# 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**

- Smart phone, smart TV, set top box, notebook
- Car navigation systems, telecomm base stations
- VR, AR
- LED lighting

| <b>SWPA</b>  | <u>3012</u> | <u>S</u> | <u>1R0</u> | <u>N</u> | <u>T</u>        |              |
|--------------|-------------|----------|------------|----------|-----------------|--------------|
| 1            | 2           | 3        | 4          | 5        | 6               | 7            |
| ( <u>1</u> ) | Type        |          |            | ② F      | vternal Dimensi | ione (LyWyH) |

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

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

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

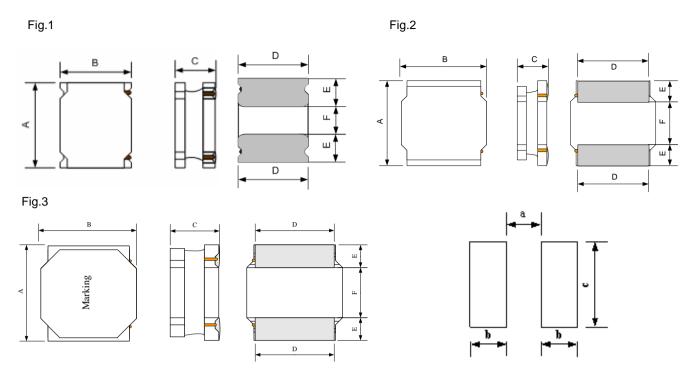
| ⑤ Ir | Inductance Tolerance |  |  |  |  |  |  |  |
|------|----------------------|--|--|--|--|--|--|--|
| K    | ±10%                 |  |  |  |  |  |  |  |
| М    | ±20%                 |  |  |  |  |  |  |  |
| N    | ±30%                 |  |  |  |  |  |  |  |

| 6 | Packing              |
|---|----------------------|
| Т | Tape Carrier Package |

| 7 | Design Code               |  |  |  |  |
|---|---------------------------|--|--|--|--|
|   | Standard product is blank |  |  |  |  |

| ② Exter | nal Dimensions (LxWxH) [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                 |
| 4012    | 4.0×4.0×1.2                 |
| 4018    | 4.0×4.0×1.8                 |
| 4020    | 4.0×4.0×2.0                 |
| 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                 |
| 5045    | 5.0×5.0×4.5                 |
| 6012    | 6.0×6.0×1.2                 |
| 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                 |
| 8060    | 8.0×8.0×6.0                 |
| 8065    | 8.0×8.0×6.5                 |

# **SHAPE AND DIMENSIONS**



### Recommended Land Pattern

Unit: mm

| Series      | Shape | А       | В       | С        | D       | Е        | F        | а Тур. | b Typ. | с Тур. |
|-------------|-------|---------|---------|----------|---------|----------|----------|--------|--------|--------|
| SWPA252010S | Fig.1 | 2.5±0.1 | 2.0±0.1 | 1.0 Max. | 2.0±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 | 1.2 Max. | 2.0±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 | 1.0 Max. | 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 | 1.2 Max. | 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 | 1.5 Max. | 2.5±0.2 | 0.75±0.2 | 1.5±0.2  | 1.5    | 0.8    | 2.7    |
| SWPA4010S   | Fig.2 | 4.0±0.2 | 4.0±0.2 | 1.0 Max. | 3.3±0.2 | 0.95±0.2 | 2.1±0.2  | 1.9    | 1.1    | 3.7    |
| SWPA4012S   | Fig.2 | 4.0±0.2 | 4.0±0.2 | 1.2 Max. | 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 | 1.8 Max. | 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 | 2.0 Max. | 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 | 3.0 Max. | 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 | 1.2 Max. | 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 | 2.0 Max. | 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 | 4.0 Max. | 4.0±0.2 | 1.25±0.2 | 2.5±0.2  | 2.3    | 1.4    | 4.2    |
| SWPA5045S   | Fig.3 | 5.0±0.2 | 5.0±0.2 | 4.5 Max. | 4.0±0.2 | 1.30±0.2 | 2.5±0.2  | 2.3    | 1.4    | 4.2    |
| SWPA6020S   | Fig.2 | 6.0±0.3 | 6.0±0.3 | 2.0 Max. | 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 | 2.8 Max. | 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 | 4.5 Max. | 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 | 4.2 Max. | 6.3±0.3 | 2.00±0.3 | 4.0±0.3  | 3.8    | 2.2    | 7.5    |
| SWPA8060S   | Fig.2 | 8.0±0.3 | 8.0±0.3 | 6.0 Max  | 6.3±0.3 | 2.00±0.3 | 4.0±0.3  | 3.8    | 2.2    | 7.5    |
| SWPA8065S   | Fig.3 | 8.0±0.3 | 8.0±0.3 | 6.5 Max. | 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.



## SWPA252010S Series

| Part Number      | Inductance | DC Resistance |       | Self-resonant<br>Frequency | Saturation<br>Current*3 |      | Heat Rating<br>Current*4 |      |
|------------------|------------|---------------|-------|----------------------------|-------------------------|------|--------------------------|------|
|                  | @100kHz,1V | Max.          | Тур.  | Min.                       | Max.                    | Тур. | Max.                     | Тур. |
| Units            | μH         | 2             | )     | MHz                        | A                       |      | A                        |      |
| Symbol           | L          | DC            | CR    | S.R.F                      | ls                      | at   | Irn                      | ns   |
| SWPA252010SR47NT | 0.47±30%   | 0.056         | 0.047 | 206                        | 2.50                    | 3.35 | 2.35                     | 2.56 |
| SWPA252010SR56NT | 0.56±30%   | 0.072         | 0.060 | 160                        | 2.90                    | 3.20 | 2.00                     | 2.18 |
| SWPA252010SR68NT | 0.68±30%   | 0.074         | 0.062 | 129                        | 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 | 81                         | 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 | 47                         | 1.05                    | 1.30 | 0.90                     | 0.98 |
| SWPA252010S4R7MT | 4.7±20%    | 0.563         | 0.469 | 42                         | 0.95                    | 1.15 | 0.70                     | 0.76 |
| SWPA252010S5R6MT | 5.6±20%    | 0.563         | 0.469 | 35                         | 0.80                    | 0.95 | 0.73                     | 0.80 |
| SWPA252010S6R8MT | 6.8±20%    | 0.896         | 0.747 | 31                         | 0.78                    | 0.92 | 0.59                     | 0.64 |
| SWPA252010S100MT | 10±20%     | 1.092         | 0.910 | 27                         | 0.65                    | 0.78 | 0.50                     | 0.55 |

## SWPA252012S Series

| Part Number      | Inductance | DC Resistance |       | Self-resonant<br>Frequency | Saturation<br>Current*3 |      | Heat Rating Current* |      |
|------------------|------------|---------------|-------|----------------------------|-------------------------|------|----------------------|------|
|                  | @100kHz,1V | Max.          | Тур.  | Min.                       | Max.                    | Тур. | Max.                 | Тур. |
| Units            | μH         |               | Ω     | MHz                        | А                       |      | Α                    |      |
| Symbol           | L          |               | OCR   | S.R.F                      | Isat                    |      | Irms                 |      |
| SWPA252012SR47NT | 0.47±30%   | 0.061         | 0.047 | 160                        | 3.82                    | 4.27 | 2.15                 | 2.34 |
| SWPA252012SR68NT | 0.68±30%   | 0.074         | 0.057 | 140                        | 3.28                    | 3.68 | 1.95                 | 2.13 |
| SWPA252012S1R0NT | 1.0±30%    | 0.090         | 0.069 | 110                        | 2.59                    | 2.90 | 1.93                 | 2.10 |
| SWPA252012S1R2NT | 1.2±30%    | 0.129         | 0.099 | 100                        | 2.38                    | 2.67 | 1.46                 | 1.59 |
| SWPA252012S1R5MT | 1.5±20%    | 0.147         | 0.113 | 97                         | 2.24                    | 2.51 | 1.40                 | 1.53 |
| SWPA252012S2R2MT | 2.2±20%    | 0.216         | 0.166 | 69                         | 1.85                    | 2.07 | 1.15                 | 1.25 |
| SWPA252012S2R7MT | 2.7±20%    | 0.239         | 0.184 | 63                         | 1.72                    | 1.92 | 1.09                 | 1.19 |
| SWPA252012S3R3MT | 3.3±20%    | 0.264         | 0.203 | 62                         | 1.61                    | 1.80 | 1.04                 | 1.13 |
| SWPA252012S3R6MT | 3.6±20%    | 0.348         | 0.268 | 53                         | 1.46                    | 1.64 | 0.90                 | 0.98 |
| SWPA252012S4R3MT | 4.3±20%    | 0.377         | 0.290 | 51                         | 1.37                    | 1.53 | 0.87                 | 0.95 |
| SWPA252012S4R7MT | 4.7±20%    | 0.377         | 0.290 | 47                         | 1.12                    | 1.25 | 0.84                 | 0.92 |
| SWPA252012S5R1MT | 5.1±20%    | 0.500         | 0.385 | 44                         | 1.23                    | 1.37 | 0.75                 | 0.82 |
| SWPA252012S5R6MT | 5.6±20%    | 0.538         | 0.414 | 38                         | 1.11                    | 1.25 | 0.73                 | 0.80 |
| SWPA252012S6R2MT | 6.2±20%    | 0.542         | 0.417 | 38                         | 1.03                    | 1.16 | 0.73                 | 0.80 |
| SWPA252012S6R8MT | 6.8±20%    | 0.581         | 0.447 | 38                         | 0.98                    | 1.09 | 0.69                 | 0.75 |
| SWPA252012S7R5MT | 7.5±20%    | 0.611         | 0.470 | 35                         | 0.97                    | 1.09 | 0.68                 | 0.74 |
| SWPA252012S8R2MT | 8.2±20%    | 0.658         | 0.506 | 36                         | 0.98                    | 1.10 | 0.65                 | 0.71 |
| SWPA252012S9R1MT | 9.1±20%    | 0.690         | 0.531 | 34                         | 0.91                    | 1.02 | 0.62                 | 0.68 |
| SWPA252012S100MT | 10±20%     | 0.690         | 0.531 | 34                         | 0.79                    | 0.88 | 0.62                 | 0.68 |
| SWPA252012S120MT | 12±20%     | 1.075         | 0.827 | 28                         | 0.78                    | 0.88 | 0.51                 | 0.56 |
| SWPA252012S150MT | 15±20%     | 1.591         | 1.224 | 25                         | 0.68                    | 0.77 | 0.42                 | 0.46 |
| SWPA252012S220MT | 22±20%     | 1.976         | 1.520 | 20                         | 0.53                    | 0.59 | 0.38                 | 0.41 |

