.7±30% | 0.030 | 28 | 3.50 | 3.00 |
| SWPA5040S6R8MT | 6.8±20% | 0.043 | 21 | 2.90 | 2.50 |
| SWPA5040S100MT | 10±20% | 0.064 | 18 | 2.35 | 2.10 |
| SWPA5040S150MT | 15±20% | 0.086 | 13 | 2.00 | 2.00 |
| SWPA5040S220MT | 22±20% | 0.129 | 11 | 1.60 | 1.50 |
| SWPA5040S330MT | 33±20% | 0.188 | 9.1 | 1.30 | 1.20 |
| SWPA5040S470MT | 47±20% | 0.272 | 6.7 | 1.10 | 1.00 |
| SWPA5040S680MT | 68±20% | 0.400 | 5.7 | 0.90 | 0.80 |
| SWPA5040S101MT | 100±20% | 0.560 | 4.7 | 0.75 | 0.70 |

SWPA6020S Series

| Part Number | Inductance @100kHz, 1V | DC Resistance (±30%) | Min. Self-resonant Frequency | Saturation Current | Heat Rating Current |
|----------------|---------------------------|-------------------------|------------------------------------|-----------------------|------------------------|
| Units | μH | Ω | MHz | A | A |
| Symbol | L | DCR | S.R.F | Isat | Irms |
| SWPA6020SR50NT | 0.50±30% | 0.014 | 120 | 4.50 | 3.30 |
| SWPA6020SR68NT | 0.68±30% | 0.017 | 115 | 6.55 | 3.80 |
| SWPA6020SR82NT | 0.82±30% | 0.017 | 110 | 5.30 | 3.80 |
| SWPA6020S1R0NT | 1.0±30% | 0.020 | 100 | 4.15 | 3.50 |



Specifications subject to change without notice. Please check our website for latest information. Revised 2013/12/30

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SPECIFICATIONS

SWPA6020S Series

| Part Number | Inductance @100kHz, 1V | DC Resistance (±30%) | Min. Self-resonant Frequency | Saturation Current | Heat Rating Current |
|----------------|---------------------------|-------------------------|------------------------------------|-----------------------|------------------------|
| Units | μH | Ω | MHz | A | A |
| Symbol | L | DCR | S.R.F | Isat | Irms |
| SWPA6020S1R2NT | 1.2±30% | 0.022 | 88 | 5.90 | 3.20 |
| SWPA6020S1R5NT | 1.5±30% | 0.022 | 79 | 4.25 | 3.20 |
| SWPA6020S1R8NT | 1.8±30% | 0.028 | 68 | 4.85 | 2.75 |
| SWPA6020S2R0NT | 2.0±30% | 0.035 | 65 | 4.10 | 2.60 |
| SWPA6020S2R2NT | 2.2±30% | 0.028 | 61 | 3.75 | 2.75 |
| SWPA6020S2R7NT | 2.7±30% | 0.035 | 56 | 3.90 | 2.60 |
| SWPA6020S3R3NT | 3.3±30% | 0.035 | 51 | 3.15 | 2.60 |
| SWPA6020S3R9NT | 3.9±30% | 0.049 | 45 | 3.25 | 2.10 |
| SWPA6020S4R3NT | 4.3±30% | 0.049 | 44 | 2.70 | 2.10 |
| SWPA6020S4R7NT | 4.7±30% | 0.058 | 41 | 3.00 | 2.00 |
| SWPA6020S5R6NT | 5.6±30% | 0.058 | 36 | 2.40 | 1.90 |
| SWPA6020S6R2NT | 6.2±30% | 0.079 | 31 | 2.30 | 1.80 |
| SWPA6020S6R8NT | 6.8±30% | 0.079 | 31 | 2.20 | 1.80 |
| SWPA6020S8R2NT | 8.2±30% | 0.105 | 27 | 2.10 | 1.40 |
| SWPA6020S100MT | 10±20% | 0.105 | 27 | 1.75 | 1.40 |
| SWPA6020S120MT | 12±20% | 0.120 | 25 | 1.45 | 1.30 |
| SWPA6020S150MT | 15±20% | 0.145 | 21 | 1.20 | 1.20 |
| SWPA6020S180MT | 18±20% | 0.180 | 18 | 1.20 | 1.08 |
| SWPA6020S220MT | 22±20% | 0.204 | 16 | 1.05 | 1.00 |