## SWPA3010S Series

| Part Number    | Inductance | DC Re | sistance | Self-resonant<br>Frequency | Satura<br>Curre |      |      | Rating<br>rent <sup>*4</sup> |
|----------------|------------|-------|----------|----------------------------|-----------------|------|------|------------------------------|
|                | @100kHz,1V | Max.  | Тур.     | Min.                       | Max.            | Тур. | Max. | Тур.                         |
| Units          | μH         |       | Ω        | MHz                        |                 | A    |      | Α                            |
| Symbol         | L          | D     | CR       | S.R.F                      | Is              | at   | Ir   | ms                           |
| SWPA3010S1R0NT | 1.0±30%    | 0.085 | 0.065    | 180                        | 1.40            | 2.10 | 1.45 | 1.80                         |
| SWPA3010S1R2NT | 1.2±30%    | 0.085 | 0.065    | 137                        | 1.25            | 1.70 | 1.45 | 1.80                         |
| SWPA3010S1R5NT | 1.5±30%    | 0.104 | 0.080    | 120                        | 1.27            | 1.70 | 1.30 | 1.60                         |
| SWPA3010S2R2NT | 2.2±30%    | 0.143 | 0.110    | 100                        | 1.15            | 1.50 | 1.09 | 1.40                         |
| SWPA3010S2R7MT | 2.7±20%    | 0.169 | 0.130    | 90                         | 1.00            | 1.20 | 1.02 | 1.40                         |
| SWPA3010S3R3NT | 3.3±30%    | 0.189 | 0.145    | 74                         | 0.97            | 1.20 | 0.96 | 1.20                         |
| SWPA3010S3R6MT | 3.6±20%    | 0.215 | 0.165    | 67                         | 0.95            | 1.20 | 0.90 | 1.10                         |
| SWPA3010S4R7MT | 4.7±20%    | 0.293 | 0.225    | 59                         | 0.75            | 1.05 | 0.77 | 1.10                         |
| SWPA3010S5R6MT | 5.6±20%    | 0.322 | 0.248    | 40                         | 0.58            | 0.65 | 0.70 | 1.05                         |
| SWPA3010S6R8MT | 6.8±20%    | 0.397 | 0.305    | 42                         | 0.55            | 0.72 | 0.66 | 0.96                         |
| SWPA3010S8R2MT | 8.2±20%    | 0.520 | 0.40     | 23                         | 0.55            | 0.70 | 0.58 | 0.70                         |
| SWPA3010S100MT | 10±20%     | 0.520 | 0.40     | 39                         | 0.55            | 0.75 | 0.58 | 0.70                         |
| SWPA3010S120MT | 12±20%     | 0.657 | 0.505    | 36                         | 0.43            | 0.65 | 0.52 | 0.67                         |
| SWPA3010S150MT | 15±20%     | 0.793 | 0.610    | 30                         | 0.42            | 0.57 | 0.47 | 0.57                         |
| SWPA3010S220MT | 22±20%     | 1.209 | 0.930    | 28                         | 0.35            | 0.48 | 0.38 | 0.52                         |
| SWPA3010S270MT | 27±20%     | 1.404 | 1.080    | 25                         | 0.30            | 0.45 | 0.35 | 0.50                         |
| SWPA3010S330MT | 33±20%     | 2.015 | 1.550    | 18                         | 0.29            | 0.42 | 0.30 | 0.55                         |
| SWPA3010S390MT | 39±20%     | 2.275 | 1.750    | 18                         | 0.28            | 0.38 | 0.28 | 0.53                         |
| SWPA3010S430MT | 43±20%     | 2.340 | 1.80     | 18                         | 0.23            | 0.36 | 0.27 | 0.52                         |
| SWPA3010S470MT | 47±20%     | 2.535 | 1.950    | 18                         | 0.22            | 0.35 | 0.26 | 0.52                         |
| SWPA3010S510MT | 51±20%     | 2.860 | 2.20     | 18                         | 0.21            | 0.33 | 0.25 | 0.48                         |
| SWPA3010S560MT | 56±20%     | 3.016 | 2.320    | 16                         | 0.21            | 0.28 | 0.24 | 0.35                         |

### SWPA3012S Series

| Part Number    | Inductance | DC Re | sistance | Self-resonant<br>Frequency | Satura<br>Curre |      |      | Rating rent*4 |
|----------------|------------|-------|----------|----------------------------|-----------------|------|------|---------------|
|                | @100kHz,1V | Max.  | Тур.     | Min.                       | Max.            | Тур. | Max. | Тур.          |
| Units          | μH         | 9     | Ω        | MHz                        |                 | A    |      | A             |
| Symbol         | L          | D(    | CR       | S.R.F                      | Is              | sat  | Ir   | ms            |
| SWPA3012SR22NT | 0.22±30%   | 0.022 | 0.017    | 321                        | 5.30            | 6.00 | 3.00 | 3.30          |
| SWPA3012SR82NT | 0.82±30%   | 0.039 | 0.030    | 180                        | 2.05            | 2.80 | 2.47 | 3.00          |
| SWPA3012S1R0NT | 1.0±30%    | 0.052 | 0.040    | 120                        | 1.87            | 2.80 | 2.20 | 2.70          |
| SWPA3012S1R2NT | 1.2±30%    | 0.059 | 0.045    | 120                        | 2.22            | 2.50 | 2.01 | 2.20          |
| SWPA3012S1R5NT | 1.5±30%    | 0.059 | 0.045    | 110                        | 1.62            | 1.90 | 2.01 | 2.20          |
| SWPA3012S1R8NT | 1.8±30%    | 0.082 | 0.063    | 90                         | 1.30            | 1.90 | 1.65 | 1.80          |
| SWPA3012S2R2NT | 2.2±30%    | 0.098 | 0.075    | 84                         | 1.20            | 1.90 | 1.55 | 1.70          |
| SWPA3012S2R4NT | 2.4±30%    | 0.088 | 0.068    | 100                        | 1.15            | 1.50 | 1.60 | 1.70          |
| SWPA3012S2R7NT | 2.7±30%    | 0.110 | 0.085    | 65                         | 1.14            | 1.50 | 1.48 | 1.50          |
| SWPA3012S3R3MT | 3.3±20%    | 0.130 | 0.10     | 64                         | 1.05            | 1.50 | 1.36 | 1.40          |
| SWPA3012S3R6MT | 3.6±20%    | 0.130 | 0.10     | 36                         | 1.05            | 1.50 | 1.36 | 1.40          |
| SWPA3012S3R9MT | 3.9±20%    | 0.189 | 0.145    | 61                         | 1.00            | 1.30 | 1.24 | 1.30          |
| SWPA3012S4R7MT | 4.7±20%    | 0.156 | 0.120    | 61                         | 0.90            | 1.00 | 1.24 | 1.30          |
| SWPA3012S6R8MT | 6.8±20%    | 0.247 | 0.190    | 61                         | 0.75            | 0.90 | 0.98 | 1.10          |
| SWPA3012S100MT | 10±20%     | 0.345 | 0.265    | 42                         | 0.60            | 0.88 | 0.83 | 0.90          |
| SWPA3012S120MT | 12±20%     | 0.449 | 0.345    | 32                         | 0.48            | 0.67 | 0.73 | 0.84          |
| SWPA3012S150MT | 15±20%     | 0.468 | 0.360    | 27                         | 0.45            | 0.62 | 0.71 | 0.77          |
| SWPA3012S180MT | 18±20%     | 0.709 | 0.545    | 25                         | 0.43            | 0.59 | 0.58 | 0.65          |
| SWPA3012S220MT | 22±20%     | 0.839 | 0.645    | 23                         | 0.42            | 0.52 | 0.53 | 0.59          |



### SWPA3012S Series

| Part Number    | Inductance | DC Re  | sistance | Self-resonant<br>Frequency | Satura<br>Curre |      |      | Rating<br>rent*4 |
|----------------|------------|--------|----------|----------------------------|-----------------|------|------|------------------|
|                | @100kHz,1V | / Max. | Тур.     | Min.                       | Max.            | Тур. | Max. | Тур.             |
| Units          | μH         |        | Ω        | MHz                        |                 | A    |      | Α                |
| Symbol         | L          | D      | CR       | S.R.F                      | Is              | at   | Ir   | ms               |
| SWPA3012S270MT | 27±20%     | 1.131  | 0.870    | 21                         | 0.35            | 0.48 | 0.47 | 0.51             |
| SWPA3012S330MT | 33±20%     | 1.138  | 0.875    | 18                         | 0.36            | 0.46 | 0.46 | 0.50             |
| SWPA3012S360MT | 36±20%     | 1.235  | 0.950    | 18                         | 0.34            | 0.44 | 0.44 | 0.48             |
| SWPA3012S390MT | 39±20%     | 1.729  | 1.330    | 18                         | 0.30            | 0.39 | 0.37 | 0.41             |
| SWPA3012S470MT | 47±20%     | 1.885  | 1.450    | 14                         | 0.27            | 0.35 | 0.35 | 0.40             |
| SWPA3012S560MT | 56±20%     | 1.794  | 1.380    | 9                          | 0.26            | 0.33 | 0.28 | 0.40             |
| SWPA3012S680MT | 68±20%     | 2.171  | 1.670    | 7                          | 0.24            | 0.29 | 0.33 | 0.37             |
| SWPA3012S820MT | 82±20%     | 3.302  | 2.540    | 7                          | 0.17            | 0.27 | 0.27 | 0.31             |
| SWPA3012S101MT | 100±20%    | 3.718  | 2.860    | 5                          | 0.21            | 0.23 | 0.25 | 0.29             |

### SWPA3015S Series

| SWPA30155 Series |            |       |          |               |        |       |      |        |
|------------------|------------|-------|----------|---------------|--------|-------|------|--------|
|                  | Inductance | DC Pa | sistance | Self-resonant | Satura | ation | Heat | Rating |
| Part Number      | muuctance  | DC Ke | Sistance | Frequency     | Curre  | ent*3 | Cur  | rent*4 |
|                  | @100kHz,1V | Max.  | Тур.     | Min.          | Max.   | Тур.  | Max. | Тур.   |
| Units            | μH         |       | Ω        | MHz           |        | A     |      | A      |
| Symbol           | L          | D     | CR       | S.R.F         | ls     | at    | Ir   | ms     |
| SWPA3015SR50NT   | 0.5±30%    | 0.039 | 0.030    | 162           | 3.90   | 4.20  | 2.60 | 2.80   |
| SWPA3015S1R0NT   | 1.0±30%    | 0.039 | 0.030    | 150           | 2.32   | 2.80  | 2.35 | 2.50   |
| SWPA3015S1R2NT   | 1.2±30%    | 0.052 | 0.040    | 110           | 2.21   | 3.10  | 1.95 | 2.30   |
| SWPA3015S1R5NT   | 1.5±30%    | 0.065 | 0.050    | 100           | 2.30   | 2.70  | 1.70 | 2.20   |
| SWPA3015S1R8NT   | 1.8±30%    | 0.065 | 0.050    | 92            | 1.75   | 2.20  | 1.70 | 2.20   |
| SWPA3015S2R2NT   | 2.2±30%    | 0.078 | 0.060    | 86            | 1.60   | 2.00  | 1.60 | 2.00   |
| SWPA3015S2R7NT   | 2.7±30%    | 0.098 | 0.075    | 64            | 1.52   | 1.90  | 1.43 | 1.90   |
| SWPA3015S3R3MT   | 3.3±20%    | 0.104 | 0.080    | 68            | 1.32   | 1.81  | 1.36 | 1.60   |
| SWPA3015S3R6MT   | 3.6±20%    | 0.137 | 0.105    | 59            | 1.28   | 1.60  | 1.20 | 1.50   |
| SWPA3015S3R9MT   | 3.9±20%    | 0.137 | 0.105    | 47            | 1.20   | 1.40  | 1.20 | 1.50   |
| SWPA3015S4R3MT   | 4.3±20%    | 0.150 | 0.115    | 53            | 1.20   | 1.40  | 1.14 | 1.30   |
| SWPA3015S4R7MT   | 4.7±20%    | 0.163 | 0.125    | 46            | 1.10   | 1.40  | 1.09 | 1.30   |
| SWPA3015S5R1MT   | 5.1±20%    | 0.173 | 0.133    | 49            | 1.00   | 1.20  | 1.05 | 1.20   |
| SWPA3015S6R2MT   | 6.2±20%    | 0.254 | 0.195    | 46            | 1.00   | 1.20  | 0.86 | 1.00   |
| SWPA3015S6R8MT   | 6.8±20%    | 0.260 | 0.20     | 39            | 0.85   | 1.10  | 0.85 | 1.10   |
| SWPA3015S100MT   | 10±20%     | 0.325 | 0.250    | 41            | 0.72   | 0.92  | 0.77 | 0.90   |
| SWPA3015S120MT   | 12±20%     | 0.416 | 0.320    | 32            | 0.70   | 0.90  | 0.68 | 0.89   |
| SWPA3015S150MT   | 15±20%     | 0.455 | 0.350    | 30            | 0.66   | 0.88  | 0.65 | 0.72   |
| SWPA3015S180MT   | 18±20%     | 0.559 | 0.430    | 23            | 0.56   | 0.72  | 0.59 | 0.72   |
| SWPA3015S220MT   | 22±20%     | 0.598 | 0.460    | 23            | 0.52   | 0.68  | 0.57 | 0.69   |
| SWPA3015S270MT   | 27±20%     | 0.949 | 0.730    | 22            | 0.48   | 0.56  | 0.45 | 0.56   |
| SWPA3015S330MT   | 33±20%     | 1.066 | 0.820    | 20            | 0.44   | 0.53  | 0.43 | 0.51   |
| SWPA3015S390MT   | 39±20%     | 1.294 | 0.995    | 14            | 0.41   | 0.55  | 0.39 | 0.44   |
| SWPA3015S430MT   | 43±20%     | 1.378 | 1.060    | 16            | 0.37   | 0.43  | 0.37 | 0.48   |
| SWPA3015S470MT   | 47±20%     | 1.625 | 1.250    | 14            | 0.35   | 0.43  | 0.35 | 0.44   |
| SWPA3015S560MT   | 56±20%     | 1.664 | 1.280    | 13            | 0.33   | 0.42  | 0.34 | 0.41   |
| SWPA3015S620MT   | 62±20%     | 2.093 | 1.610    | 13            | 0.30   | 0.40  | 0.30 | 0.41   |
| SWPA3015S680MT   | 68±20%     | 3.510 | 2.700    | 11            | 0.28   | 0.37  | 0.23 | 0.31   |
| SWPA3015S101MT   | 100±20%    | 4.043 | 3.110    | 7.2           | 0.23   | 0.25  | 0.21 | 0.25   |
| SWPA3015S151MT   | 150±20%    | 4.940 | 3.80     | 4.5           | 0.18   | 0.22  | 0.19 | 0.23   |

## SWPA4010S Series

| Part Number    | Inductance | DC Resistance |       | Self-resonant<br>Frequency | Satura<br>Curre |      |      | Rating<br>rent*4 |
|----------------|------------|---------------|-------|----------------------------|-----------------|------|------|------------------|
|                | @100kHz,1V | Max.          | Тур.  | Min.                       | Max.            | Тур. | Max. | Тур.             |
| Units 单位       | μH         |               | Ω     | MHz                        |                 | A    |      | A                |
| Symbol 符号      | L          | D             | CR    | S.R.F                      | ls              | sat  | Ir   | ms               |
| SWPA4010S1R0NT | 1.0±30%    | 0.067         | 0.056 | 104                        | 2.00            | 2.30 | 1.90 | 2.40             |
| SWPA4010S1R5NT | 1.5±30%    | 0.084         | 0.070 | 71                         | 1.68            | 2.00 | 1.70 | 2.00             |
| SWPA4010S2R2MT | 2.2±20%    | 0.102         | 0.085 | 52                         | 1.20            | 1.50 | 1.50 | 2.00             |
| SWPA4010S3R3MT | 3.3±20%    | 0.120         | 0.100 | 42                         | 1.10            | 1.40 | 1.40 | 1.80             |
| SWPA4010S4R7MT | 4.7±20%    | 0.168         | 0.140 | 30                         | 0.95            | 1.10 | 1.20 | 1.50             |
| SWPA4010S6R8MT | 6.8±20%    | 0.240         | 0.200 | 26                         | 0.80            | 0.95 | 1.00 | 1.20             |
| SWPA4010S100MT | 10±20%     | 0.360         | 0.300 | 19                         | 0.62            | 0.75 | 0.75 | 1.00             |
| SWPA4010S150MT | 15±20%     | 0.516         | 0.430 | 17                         | 0.54            | 0.61 | 0.60 | 0.85             |
| SWPA4010S220MT | 22±20%     | 0.684         | 0.570 | 11                         | 0.45            | 0.52 | 0.50 | 0.75             |