SWPA6028S Series

| Part Number | Inductance @100kHz, 1V | DC Resistance (±30%) | Min. Self-resonant Frequency | Saturation Current | Heat Rating Current |
|----------------|---------------------------|-------------------------|------------------------------------|-----------------------|------------------------|
| Units | μH | Ω | MHz | A | A |
| Symbol | L | DCR | S.R.F | Isat | Irms |
| SWPA6028S1R0NT | 1.0±30% | 0.010 | 70 | 5.75 | 5.20 |
| SWPA6028S1R5NT | 1.5±30% | 0.013 | 65 | 6.00 | 4.58 |
| SWPA6028S2R2NT | 2.2±30% | 0.020 | 48 | 5.10 | 3.75 |
| SWPA6028S2R7NT | 2.7±30% | 0.020 | 48 | 3.80 | 3.75 |
| SWPA6028S3R3NT | 3.3±30% | 0.025 | 41 | 4.15 | 3.48 |
| SWPA6028S4R7NT | 4.7±30% | 0.030 | 35 | 3.00 | 3.08 |
| SWPA6028S5R1NT | 5.1±30% | 0.043 | 32 | 3.20 | 2.60 |
| SWPA6028S6R2MT | 6.2±20% | 0.047 | 30 | 3.05 | 2.40 |
| SWPA6028S6R8MT | 6.8±20% | 0.047 | 27 | 2.60 | 2.40 |
| SWPA6028S8R2MT | 8.2±20% | 0.055 | 24 | 2.30 | 2.25 |
| SWPA6028S9R1MT | 9.1±20% | 0.074 | 24 | 2.55 | 2.15 |
| SWPA6028S100MT | 10±20% | 0.072 | 23 | 2.04 | 1.95 |
| SWPA6028S120MT | 12±20% | 0.080 | 18 | 1.80 | 1.85 |
| SWPA6028S150MT | 15±20% | 0.125 | 18 | 1.75 | 1.45 |
| SWPA6028S180MT | 18±20% | 0.120 | 15 | 1.52 | 1.45 |
| SWPA6028S220MT | 22±20% | 0.140 | 14 | 1.45 | 1.40 |
| SWPA6028S270MT | 27±20% | 0.155 | 13 | 1.50 | 1.32 |
| SWPA6028S330MT | 33±20% | 0.185 | 12 | 1.35 | 1.22 |
| SWPA6028S360MT | 36±20% | 0.215 | 11 | 1.25 | 1.13 |
| SWPA6028S390MT | 39±20% | 0.225 | 11 | 1.25 | 1.10 |
| SWPA6028S470MT | 47±20% | 0.315 | 9.5 | 1.15 | 1.06 |
| SWPA6028S680MT | 68±20% | 0.360 | 7.7 | 0.80 | 0.86 |
| SWPA6028S750MT | 75±20% | 0.410 | 7.7 | 0.90 | 0.81 |
| SWPA6028S820MT | 82±20% | 0.500 | 7.7 | 0.80 | 0.70 |
| SWPA6028S101MT | 100±20% | 0.500 | 7.1 | 0.65 | 0.70 |



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SPECIFICATIONS

SWPA6045S Series

| Part Number | Inductance @100kHz,1V | DC Resistance (±30%) | Min. Self-resonant Frequency | Saturation Current | Heat Rating Current |
|----------------|--------------------------|-------------------------|------------------------------------|-----------------------|------------------------|
| Units | µH | Ω | MHz | A | A |
| Symbol | L | DCR | S.R.F | Isat | Irms |
| SWPA6045SR82NT | 0.82±30% | 0.008 | 140 | 10.40 | 5.90 |
| SWPA6045S1R0NT | 1.0±30% | 0.011 | 100 | 9.85 | 5.14 |
| SWPA6045S1R2NT | 1.2±30% | 0.010 | 100 | 8.35 | 5.40 |
| SWPA6045S1R5NT | 1.5±30% | 0.012 | 65 | 8.80 | 4.95 |
| SWPA6045S1R8NT | 1.8±30% | 0.012 | 74 | 7.60 | 4.95 |
| SWPA6045S2R2NT | 2.2±30% | 0.014 | 52 | 6.75 | 4.60 |
| SWPA6045S2R3NT | 2.3±30% | 0.021 | 60 | 6.00 | 3.50 |
| SWPA6045S2R7NT | 2.7±30% | 0.015 | 38 | 5.75 | 4.30 |
| SWPA6045S3R0NT | 3.0±30% | 0.020 | 35 | 5.60 | 3.80 |
| SWPA6045S3R3NT | 3.3±30% | 0.021 | 32 | 5.90 | 3.70 |
| SWPA6045S3R6NT | 3.6±30% | 0.021 | 28 | 5.25 | 3.70 |
| SWPA6045S4R3MT | 4.3±20% | 0.023 | 23 | 4.45 | 3.50 |
| SWPA6045S4R7MT | 4.7±20% | 0.026 | 24 | 4.97 | 3.30 |
| SWPA6045S5R1MT | 5.1±20% | 0.026 | 23 | 4.40 | 3.30 |
| SWPA6045S5R6MT | 5.6±20% | 0.029 | 23 | 4.15 | 3.15 |
| SWPA6045S6R8MT | 6.8±20% | 0.031 | 20 | 3.90 | 3.00 |
| SWPA6045S7R5MT | 7.5±20% | 0.034 | 18 | 3.50 | 2.90 |
| SWPA6045S8R2MT | 8.2±20% | 0.043 | 21 | 3.90 | 2.60 |
| SWPA6045S9R1MT | 9.1±20% | 0.043 | 17 | 3.35 | 2.60 |
| SWPA6045S100MT | 10±20% | 0.048 | 15 | 3.20 | 2.45 |
| SWPA6045S120MT | 12±20% | 0.058 | 13 | 2.80 | 2.20 |
| SWPA6045S150MT | 15±20% | 0.068 | 12 | 2.50 | 2.05 |
| SWPA6045S180MT | 18±20% | 0.081 | 10 | 2.20 | 1.85 |
| SWPA6045S220MT | 22±20% | 0.089 | 10 | 2.05 | 1.80 |
| SWPA6045S270MT | 27±20% | 0.102 | 9.2 | 1.90 | 1.65 |
| SWPA6045S300MT | 30±20% | 0.132 | 7.8 | 1.70 | 1.50 |
| SWPA6045S330MT | 33±20% | 0.137 | 7.8 | 1.65 | 1.45 |
| SWPA6045S360MT | 36±20% | 0.173 | 7.8 | 1.62 | 1.40 |
| SWPA6045S390MT | 39±20% | 0.180 | 7.8 | 1.50 | 1.25 |
| SWPA6045S430MT | 43±20% | 0.200 | 7.7 | 1.63 | 1.20 |
| SWPA6045S470MT | 47±20% | 0.200 | 6.4 | 1.40 | 1.20 |
| SWPA6045S510MT | 51±20% | 0.207 | 6.4 | 1.35 | 1.15 |
| SWPA6045S560MT | 56±20% | 0.221 | 6.4 | 1.30 | 1.10 |
| SWPA6045S620MT | 62±20% | 0.235 | 6.4 | 1.25 | 1.10 |
| SWPA6045S680MT | 68±20% | 0.289 | 6.4 | 1.20 | 1.00 |
| SWPA6045S750MT | 75±20% | 0.305 | 5.0 | 1.15 | 0.95 |
| SWPA6045S820MT | 82±20% | 0.341 | 4.9 | 1.05 | 0.90 |
| SWPA6045S910MT | 91±20% | 0.359 | 4.9 | 1.00 | 0.85 |
| SWPA6045S101MT | 100±20% | 0.433 | 4.2 | 0.95 | 0.80 |
| SWPA6045S121MT | 120±20% | 0.484 | 4.2 | 0.85 | 0.77 |
| SWPA6045S151MT | 150±20% | 0.580 | 4.2 | 0.80 | 0.70 |
| SWPA6045S221MT | 220±20% | 0.834 | 3.5 | 0.70 | 0.59 |
| SWPA6045S331MT | 330±20% | 1.270 | 2.8 | 0.57 | 0.57 |

SPECIFICATIONS

SWPA8040S Series

| Part Number | Inductance @100kHz,1V | DC Resistance (±30%) | Min. Self-resonant Frequency | Saturation Current | Heat Rating Current |
|----------------|--------------------------|-------------------------|------------------------------------|-----------------------|------------------------|
| Units | μH | Ω | MHz | A | A |
| Symbol | L | DCR | S.R.F | Isat | Irms |
| SWPA8040SR82NT | 0.82±30% | 0.008 | 94 | 13.8 | 6.30 |
| SWPA8040S1R0NT | 1.0±30% | 0.008 | 89 | 9.85 | 6.30 |
| SWPA8040S1R5NT | 1.5±30% | 0.010 | 67 | 8.15 | 5.65 |
| SWPA8040S2R0NT | 2.0±30% | 0.012 | 43 | 9.25 | 5.15 |
| SWPA8040S2R2NT | 2.2±30% | 0.012 | 41 | 7.10 | 5.15 |
| SWPA8040S3R0NT | 3.0±30% | 0.014 | 32 | 6.10 | 4.70 |
| SWPA8040S3R3NT | 3.3±30% | 0.017 | 27 | 6.50 | 4.40 |
| SWPA8040S3R6NT | 3.6±30% | 0.017 | 30 | 7.52 | 4.35 |
| SWPA8040S3R9NT | 3.9±30% | 0.017 | 26 | 5.75 | 4.35 |
| SWPA8040S4R7NT | 4.7±30% | 0.019 | 24 | 5.90 | 4.10 |
| SWPA8040S5R1NT | 5.1±30% | 0.019 | 22 | 4.70 | 4.05 |
| SWPA8040S5R6NT | 5.6±30% | 0.021 | 24 | 6.00 | 3.85 |
| SWPA8040S6R2NT | 6.2±30% | 0.021 | 20 | 4.45 | 3.85 |
| SWPA8040S6R8MT | 6.8±20% | 0.024 | 20 | 4.55 | 3.60 |
| SWPA8040S8R2MT | 8.2±20% | 0.026 | 17 | 4.20 | 3.45 |
| SWPA8040S100MT | 10±20% | 0.029 | 15 | 3.60 | 3.30 |
| SWPA8040S120MT | 12±20% | 0.041 | 13 | 3.50 | 2.80 |
| SWPA8040S150MT | 15±20% | 0.047 | 12 | 2.95 | 2.60 |
| SWPA8040S180MT | 18±20% | 0.053 | 11 | 2.70 | 2.40 |
| SWPA8040S220MT | 22±20% | 0.069 | 9.5 | 2.40 | 2.10 |
| SWPA8040S270MT | 27±20% | 0.078 | 9.2 | 2.15 | 2.00 |
| SWPA8040S330MT | 33±20% | 0.097 | 7.8 | 2.05 | 1.80 |
| SWPA8040S360MT | 36±20% | 0.102 | 7.8 | 2.00 | 1.75 |
| SWPA8040S390MT | 39±20% | 0.107 | 7.8 | 1.95 | 1.70 |
| SWPA8040S430MT | 43±20% | 0.113 | 7.8 | 1.90 | 1.65 |
| SWPA8040S470MT | 47±20% | 0.136 | 6.4 | 1.75 | 1.55 |
| SWPA8040S510MT | 51±20% | 0.142 | 6.4 | 1.70 | 1.50 |
| SWPA8040S560MT | 56±20% | 0.148 | 6.4 | 1.55 | 1.45 |
| SWPA8040S620MT | 62±20% | 0.182 | 6.4 | 1.50 | 1.30 |
| SWPA8040S680MT | 68±20% | 0.196 | 4.9 | 1.45 | 1.25 |
| SWPA8040S750MT | 75±20% | 0.211 | 4.9 | 1.35 | 1.20 |
| SWPA8040S820MT | 82±20% | 0.225 | 5.9 | 1.30 | 1.15 |
| SWPA8040S910MT | 91±20% | 0.272 | 4.9 | 1.20 | 1.05 |
| SWPA8040S101MT | 100±20% | 0.290 | 4.2 | 1.15 | 1.00 |
| SWPA8040S121MT | 120±20% | 0.334 | 3.5 | 1.05 | 0.95 |
| SWPA8040S151MT | 150±20% | 0.410 | 3.5 | 1.10 | 0.85 |
| SWPA8040S221MT | 220±20% | 0.599 | 3.5 | 0.85 | 0.80 |
| SWPA8040S331MT | 330±20% | 0.889 | 2.8 | 0.68 | 0.64 |