### SWPA4012S Series

| Part Number    | Inductance | DC Re | sistance | Self-resonant<br>Frequency | Satura<br>Curre |      |      | Rating<br>rent <sup>*4</sup> |
|----------------|------------|-------|----------|----------------------------|-----------------|------|------|------------------------------|
|                | @100kHz,1V | Max.  | Тур.     | Min.                       | Max.            | Тур. | Max. | Тур.                         |
| Units 单位       | μΗ         | !     | Ω        | MHz                        |                 | A    |      | A                            |
| Symbol 符号      | L          | D     | CR       | S.R.F                      | ls              | sat  | Ir   | ms                           |
| SWPA4012SR82NT | 0.82±30%   | 0.065 | 0.050    | 150                        | 3.02            | 3.30 | 1.65 | 2.50                         |
| SWPA4012S1R0NT | 1.0±30%    | 0.065 | 0.050    | 120                        | 2.61            | 3.20 | 1.65 | 2.50                         |
| SWPA4012S1R5NT | 1.5±30%    | 0.085 | 0.065    | 90                         | 2.10            | 2.70 | 1.46 | 2.20                         |
| SWPA4012S1R8NT | 1.8±30%    | 0.104 | 0.080    | 88                         | 2.12            | 2.60 | 1.32 | 1.90                         |
| SWPA4012S2R2NT | 2.2±30%    | 0.104 | 0.080    | 74                         | 1.76            | 2.30 | 1.32 | 1.90                         |
| SWPA4012S2R7NT | 2.7±30%    | 0.117 | 0.090    | 71                         | 1.90            | 2.30 | 1.25 | 1.70                         |
| SWPA4012S3R3NT | 3.3±30%    | 0.143 | 0.110    | 60                         | 1.72            | 2.10 | 1.12 | 1.60                         |
| SWPA4012S3R6NT | 3.6±30%    | 0.143 | 0.110    | 57                         | 1.20            | 1.70 | 1.12 | 1.60                         |
| SWPA4012S4R3NT | 4.3±30%    | 0.182 | 0.140    | 54                         | 1.58            | 1.70 | 1.00 | 1.50                         |
| SWPA4012S4R7NT | 4.7±30%    | 0.163 | 0.125    | 50                         | 1.15            | 1.80 | 1.05 | 1.50                         |
| SWPA4012S5R1NT | 5.1±30%    | 0.201 | 0.155    | 50                         | 1.55            | 1.60 | 0.95 | 1.50                         |
| SWPA4012S5R6NT | 5.6±30%    | 0.182 | 0.140    | 42                         | 1.00            | 1.60 | 1.00 | 1.20                         |
| SWPA4012S6R8MT | 6.8±20%    | 0.257 | 0.198    | 40                         | 0.85            | 1.40 | 0.84 | 1.20                         |
| SWPA4012S100MT | 10±20%     | 0.345 | 0.265    | 33                         | 0.80            | 1.10 | 0.77 | 1.00                         |
| SWPA4012S120MT | 12±20%     | 0.377 | 0.290    | 32                         | 0.66            | 1.00 | 0.70 | 0.95                         |
| SWPA4012S150MT | 15±20%     | 0.442 | 0.340    | 25                         | 0.56            | 0.80 | 0.64 | 0.85                         |
| SWPA4012S180MT | 18±20%     | 0.611 | 0.470    | 23                         | 0.55            | 0.75 | 0.55 | 0.80                         |
| SWPA4012S220MT | 22±20%     | 0.763 | 0.587    | 20                         | 0.46            | 0.70 | 0.49 | 0.75                         |
| SWPA4012S270MT | 27±20%     | 0.936 | 0.720    | 18                         | 0.50            | 0.70 | 0.45 | 0.60                         |
| SWPA4012S330MT | 33±20%     | 1.053 | 0.810    | 17                         | 0.42            | 0.60 | 0.42 | 0.58                         |
| SWPA4012S360MT | 36±20%     | 1.170 | 0.90     | 14                         | 0.40            | 0.50 | 0.40 | 0.56                         |
| SWPA4012S390MT | 39±20%     | 1.430 | 1.10     | 16                         | 0.55            | 0.66 | 0.37 | 0.50                         |
| SWPA4012S470MT | 47±20%     | 1.430 | 1.10     | 12                         | 0.35            | 0.50 | 0.37 | 0.50                         |
| SWPA4012S560MT | 56±20%     | 1.625 | 1.250    | 11                         | 0.33            | 0.45 | 0.33 | 0.46                         |
| SWPA4012S680MT | 68±20%     | 2.535 | 1.950    | 11                         | 0.38            | 0.45 | 0.27 | 0.45                         |
| SWPA4012S820MT | 82±20%     | 2.782 | 2.140    | 11                         | 0.28            | 0.40 | 0.26 | 0.36                         |
| SWPA4012S101MT | 100±20%    | 2.873 | 2.210    | 9.4                        | 0.25            | 0.30 | 0.25 | 0.35                         |



## SWPA4018S Series

| Dort Number    | Inductance | DC Re | sistance | Self-resonant | Satura |                  |           | Rating |
|----------------|------------|-------|----------|---------------|--------|------------------|-----------|--------|
| Part Number    |            |       |          | Frequency     | Curre  | ent <sup>3</sup> | Current*4 |        |
|                | @100kHz,1V | Max.  | Тур.     | Min.          | Max.   | Тур.             | Max.      | Тур.   |
| Units          | μH         | 9     | Ω        | MHz           |        | A                |           | A      |
| Symbol         | L          | D     | CR       | S.R.F         | ls     | sat              | Ir        | ms     |
| SWPA4018SR47NT | 0.47±30%   | 0.018 | 0.014    | 155           | 4.30   | 5.20             | 4.00      | 4.50   |
| SWPA4018SR68NT | 0.68±30%   | 0.026 | 0.020    | 128           | 4.90   | 5.60             | 3.30      | 3.80   |
| SWPA4018S1R0NT | 1.0±30%    | 0.033 | 0.025    | 80            | 4.80   | 5.20             | 2.00      | 3.30   |
| SWPA4018S1R5NT | 1.5±30%    | 0.039 | 0.030    | 65            | 3.35   | 4.00             | 1.80      | 3.20   |
| SWPA4018S1R8NT | 1.8±30%    | 0.044 | 0.034    | 54            | 3.00   | 3.40             | 2.00      | 2.80   |
| SWPA4018S2R2MT | 2.2±20%    | 0.059 | 0.045    | 52            | 2.70   | 3.20             | 1.65      | 2.60   |
| SWPA4018S3R3MT | 3.3±20%    | 0.091 | 0.070    | 44            | 2.45   | 2.90             | 1.23      | 2.10   |
| SWPA4018S4R7MT | 4.7±20%    | 0.117 | 0.090    | 34            | 1.70   | 2.20             | 1.20      | 1.80   |
| SWPA4018S6R8MT | 6.8±20%    | 0.143 | 0.110    | 29            | 1.45   | 2.00             | 1.06      | 1.50   |
| SWPA4018S100MT | 10±20%     | 0.234 | 0.180    | 24            | 1.30   | 1.60             | 0.84      | 1.20   |
| SWPA4018S150MT | 15±20%     | 0.325 | 0.250    | 19            | 0.94   | 1.10             | 0.65      | 1.00   |
| SWPA4018S220MT | 22±20%     | 0.468 | 0.360    | 16            | 0.80   | 0.88             | 0.59      | 0.85   |
| SWPA4018S330MT | 33±20%     | 0.689 | 0.530    | 12            | 0.56   | 0.75             | 0.49      | 0.72   |
| SWPA4018S470MT | 47±20%     | 0.845 | 0.650    | 10            | 0.57   | 0.70             | 0.42      | 0.65   |
| SWPA4018S680MT | 68±20%     | 1.30  | 1.0      | 8.3           | 0.47   | 0.51             | 0.32      | 0.52   |
| SWPA4018S101MT | 100±20%    | 2.275 | 1.750    | 6.5           | 0.40   | 0.44             | 0.25      | 0.41   |
| SWPA4018S151MT | 150±20%    | 3.250 | 2.50     | 5.5           | 0.31   | 0.34             | 0.22      | 0.36   |
| SWPA4018S221MT | 220±20%    | 5.20  | 4.0      | 4             | 0.27   | 0.30             | 0.17      | 0.27   |

## SWPA4020S Series

| Part Number    | Inductance | DC Re | sistance | Self-resonant<br>Frequency | Satura<br>Curre |      |      | Rating<br>rent*4 |
|----------------|------------|-------|----------|----------------------------|-----------------|------|------|------------------|
|                | @100kHz,1V | Max.  | Тур.     | Min.                       | Max.            | Тур. | Max. | Тур.             |
| Units          | μH         | 9     | Ω        | MHz                        |                 | A    |      | A                |
| Symbol         | L          | D     | CR       | S.R.F                      | ls              | sat  | Ir   | ms               |
| SWPA4020SR24MT | 0.24±20%   | 0.014 | 0.011    | 283                        | 10.5            | 12.5 | 4.50 | 5.20             |
| SWPA4020SR33NT | 0.33±30%   | 0.016 | 0.013    | 223                        | 7.50            | 8.50 | 3.30 | 4.90             |
| SWPA4020SR47NT | 0.47±30%   | 0.029 | 0.022    | 160                        | 7.00            | 7.50 | 3.30 | 3.70             |
| SWPA4020SR68NT | 0.68±30%   | 0.036 | 0.028    | 120                        | 6.40            | 6.60 | 2.80 | 3.30             |
| SWPA4020S1R0NT | 1.0±30%    | 0.038 | 0.029    | 75                         | 4.78            | 5.20 | 2.15 | 3.20             |
| SWPA4020S1R2NT | 1.2±30%    | 0.038 | 0.029    | 72                         | 5.10            | 5.60 | 2.15 | 3.20             |
| SWPA4020S1R5NT | 1.5±30%    | 0.046 | 0.035    | 71                         | 4.45            | 4.90 | 1.98 | 3.00             |
| SWPA4020S2R2MT | 2.2±20%    | 0.052 | 0.040    | 49                         | 3.40            | 3.70 | 1.85 | 2.80             |
| SWPA4020S3R3MT | 3.3±20%    | 0.091 | 0.070    | 44                         | 3.20            | 3.50 | 1.40 | 2.50             |
| SWPA4020S3R6MT | 3.6±20%    | 0.072 | 0.055    | 49                         | 2.80            | 3.00 | 1.54 | 2.50             |
| SWPA4020S4R7MT | 4.7±20%    | 0.098 | 0.075    | 42                         | 2.35            | 2.50 | 1.34 | 2.00             |
| SWPA4020S5R1MT | 5.1±20%    | 0.111 | 0.085    | 42                         | 2.30            | 2.50 | 1.27 | 1.80             |
| SWPA4020S5R6MT | 5.6±20%    | 0.117 | 0.090    | 30                         | 2.20            | 2.40 | 1.22 | 1.80             |
| SWPA4020S6R2MT | 6.2±20%    | 0.150 | 0.115    | 36                         | 2.15            | 2.30 | 1.08 | 1.60             |
| SWPA4020S6R8MT | 6.8±20%    | 0.163 | 0.125    | 33                         | 2.20            | 2.40 | 1.04 | 1.60             |
| SWPA4020S7R5MT | 7.5±20%    | 0.150 | 0.115    | 30                         | 1.85            | 2.00 | 1.08 | 1.50             |
| SWPA4020S8R2MT | 8.2±20%    | 0.163 | 0.125    | 27                         | 1.75            | 1.90 | 1.04 | 1.40             |
| SWPA4020S100MT | 10±20%     | 0.215 | 0.165    | 26                         | 1.60            | 1.70 | 0.90 | 1.20             |
| SWPA4020S120MT | 12±20%     | 0.228 | 0.175    | 26                         | 1.50            | 1.60 | 0.88 | 1.20             |
| SWPA4020S150MT | 15±20%     | 0.299 | 0.230    | 24                         | 1.35            | 1.50 | 0.77 | 1.10             |
| SWPA4020S220MT | 22±20%     | 0.455 | 0.350    | 15                         | 1.05            | 1.10 | 0.62 | 0.87             |
| SWPA4020S270MT | 27±20%     | 0.709 | 0.545    | 14                         | 1.02            | 1.10 | 0.50 | 0.70             |