※1: All test data is referenced to 20°C ambient;

※2: Rated current: Isat or Irms, whichever is smaller;

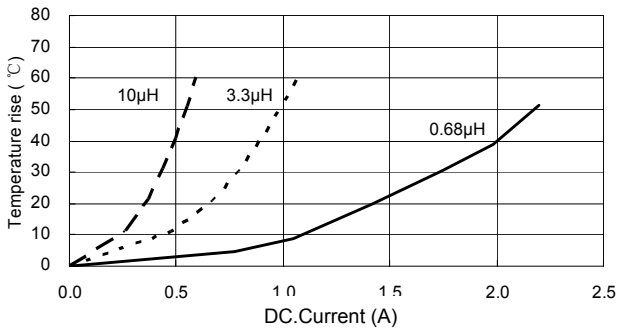
※*3: Isat: DC current at which the inductance drops approximate 30% from its value without current;

※*4: Irms: DC current that causes the temperature rise ($\Delta T = 40^{\circ}\text{C}$) from 20°C ambient.

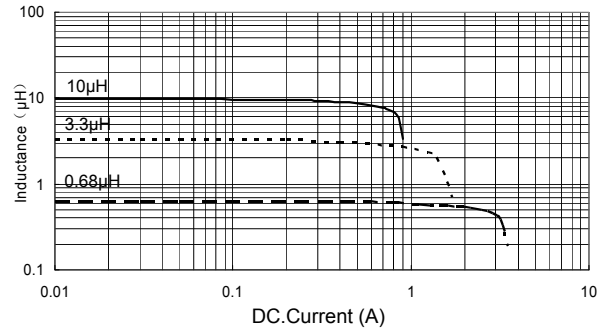
TYPICAL ELECTRICAL CHARACTERISTICS

SWPA252010S Series

Temperature vs. DC Current Characteristics

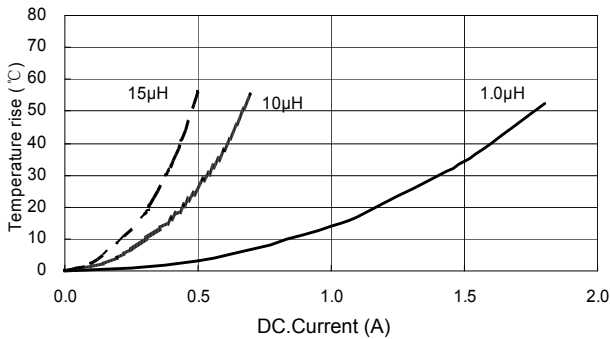


Inductance vs. DC Current Characteristics

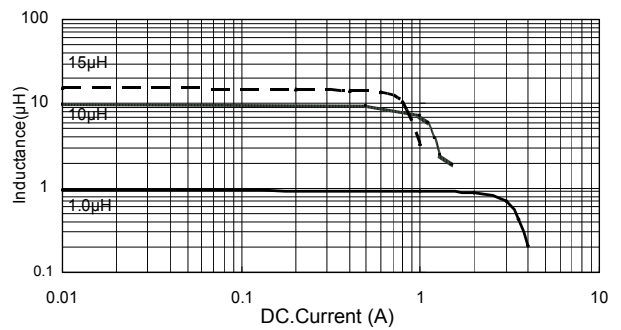


SWPA252012S Series

Temperature vs. DC Current Characteristics

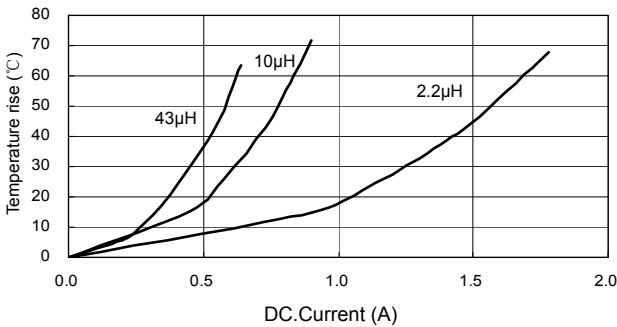


Inductance vs. DC Current Characteristics

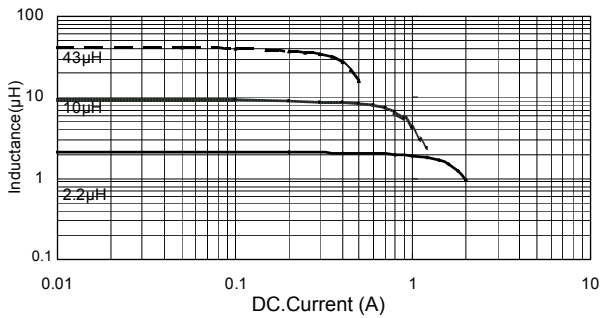


SWPA3010S Series

Temperature vs. DC Current Characteristics

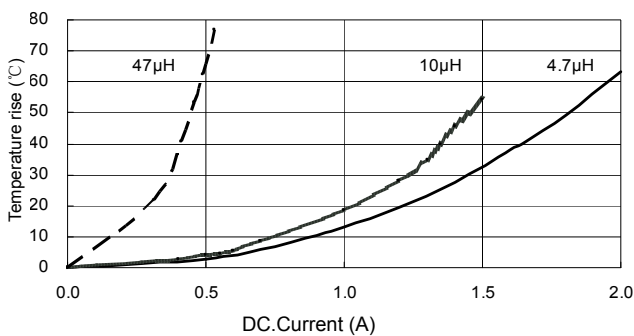


Inductance vs. DC Current Characteristics

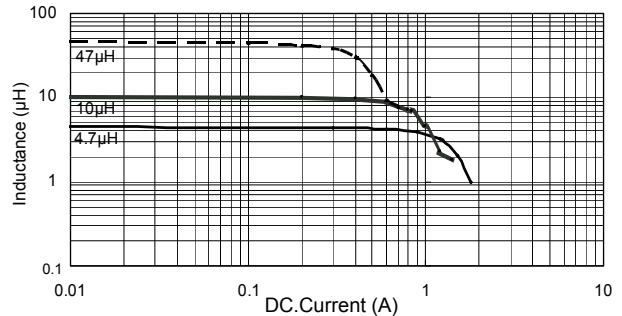


SWPA3012S Series

Temperature vs. DC Current Characteristics



Inductance vs. DC Current Characteristics



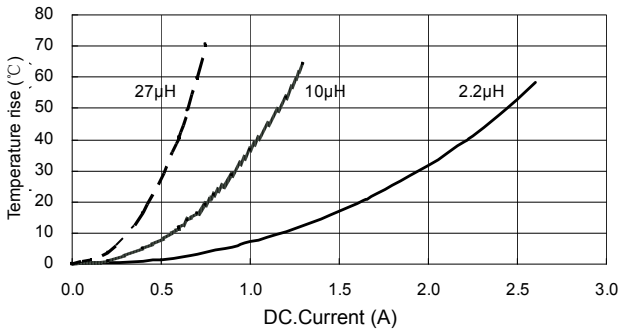
Specifications subject to change without notice. Please check our website for latest information. Revised 2013/12/30

Sunlord Industrial Park, Dafuyuan Industrial Zone, Guanlan, Shenzhen, China 518110 Tel: 0086-755-29832660 Fax: 0086-755-82269029 E-Mail: sunlord@sunlordinc.com

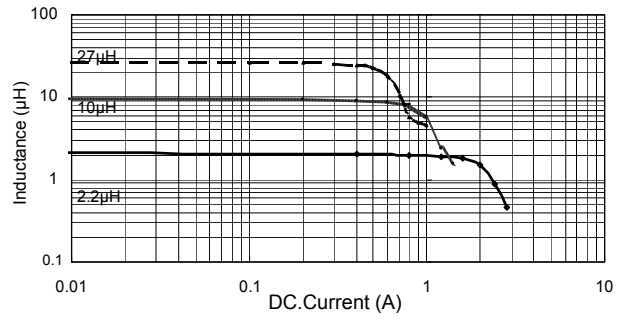
TYPICAL ELECTRICAL CHARACTERISTICS

SWPA3015S Series

Temperature vs. DC Current Characteristics

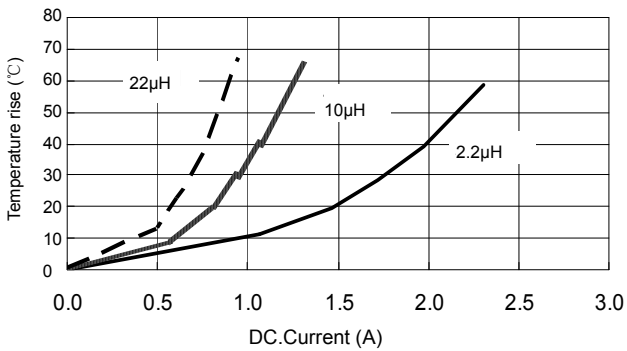


Inductance vs. DC Current Characteristics

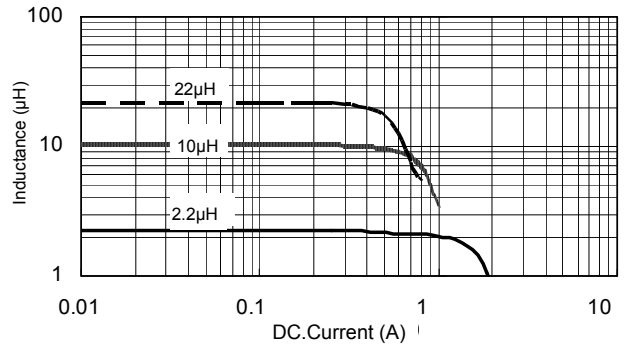


SWPA4010S Series

Temperature vs. DC Current Characteristics

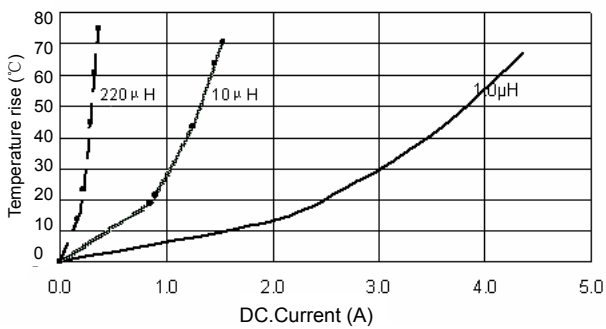


Inductance vs. DC Current Characteristic

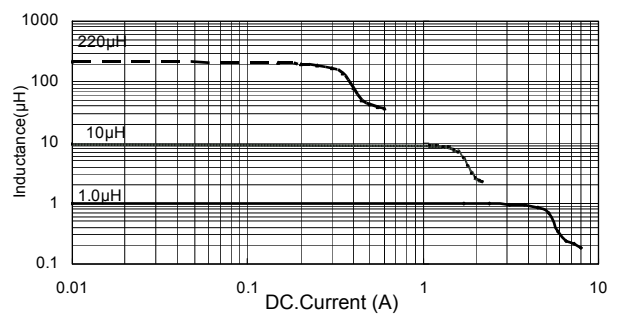


SWPA4018S Series

Temperature vs. DC Current Characteristics



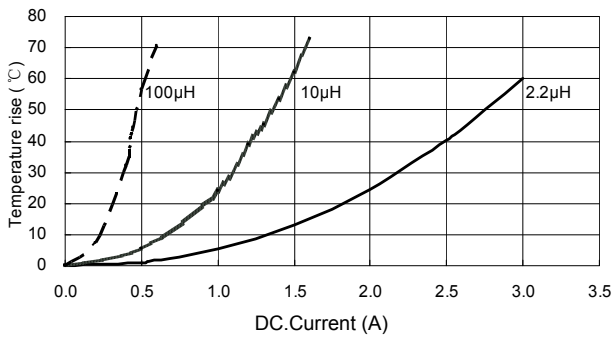
Inductance vs. DC Current Characteristics