## SWPA4020S Series

| Part Number    | Inductance | DC Re | sistance | Self-resonant<br>Frequency | Satura<br>Curre |      |      | Rating<br>rent <sup>*4</sup> |
|----------------|------------|-------|----------|----------------------------|-----------------|------|------|------------------------------|
|                | @100kHz,1V | Max.  | Тур.     | Min.                       | Max.            | Тур. | Max. | Тур.                         |
| Units          | μH         | 9     | Ω        | MHz                        |                 | A    |      | A                            |
| Symbol         | L          | D     | CR       | S.R.F                      | ls              | sat  | Ir   | ms                           |
| SWPA4020S330MT | 33±20%     | 0.715 | 0.550    | 11                         | 0.85            | 0.93 | 0.49 | 0.68                         |
| SWPA4020S390MT | 39±20%     | 0.845 | 0.650    | 11                         | 0.82            | 0.90 | 0.46 | 0.64                         |
| SWPA4020S430MT | 43±20%     | 0.858 | 0.660    | 10                         | 0.77            | 0.85 | 0.45 | 0.63                         |
| SWPA4020S470MT | 47±20%     | 0.923 | 0.710    | 10                         | 0.74            | 0.81 | 0.44 | 0.61                         |
| SWPA4020S510MT | 51±20%     | 0.975 | 0.750    | 10                         | 0.70            | 0.77 | 0.42 | 0.59                         |
| SWPA4020S560MT | 56±20%     | 1.040 | 0.80     | 10                         | 0.66            | 0.72 | 0.41 | 0.57                         |
| SWPA4020S620MT | 62±20%     | 1.170 | 0.90     | 9.6                        | 0.65            | 0.71 | 0.39 | 0.52                         |
| SWPA4020S680MT | 68±20%     | 1.380 | 1.060    | 7.7                        | 0.61            | 0.67 | 0.36 | 0.50                         |
| SWPA4020S750MT | 75±20%     | 1.510 | 1.160    | 7.7                        | 0.70            | 0.77 | 0.35 | 0.49                         |
| SWPA4020S820MT | 82±20%     | 1.520 | 1.170    | 7.2                        | 0.50            | 0.55 | 0.34 | 0.47                         |
| SWPA4020S101MT | 100±20%    | 2.020 | 1.550    | 6.3                        | 0.48            | 0.53 | 0.31 | 0.43                         |

# SWPA4030S Series

|                | Industance | DC Day | oiotonos | Self-resonant | Satura | A         A           Isat         Irms           7.80         9.80         5.20         5           6.80         8.00         4.56         5           6.25         6.80         4.15         4           5.26         5.70         4.15         4           5.80         6.30         3.82         4           4.84         5.30         3.34         3           5.40         5.80         3.20         3           4.90         5.80         2.95         3           3.00         3.50         2.40         2           3.00         3.50         2.40         2           2.95         3.20         2.10         2           2.95         3.20         2.10         2           2.95         3.20         2.00         2           2.95         3.20         2.00         2           2.75         3.00         1.60         1           2.20         2.40         1.65         1           2.10         2.30         1.60         1           1.95         2.40         1.50         1           1.70         1.80 |      |        |
|----------------|------------|--------|----------|---------------|--------|---|------|--------|
| Part Number    | Inductance | DC Res | sistance | Frequency     | Curre  | ent <sup>*3</sup>   | Curi | rent*4 |
|                | @100kHz,1V | Max.   | Тур.     | Min.          | Max.   | Тур.  | Max. | Тур.   |
| Units          | μH         | 2      | Ω        | MHz           |        | A   |      | A      |
| Symbol         | L          | D      | CR       | S.R.F         | ls     | at  | Irı  | ms     |
| SWPA4030SR47NT | 0.47±30%   | 0.0104 | 0.008    | 184           | 7.80   | 9.80  | 5.20 | 5.90   |
| SWPA4030SR68NT | 0.68±30%   | 0.013  | 0.010    | 130           | 6.80   | 8.00  | 4.56 | 5.10   |
| SWPA4030SR91NT | 0.91±30%   | 0.017  | 0.013    | 100           | 6.25   | 6.80  | 4.15 | 4.70   |
| SWPA4030S1R0NT | 1.0±30%    | 0.018  | 0.014    | 70            | 5.26   | 5.70  | 4.15 | 4.70   |
| SWPA4030S1R2NT | 1.2±30%    | 0.020  | 0.015    | 80            | 5.80   | 6.30  | 3.82 | 4.20   |
| SWPA4030S1R5NT | 1.5±30%    | 0.026  | 0.020    | 62            | 4.84   | 5.30  | 3.34 | 3.60   |
| SWPA4030S1R8NT | 1.8±30%    | 0.033  | 0.025    | 60            | 5.40   | 5.80  | 3.20 | 3.30   |
| SWPA4030S2R2NT | 2.2±30%    | 0.039  | 0.030    | 52            | 4.90   | 5.80  | 2.95 | 3.20   |
| SWPA4030S3R3MT | 3.3±20%    | 0.052  | 0.040    | 38            | 3.30   | 3.60  | 2.40 | 2.60   |
| SWPA4030S3R6MT | 3.6±20%    | 0.052  | 0.040    | 37            | 3.00   | 3.50  | 2.40 | 2.60   |
| SWPA4030S3R9MT | 3.9±20%    | 0.074  | 0.057    | 32            | 3.00   | 3.30  | 2.10 | 2.30   |
| SWPA4030S4R3MT | 4.3±20%    | 0.072  | 0.055    | 37            | 2.95   | 3.20  | 2.10 | 2.30   |
| SWPA4030S4R7MT | 4.7±20%    | 0.078  | 0.060    | 31            | 2.90   | 3.20  | 2.00 | 2.30   |
| SWPA4030S5R6MT | 5.6±20%    | 0.085  | 0.065    | 30            | 2.60   | 2.80  | 1.95 | 2.10   |
| SWPA4030S6R8MT | 6.8±20%    | 0.117  | 0.090    | 24            | 2.75   | 3.00  | 1.60 | 1.70   |
| SWPA4030S7R5MT | 7.5±20%    | 0.110  | 0.085    | 26            | 2.20   | 2.40  | 1.65 | 1.80   |
| SWPA4030S8R2MT | 8.2±20%    | 0.117  | 0.090    | 26            | 2.10   | 2.30  | 1.60 | 1.70   |
| SWPA4030S100MT | 10±20%     | 0.130  | 0.10     | 21            | 1.95   | 2.40  | 1.50 | 1.60   |
| SWPA4030S120MT | 12±20%     | 0.175  | 0.135    | 18            | 1.70   | 1.80  | 1.30 | 1.40   |
| SWPA4030S150MT | 15±20%     | 0.247  | 0.190    | 16            | 1.65   | 1.80  | 1.11 | 1.20   |
| SWPA4030S180MT | 18±20%     | 0.260  | 0.20     | 10            | 1.40   | 1.50  | 1.10 | 1.20   |
| SWPA4030S220MT | 22±20%     | 0.293  | 0.225    | 10            | 1.30   | 1.40  | 1.00 | 1.20   |
| SWPA4030S330MT | 33±20%     | 0.429  | 0.330    | 10            | 1.10   | 1.20  | 0.84 | 0.92   |
| SWPA4030S360MT | 36±20%     | 0.436  | 0.335    | 9.8           | 1.05   | 1.10  | 0.83 | 0.91   |
| SWPA4030S390MT | 39±20%     | 0.566  | 0.435    | 10            | 1.03   | 1.10  | 0.73 | 0.80   |
| SWPA4030S470MT | 47±20%     | 0.579  | 0.445    | 8.4           | 0.95   | 1.00  | 0.72 | 0.80   |
| SWPA4030S510MT | 51±20%     | 0.611  | 0.470    | 8.4           | 0.90   | 1.13  | 0.70 | 0.80   |
| SWPA4030S560MT | 56±20%     | 0.722  | 0.555    | 8.4           | 0.85   | 0.94  | 0.65 | 0.71   |
| SWPA4030S620MT | 62±20%     | 0.760  | 0.585    | 7             | 0.80   | 0.99  | 0.63 | 0.70   |
| SWPA4030S680MT | 68±20%     | 1.128  | 0.868    | 7             | 0.72   | 0.80  | 0.52 | 0.57   |