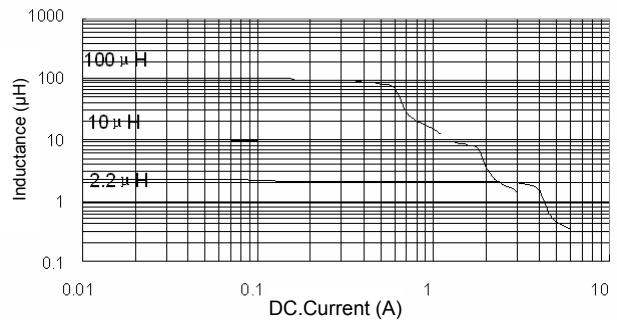
TYPICAL ELECTRICAL CHARACTERISTICS

SWPA4020S Series

Temperature vs. DC Current Characteristics

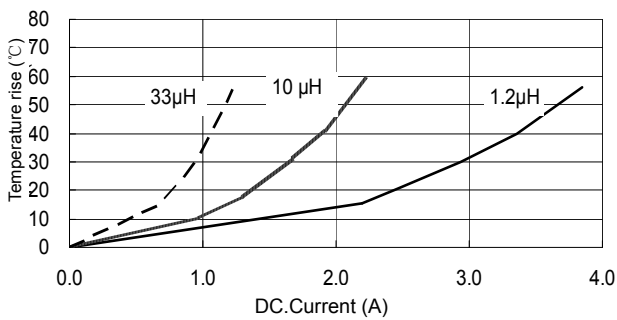


Inductance vs. DC Current Characteristics

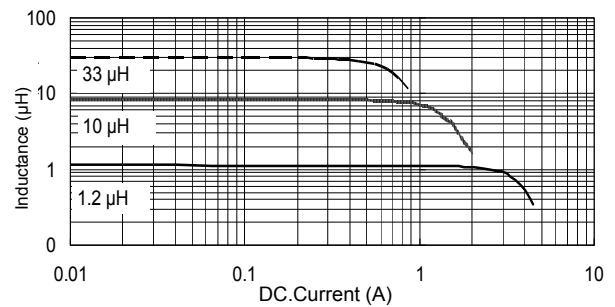


SWPA4026S Series

Temperature vs. DC Current Characteristics

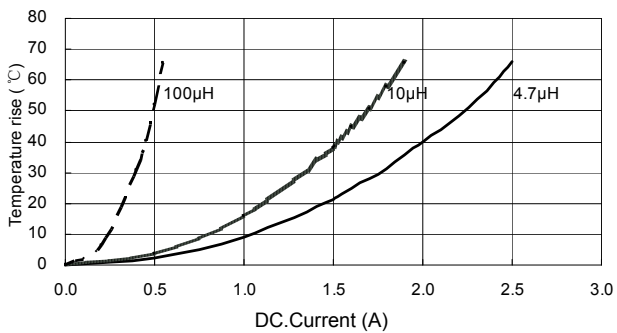


Inductance vs. DC Current Characteristics

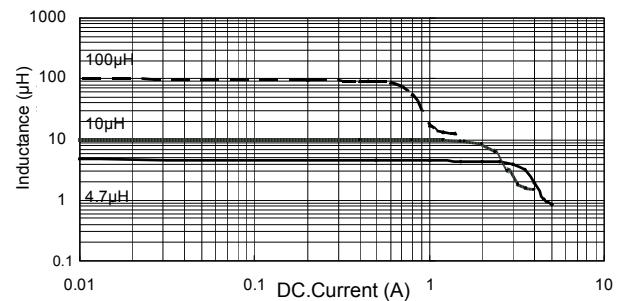


SWPA4030S Series

Temperature vs. DC Current Characteristics

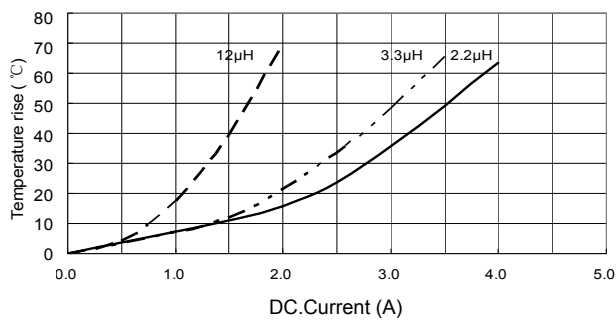


Inductance vs. DC Current Characteristics

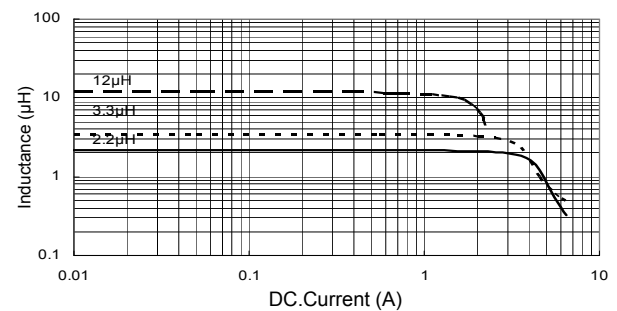


SWPA5020S Series

Temperature vs. DC Current Characteristics



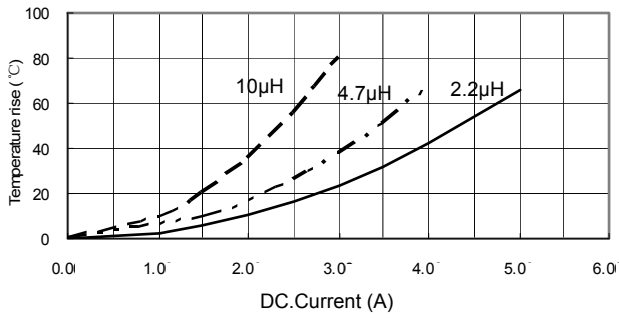
Inductance vs. DC Current Characteristics



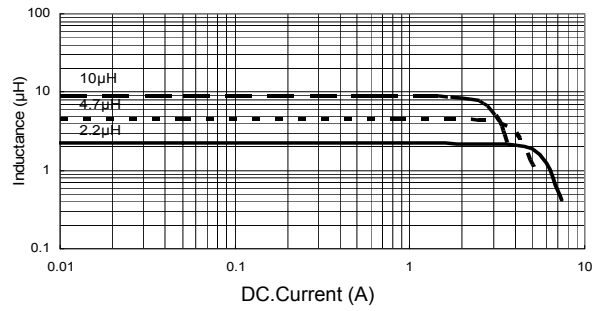
TYPICAL ELECTRICAL CHARACTERISTICS

SWPA5040S Series

Temperature vs. DC Current Characteristics

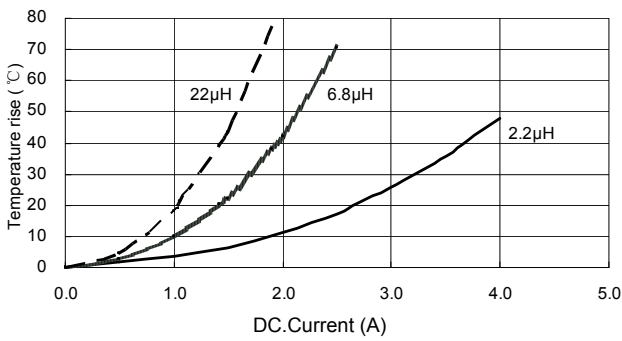


Inductance vs. DC Current Characteristics

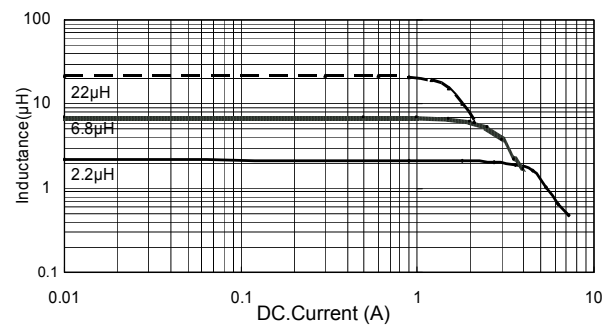


SWPA6020S Series

Temperature vs. DC Current Characteristics

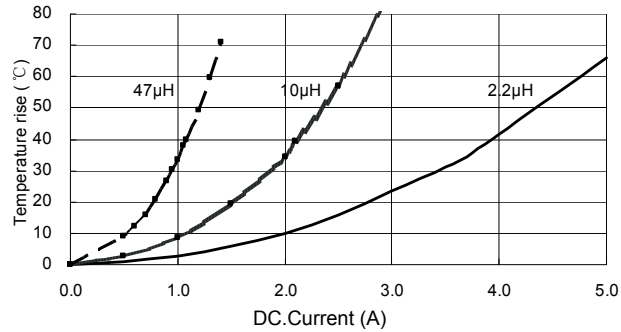


Inductance vs. DC Current Characteristics

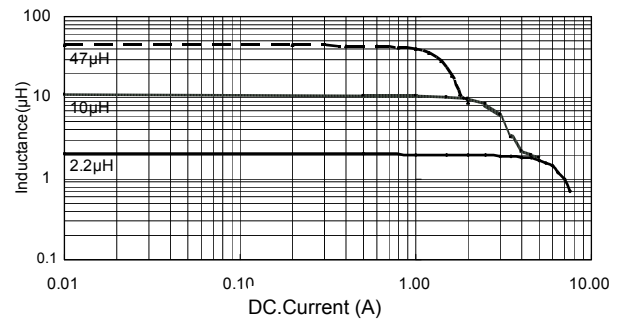


SWPA6028S Series

Temperature vs. DC Current Characteristics

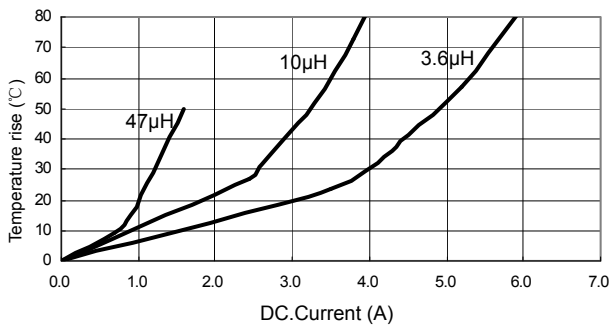


Inductance vs. DC Current Characteristics

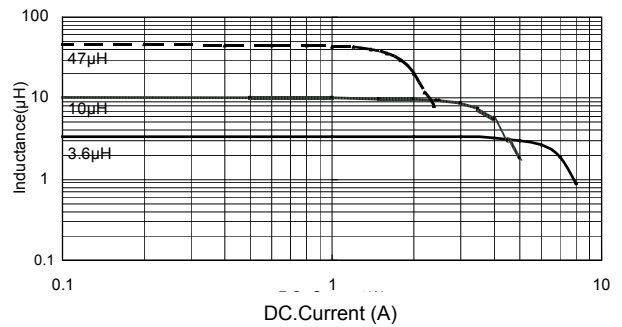


SWPA6045S Series

Temperature vs. DC Current Characteristics



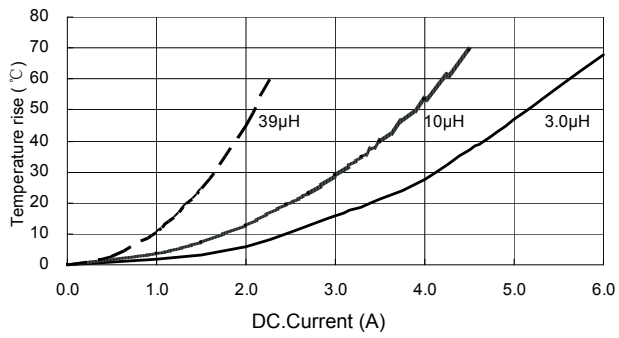
Inductance vs. DC Current Characteristics



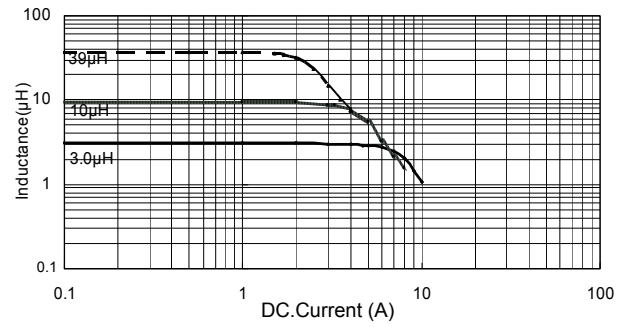
TYPICAL ELECTRICAL CHARACTERISTICS

SWPA8040S Series

Temperature vs. DC Current Characteristics



Inductance vs. DC Current Characteristics



PACKAGING

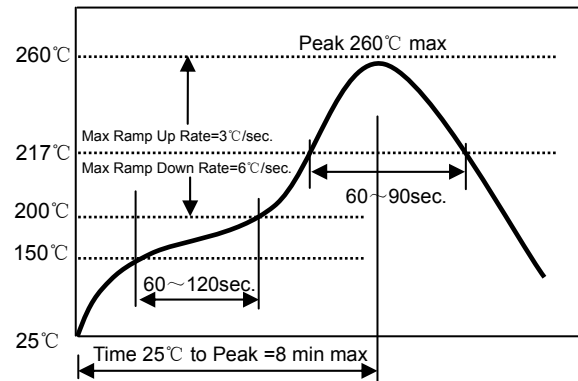
| Type | Tape Width | Reel Diameter | Quantity (pcs) |
|----------------|------------|---------------|----------------|
| 252010/252012 | 8mm | 178mm | 2K |
| 3010/3012/3015 | 8mm | 178mm | 2K |