### SWPA4030S Series

| Part Number    | Inductance | DC Re | sistance | Self-resonant<br>Frequency | Satura<br>Curre |      |      | Rating<br>rent*4 |
|----------------|------------|-------|----------|----------------------------|-----------------|------|------|------------------|
|                | @100kHz,1V | Max.  | Тур.     | Min.                       | Max.            | Тур. | Max. | Тур.             |
| Units          | μH         | 9     | Ω        | MHz                        |                 | A    |      | A                |
| Symbol         | L          | D     | CR       | S.R.F                      | Is              | sat  | Iri  | ms               |
| SWPA4030S750MT | 75±20%     | 1.326 | 1.020    | 6.3                        | 0.70            | 0.88 | 0.48 | 0.53             |
| SWPA4030S820MT | 82±20%     | 1.378 | 1.060    | 5.6                        | 0.66            | 0.72 | 0.47 | 0.52             |
| SWPA4030S910MT | 91±20%     | 1.430 | 1.10     | 5.6                        | 0.65            | 0.71 | 0.46 | 0.50             |
| SWPA4030S101MT | 100±20%    | 1.495 | 1.150    | 5.6                        | 0.60            | 0.73 | 0.45 | 0.49             |
| SWPA4030S121MT | 120±20%    | 1.755 | 1.350    | 5.4                        | 0.55            | 0.60 | 0.42 | 0.46             |
| SWPA4030S151MT | 150±20%    | 2.340 | 1.80     | 4                          | 0.50            | 0.55 | 0.30 | 0.35             |
| SWPA4030S471KT | 470±10%    | 9.360 | 7.20     | 2                          | 0.30            | 0.35 | 0.20 | 0.23             |
| SWPA4030S501MT | 500±20%    | 9.027 | 6.944    | 2                          | 0.28            | 0.30 | 0.15 | 0.20             |
| SWPA4030S681MT | 680±20%    | 9.854 | 7.580    | 1.2                        | 0.19            | 0.20 | 0.14 | 0.18             |

### SWPA5012S Series

| Part Number    | Inductance | DC Resistance |       | DC Resistance |      |      | Rating<br>rent*4 |      |
|----------------|------------|---------------|-------|---------------|------|------|------------------|------|
|                | @100kHz,1V | Max.          | Тур.  | Min.          | Max. | Тур. | Max.             | Тур. |
| Units          | μH         | 9             | Ω     | MHz           |      | A    |                  | A    |
| Symbol         | L          | D             | CR    | S.R.F         | ls   | sat  | Iri              | ms   |
| 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 |
| SWPA5012S220MT | 22±20%     | 0.858         | 0.780 | 16            | 0.88 | 0.98 | 0.60             | 0.68 |

### SWPA5020S Series

| Part Number    | Inductance | DC Re | sistance | Self-resonant<br>Frequency | Satura<br>Curre |       | Heat Rating<br>Current*4 |      |
|----------------|------------|-------|----------|----------------------------|-----------------|-------|--------------------------|------|
|                | @100kHz,1V | Max.  | Тур.     | Min.                       | Max.            | Тур.  | Max.                     | Тур. |
| Units          | μH         |       | Ω        | MHz                        |                 | A     |                          | A    |
| Symbol         | L          | D     | CR       | S.R.F                      | Is              | sat   | In                       | ms   |
| SWPA5020SR22NT | 0.22±30%   | 0.011 | 0.009    | 280                        | 9.00            | 12.00 | 5.30                     | 6.00 |
| SWPA5020SR24NT | 0.24±30%   | 0.011 | 0.009    | 248                        | 8.00            | 10.00 | 5.30                     | 6.00 |
| SWPA5020SR47NT | 0.47±30%   | 0.017 | 0.013    | 160                        | 6.15            | 6.70  | 4.60                     | 5.00 |
| SWPA5020SR56NT | 0.56±30%   | 0.022 | 0.017    | 137                        | 8.50            | 9.60  | 3.80                     | 4.20 |
| SWPA5020SR68NT | 0.68±30%   | 0.022 | 0.017    | 120                        | 5.50            | 6.00  | 4.00                     | 4.40 |
| SWPA5020SR75NT | 0.75±30%   | 0.022 | 0.017    | 117                        | 5.50            | 6.00  | 4.00                     | 4.40 |
| SWPA5020S1R0NT | 1.0±30%    | 0.026 | 0.020    | 114                        | 4.10            | 5.00  | 3.80                     | 4.10 |
| SWPA5020S1R2NT | 1.2±30%    | 0.029 | 0.022    | 83                         | 4.50            | 4.90  | 3.55                     | 3.90 |
| SWPA5020S1R5NT | 1.5±30%    | 0.034 | 0.026    | 68                         | 4.10            | 4.50  | 3.20                     | 3.50 |
| SWPA5020S2R2NT | 2.2±30%    | 0.042 | 0.032    | 57                         | 3.20            | 4.00  | 2.90                     | 3.10 |
| SWPA5020S2R7NT | 2.7±30%    | 0.049 | 0.038    | 52                         | 2.90            | 3.50  | 2.70                     | 2.90 |
| SWPA5020S3R0NT | 3.0±30%    | 0.049 | 0.038    | 49                         | 2.55            | 2.80  | 2.70                     | 2.90 |
| SWPA5020S3R3NT | 3.3±30%    | 0.056 | 0.043    | 46                         | 2.55            | 3.00  | 2.50                     | 2.70 |
| SWPA5020S3R6NT | 3.6±30%    | 0.056 | 0.043    | 43                         | 2.80            | 3.00  | 2.50                     | 2.70 |

### SWPA5020S Series

| Part Number    | Inductance | DC Re | sistance | Self-resonant<br>Frequency | Satura<br>Curre |      | Heat Rating<br>Current*4 |      |
|----------------|------------|-------|----------|----------------------------|-----------------|------|--------------------------|------|
|                | @100kHz,1V | Max.  | Тур.     | Min.                       | Max.            | Тур. | Max.                     | Тур. |
| Units          | μH         |       | Ω        | MHz                        |                 | A    |                          | A    |
| Symbol         | L          | D     | CR       | S.R.F                      | ls              | sat  | Iri                      | ms   |
| SWPA5020S3R9NT | 3.9±30%    | 0.056 | 0.043    | 40                         | 2.30            | 2.80 | 2.50                     | 2.70 |
| SWPA5020S4R3MT | 4.3±20%    | 0.074 | 0.057    | 37                         | 2.50            | 3.00 | 2.20                     | 2.40 |
| SWPA5020S4R7MT | 4.7±20%    | 0.074 | 0.057    | 37                         | 2.50            | 2.70 | 2.20                     | 2.40 |
| SWPA5020S5R1MT | 5.1±20%    | 0.083 | 0.064    | 32                         | 2.25            | 2.60 | 2.05                     | 2.20 |
| SWPA5020S5R6MT | 5.6±20%    | 0.083 | 0.064    | 32                         | 2.30            | 2.50 | 2.05                     | 2.20 |
| SWPA5020S6R8MT | 6.8±20%    | 0.108 | 0.083    | 30                         | 2.05            | 2.20 | 1.80                     | 1.90 |
| SWPA5020S7R5MT | 7.5±20%    | 0.117 | 0.090    | 26                         | 1.85            | 2.00 | 1.75                     | 1.90 |
| SWPA5020S8R2MT | 8.2±20%    | 0.127 | 0.098    | 26                         | 1.85            | 2.00 | 1.65                     | 1.80 |
| SWPA5020S9R1MT | 9.1±20%    | 0.143 | 0.110    | 24                         | 1.70            | 1.80 | 1.55                     | 1.70 |
| SWPA5020S100MT | 10±20%     | 0.143 | 0.110    | 24                         | 1.70            | 1.80 | 1.55                     | 1.70 |
| SWPA5020S120MT | 12±20%     | 0.182 | 0.140    | 22                         | 1.50            | 1.60 | 1.40                     | 1.50 |
| SWPA5020S150MT | 15±20%     | 0.215 | 0.165    | 20                         | 1.35            | 1.40 | 1.25                     | 1.30 |
| SWPA5020S180MT | 18±20%     | 0.260 | 0.200    | 16                         | 1.25            | 1.30 | 1.15                     | 1.20 |
| SWPA5020S220MT | 22±20%     | 0.294 | 0.226    | 14                         | 1.15            | 1.20 | 1.10                     | 1.20 |
| SWPA5020S330MT | 33±20%     | 0.507 | 0.390    | 10                         | 0.92            | 1.00 | 0.90                     | 0.99 |
| SWPA5020S470MT | 47±20%     | 0.680 | 0.523    | 7                          | 0.77            | 0.84 | 0.77                     | 0.84 |
| SWPA5020S560MT | 56±20%     | 0.819 | 0.630    | 6                          | 0.77            | 0.84 | 0.70                     | 0.77 |
| SWPA5020S680MT | 68±20%     | 0.962 | 0.740    | 6                          | 0.65            | 0.70 | 0.64                     | 0.70 |
| SWPA5020S820MT | 82±20%     | 1.158 | 0.965    | 6                          | 0.65            | 0.75 | 0.50                     | 0.60 |
| SWPA5020S101MT | 100±20%    | 1.430 | 1.100    | 6                          | 0.53            | 0.58 | 0.53                     | 0.58 |
| SWPA5020S121MT | 120±20%    | 1.755 | 1.350    | 6                          | 0.42            | 0.53 | 0.40                     | 0.50 |
| SWPA5020S201MT | 200±20%    | 2.60  | 2.00     | 4.5                        | 0.30            | 0.33 | 0.40                     | 0.45 |

### SWPA5040S Series

| Part Number    | Inductance | DC Res | sistance | Self-resonant<br>Frequency | Satura<br>Curre |       |      | Rating<br>rent*4 |
|----------------|------------|--------|----------|----------------------------|-----------------|-------|------|------------------|
|                | @100kHz,1V | Max.   | Тур.     | Min.                       | Max.            | Тур.  | Max. | Тур.             |
| Units          | μH         | 2      | Ω        | MHz                        |                 | A     |      | Ą                |
| Symbol         | L          | D      | CR       | S.R.F                      | ls              | at    | In   | ms               |
| SWPA5040SR22MT | 0.22 ±20%  | 0.008  | 0.006    | 289                        | 18.00           | 20.00 | 6.50 | 7.50             |
| SWPA5040SR24NT | 0.24 ±30%  | 0.008  | 0.006    | 251                        | 15.70           | 18.00 | 6.40 | 7.40             |
| SWPA5040SR47MT | 0.47 ±20%  | 0.009  | 0.007    | 171                        | 10.00           | 11.50 | 6.60 | 7.60             |
| SWPA5040S1R0NT | 1.0±30%    | 0.016  | 0.012    | 117                        | 7.35            | 8.20  | 4.90 | 5.10             |
| SWPA5040S1R2NT | 1.2±30%    | 0.021  | 0.016    | 110                        | 6.50            | 7.00  | 4.15 | 4.30             |
| SWPA5040S1R5NT | 1.5±30%    | 0.020  | 0.015    | 86                         | 6.30            | 7.30  | 4.30 | 4.80             |
| SWPA5040S1R8MT | 1.8±20%    | 0.021  | 0.016    | 55                         | 5.50            | 6.40  | 4.15 | 4.30             |
| SWPA5040S2R2NT | 2.2±30%    | 0.025  | 0.019    | 50                         | 4.90            | 5.50  | 3.80 | 4.30             |
| SWPA5040S2R7NT | 2.7±30%    | 0.029  | 0.022    | 37                         | 4.30            | 5.10  | 3.60 | 4.10             |
| SWPA5040S3R0NT | 3.0±30%    | 0.029  | 0.022    | 37                         | 4.15            | 4.80  | 3.60 | 4.20             |
| SWPA5040S3R3NT | 3.3±30%    | 0.031  | 0.024    | 32                         | 3.95            | 4.60  | 3.40 | 3.90             |
| SWPA5040S3R6MT | 3.6±20%    | 0.031  | 0.026    | 30                         | 3.80            | 4.40  | 3.30 | 3.70             |
| SWPA5040S3R9NT | 3.9±30%    | 0.035  | 0.027    | 29                         | 3.55            | 4.20  | 3.20 | 3.70             |
| SWPA5040S3R9NT | 3.9±30%    | 0.035  | 0.027    | 29                         | 3.55            | 4.20  | 3.20 | 3.70             |
| SWPA5040S4R7NT | 4.7±30%    | 0.039  | 0.030    | 28                         | 3.50            | 3.90  | 3.00 | 3.30             |
| SWPA5040S5R6MT | 5.6±20%    | 0.046  | 0.035    | 27                         | 3.00            | 3.70  | 2.80 | 3.10             |
| SWPA5040S6R8MT | 6.8±20%    | 0.056  | 0.043    | 21                         | 2.90            | 3.50  | 2.50 | 2.80             |
| SWPA5040S8R2MT | 8.2±20%    | 0.062  | 0.048    | 20                         | 2.70            | 3.00  | 2.30 | 2.60             |
| SWPA5040S100MT | 10±20%     | 0.083  | 0.064    | 18                         | 2.35            | 2.90  | 2.10 | 2.40             |



## SWPA5040S Series

|                | Inductance | DC Res | sistance | Self-resonant | Satura | ation | Heat | Rating |
|----------------|------------|--------|----------|---------------|--------|-------|------|--------|
| Part Number    | madetance  | DO Ne. | sistance | Frequency     | Curre  | ent*3 | Curi | rent*4 |
|                | @100kHz,1V | Max.   | Тур.     | Min.          | Max.   | Тур.  | Max. | Тур.   |
| Units          | μΗ         | 2      | Ω        | MHz           | ı      | A     |      | A      |
| Symbol         | L          | DO     | CR       | S.R.F         | ls     | sat   | Iri  | ms     |
| SWPA5040S120MT | 12±20%     | 0.100  | 0.077    | 14            | 2.20   | 2.50  | 2.00 | 2.10   |
| SWPA5040S150MT | 15±20%     | 0.112  | 0.086    | 13            | 2.00   | 2.30  | 2.00 | 2.10   |
| SWPA5040S180MT | 18±20%     | 0.155  | 0.119    | 12            | 1.70   | 2.00  | 1.45 | 1.65   |
| SWPA5040S220MT | 22±20%     | 0.168  | 0.129    | 11            | 1.60   | 1.90  | 1.50 | 1.60   |
| SWPA5040S270MT | 27±20%     | 0.244  | 0.188    | 9.8           | 1.52   | 1.75  | 1.10 | 1.25   |
| SWPA5040S330MT | 33±20%     | 0.244  | 0.188    | 9             | 1.30   | 1.50  | 1.20 | 1.40   |
| SWPA5040S470MT | 47±20%     | 0.354  | 0.272    | 7             | 1.10   | 1.30  | 1.00 | 1.10   |
| SWPA5040S510MT | 51±20%     | 0.494  | 0.380    | 6             | 1.00   | 1.20  | 1.00 | 1.10   |
| SWPA5040S560MT | 56±20%     | 0.494  | 0.380    | 6             | 1.05   | 1.20  | 0.80 | 0.90   |
| SWPA5040S680MT | 68±20%     | 0.520  | 0.40     | 6             | 0.90   | 1.10  | 0.80 | 0.90   |
| SWPA5040S750MT | 75±20%     | 0.585  | 0.450    | 6             | 0.85   | 0.95  | 0.72 | 0.80   |
| SWPA5040S101MT | 100±20%    | 0.728  | 0.560    | 5             | 0.75   | 0.85  | 0.70 | 0.80   |
| SWPA5040S151MT | 150±20%    | 0.975  | 0.750    | 3.7           | 0.65   | 0.67  | 0.60 | 0.70   |
| SWPA5040S221MT | 220±20%    | 1.820  | 1.400    | 3.0           | 0.48   | 0.55  | 0.40 | 0.50   |
| SWPA5040S301MT | 300±20%    | 2.600  | 2.000    | 2.7           | 0.50   | 0.58  | 0.35 | 0.40   |
| SWPA5040S331MT | 330±20%    | 2.730  | 2.100    | 2.7           | 0.42   | 0.47  | 0.40 | 0.50   |
| SWPA5040S471MT | 470±20%    | 3.900  | 3.000    | 2.7           | 0.37   | 0.43  | 0.35 | 0.40   |
| SWPA5040S561MT | 560±20%    | 4.914  | 3.780    | 1.52          | 0.31   | 0.36  | 0.31 | 0.35   |
| SWPA5040S681MT | 680±20%    | 5.070  | 3.900    | 1.60          | 0.30   | 0.35  | 0.25 | 0.30   |

### SWPA5045S Series

| Dord Normhon   | Inductance | DC Re | Self-resonant Saturation Heat R |           |      |                  | ·    |        |
|----------------|------------|-------|---------------------------------|-----------|------|------------------|------|--------|
| Part Number    |            |       |                                 | Frequency | Curr | ent <sup>3</sup> | Cur  | rent*4 |
|                | @100kHz,1V | Max.  | Тур.                            | Min.      | T    | yp.              | Ty   | yp.    |
| Units          | μΗ         | 9     | Ω                               | MHz       |      | A                | Α    |        |
| Symbol         | L          | D     | CR                              | S.R.F     | Isat |                  | Irms |        |
| SWPA5045S1R5NT | 1.5±30%    | 0.022 | 0.017                           | 78        | 7.40 | 8.50             | 5.20 | 5.90   |
| SWPA5045S2R2NT | 2.2±20%    | 0.029 | 0.022                           | 50        | 6.40 | 7.20             | 4.70 | 5.40   |
| SWPA5045S3R3MT | 3.3±20%    | 0.035 | 0.027                           | 36        | 6.40 | 7.20             | 4.20 | 4.85   |
| SWPA5045S100MT | 10±20%     | 0.079 | 0.061                           | 17        | 3.20 | 3.70             | 2.50 | 2.90   |
| SWPA5045S220MT | 22±20%     | 0.163 | 0.125                           | 10        | 2.00 | 2.35             | 1.55 | 1.80   |