| 4010 | 12 mm | 330 mm | 5K |
| 4018/4020 | 12 mm | 330mm | 3K |
| 4026 | 12 mm | 330mm | 2.5K |
| 4030 | 12 mm | 330mm | 2K |
| 5012 | 12 mm | 330mm | 4.5 |
| 5020 | 12 mm | 330mm | 2.5 |
| 5040 | 12 mm | 330mm | 1.5 |
| 6010/6012/6020 | 16 mm | 330mm | 2.5K |
| 6028 | 16 mm | 330mm | 2K |
| 6040/6045 | 16 mm | 330mm | 1.5K |
| 8040 | 16 mm | 330mm | 1K |

RECOMMENDED SOLDERING TECHNOLOGIES

● Re-flowing Profile:

- △ Preheat condition: 150 ~200 °C/60~120sec.
- △ Allowed time above 217 °C: 60~90sec.
- △ Max temp: 260 °C
- △ Max time at max temp: 10sec.
- △ Solder paste: Sn/3.0Ag/0.5Cu
- △ Allowed Reflow time: 2x max

[Note: The reflow profile in the above table is only for qualification and is not meant to specify board assembly profiles. Actual board assembly profiles must be based on the customer's specific board design, solder paste and process, and should not exceed the parameters as the Reflow profile shows.]



● Iron Soldering Profile.

- △ Iron soldering power: Max.30W
- △ Pre-heating: 150 °C/60 sec.
- △ Soldering Tip temperature: 350°C Max.
- △ Soldering time: 3sec Max.
- △ Solder paste: Sn/3.0Ag/0.5Cu
- △ Max.1 times for iron soldering

[Note: Take care not to apply the tip of the soldering iron to the terminal electrodes.]