### SWPA6012S Series

| i              |            |               |               |            |             |
|----------------|------------|---------------|---------------|------------|-------------|
|                | Inductance | DC Resistance | Self-resonant | Saturation | Heat Rating |
| Part Number    | madotanoo  | DO Rediciano  | Frequency     | Current*3  | Current*4   |
|                | @100kHz,1V | Тур.          | Min.          | Тур.       | Тур.        |
| Units          | μH         | Ω             | MHz           | А          | Α           |
| Symbol         | L          | DCR           | S.R.F         | Isat       | Irms        |
| SWPA6012S1R0NT | 1.00±30%   | 0.055         | 80            | 3.52       | 2.30        |
| SWPA6012S1R5NT | 1.50±30%   | 0.075         | 65            | 2.73       | 2.00        |
| SWPA6012S2R5NT | 2.5±30%    | 0.090         | 45            | 2.10       | 1.80        |
| SWPA6012S3R3NT | 3.3±30%    | 0.105         | 42            | 1.80       | 1.70        |
| SWPA6012S4R7NT | 4.7±30%    | 0.125         | 36            | 1.60       | 1.55        |
| SWPA6012S5R3NT | 5.3±30%    | 0.125         | 34            | 1.50       | 1.55        |
| SWPA6012S6R8NT | 6.8±30%    | 0.165         | 30            | 1.30       | 1.35        |
| SWPA6012S100MT | 10±20%     | 0.200         | 22            | 1.00       | 1.20        |
| SWPA6012S150MT | 15±20%     | 0.295         | 18            | 1.80       | 0.80        |

### SWPA6012S Series

| Part Number    | Inductance | DC Resistance | Self-resonant<br>Frequency | Saturation<br>Current*3 | Heat Rating<br>Current*4 |
|----------------|------------|---------------|----------------------------|-------------------------|--------------------------|
|                | @100kHz,1V | Тур.          | Min.                       | Тур.                    | Тур.                     |
| Units          | μH         | Ω             | MHz                        | А                       | Α                        |
| Symbol         | L          | DCR           | S.R.F                      | Isat                    | Irms                     |
| SWPA6012S220MT | 22±20%     | 0.465         | 12                         | 0.76                    | 0.65                     |
| SWPA6012S330MT | 33±20%     | 0.580         | 8                          | 0.59                    | 0.55                     |
| SWPA6012S470MT | 47±20%     | 0.810         | 6                          | 0.52                    | 0.46                     |
| SWPA6012S680MT | 68±20%     | 1.160         | 3                          | 0.44                    | 0.41                     |
| SWPA6012S101MT | 100±20%    | 1.670         | 1                          | 0.35                    | 0.32                     |

### SWPA6020S Series

| Part Number    | Inductance | DC Re | sistance | Self-resonant<br>Frequency | Satura<br>Curre |      |      | Rating<br>rent*4 |
|----------------|------------|-------|----------|----------------------------|-----------------|------|------|------------------|
|                | @100kHz,1V | Max.  | Тур.     | Min.                       | Max.            | Тур. | Max. | Тур.             |
| Units          | μH         |       | Ω        | MHz                        |                 | A    |      | A                |
| Symbol         | L          | D     | CR       | S.R.F                      | Is              | sat  | Iri  | ms               |
| SWPA6020SR50NT | 0.50±30%   | 0.018 | 0.014    | 120                        | 4.50            | 6.00 | 4.00 | 5.00             |
| SWPA6020SR68NT | 0.68±30%   | 0.022 | 0.017    | 115                        | 6.55            | 7.80 | 3.80 | 4.80             |
| SWPA6020SR82NT | 0.82±30%   | 0.022 | 0.017    | 110                        | 5.30            | 6.30 | 3.80 | 4.80             |
| SWPA6020S1R0NT | 1.0±30%    | 0.026 | 0.020    | 100                        | 4.15            | 5.00 | 3.50 | 4.40             |
| SWPA6020S1R2NT | 1.2±30%    | 0.029 | 0.022    | 88                         | 5.90            | 7.00 | 3.20 | 4.00             |
| SWPA6020S1R5NT | 1.5±30%    | 0.029 | 0.022    | 79                         | 4.25            | 5.10 | 3.20 | 4.00             |
| SWPA6020S1R8NT | 1.8±30%    | 0.036 | 0.028    | 68                         | 4.85            | 5.80 | 2.75 | 3.50             |
| SWPA6020S2R0NT | 2.0±30%    | 0.046 | 0.035    | 65                         | 4.10            | 4.90 | 2.60 | 3.30             |
| SWPA6020S2R2NT | 2.2±30%    | 0.036 | 0.028    | 61                         | 3.75            | 4.50 | 2.75 | 3.50             |
| SWPA6020S2R7NT | 2.7±30%    | 0.046 | 0.035    | 56                         | 3.90            | 4.60 | 2.60 | 3.30             |
| SWPA6020S3R3NT | 3.3±30%    | 0.046 | 0.035    | 51                         | 3.15            | 3.70 | 2.60 | 3.30             |
| SWPA6020S3R9NT | 3.9±30%    | 0.064 | 0.049    | 45                         | 3.25            | 3.90 | 2.10 | 2.60             |
| SWPA6020S4R3NT | 4.3±30%    | 0.064 | 0.049    | 44                         | 2.70            | 3.20 | 2.10 | 2.60             |
| SWPA6020S4R7NT | 4.7±30%    | 0.075 | 0.058    | 41                         | 3.00            | 3.60 | 2.00 | 2.50             |
| SWPA6020S5R6NT | 5.6±30%    | 0.075 | 0.058    | 36                         | 2.40            | 2.90 | 1.90 | 2.40             |
| SWPA6020S6R2NT | 6.2±30%    | 0.103 | 0.079    | 31                         | 2.30            | 2.70 | 1.80 | 2.30             |
| SWPA6020S6R8NT | 6.8±30%    | 0.103 | 0.079    | 31                         | 2.20            | 2.60 | 1.80 | 2.30             |
| SWPA6020S8R2NT | 8.2±30%    | 0.137 | 0.105    | 27                         | 2.10            | 2.50 | 1.40 | 1.80             |
| SWPA6020S100MT | 10±20%     | 0.137 | 0.105    | 27                         | 1.75            | 2.10 | 1.40 | 1.80             |
| SWPA6020S120MT | 12±20%     | 0.156 | 0.120    | 25                         | 1.45            | 1.70 | 1.30 | 1.60             |
| SWPA6020S150MT | 15±20%     | 0.189 | 0.145    | 21                         | 1.20            | 1.40 | 1.20 | 1.50             |
| SWPA6020S180MT | 18±20%     | 0.234 | 0.180    | 18                         | 1.20            | 1.40 | 1.08 | 1.40             |
| SWPA6020S220MT | 22±20%     | 0.265 | 0.204    | 16                         | 1.05            | 1.20 | 1.00 | 1.30             |
| SWPA6020S330MT | 33±20%     | 0.390 | 0.30     | 11                         | 0.95            | 1.10 | 0.84 | 1.05             |
| SWPA6020S470MT | 47±20%     | 0.559 | 0.430    | 10                         | 0.70            | 0.90 | 0.80 | 0.90             |

### SWPA6028S Series

|                | Inductance | DC Bo         | oiotopoo | Self-resonant | Satura    | ation | Heat | Rating |
|----------------|------------|---------------|----------|---------------|-----------|-------|------|--------|
| Part Number    | inductance | DC Resistance |          | Frequency     | Current*3 |       | Cur  | rent*4 |
|                | @100kHz,1V | Max.          | Тур.     | Min.          | Max.      | Тур.  | Max. | Тур.   |
| Units          | μH         | 9             | Ω        | MHz           | Α         |       | Α    |        |
| Symbol         | L          | D             | CR       | S.R.F         | ls        | at    | Ir   | ms     |
| SWPA6028SR82NT | 0.82±30%   | 0.016         | 0.012    | 97            | 6.50      | 9.00  | 5.20 | 6.00   |
| SWPA6028S1R0NT | 1.0±30%    | 0.013         | 0.010    | 70            | 5.75      | 7.00  | 5.20 | 5.70   |
| SWPA6028S1R2NT | 1.2±30%    | 0.017         | 0.013    | 69            | 6.40      | 7.50  | 4.58 | 5.00   |

## SWPA6028S Series

| Part Number    | Inductance | DC Re | sistance | Self-resonant<br>Frequency | Satura<br>Curre |      |      | Rating rent*4 |
|----------------|------------|-------|----------|----------------------------|-----------------|------|------|---------------|
|                | @100kHz,1V | Max.  | Тур.     | Min.                       | Max.            | Тур. | Max. | Тур.          |
| Units          | μH         | 9     | Ω        | MHz                        |                 | A    |      | A             |
| Symbol         | L          | D(    | CR       | S.R.F                      | ls              | at   | Iri  | ms            |
| SWPA6028S1R5NT | 1.5±30%    | 0.017 | 0.013    | 65                         | 6.00            | 6.60 | 4.58 | 5.00          |
| SWPA6028S2R2NT | 2.2±30%    | 0.026 | 0.020    | 48                         | 5.10            | 5.60 | 3.75 | 4.10          |
| SWPA6028S2R7NT | 2.7±30%    | 0.026 | 0.020    | 48                         | 3.80            | 4.10 | 3.75 | 4.10          |
| SWPA6028S3R3NT | 3.3±30%    | 0.033 | 0.025    | 41                         | 4.15            | 4.50 | 3.48 | 3.80          |
| SWPA6028S4R7NT | 4.7±30%    | 0.039 | 0.030    | 35                         | 3.00            | 3.30 | 3.08 | 3.40          |
| SWPA6028S5R1NT | 5.1±30%    | 0.056 | 0.043    | 32                         | 3.20            | 3.50 | 2.60 | 2.80          |
| SWPA6028S6R2MT | 6.2±20%    | 0.061 | 0.047    | 30                         | 3.05            | 3.30 | 2.40 | 2.60          |
| SWPA6028S6R8MT | 6.8±20%    | 0.061 | 0.047    | 27                         | 2.60            | 3.00 | 2.40 | 2.60          |
| SWPA6028S8R2MT | 8.2±20%    | 0.072 | 0.055    | 24                         | 2.30            | 2.50 | 2.25 | 2.50          |
| SWPA6028S9R1MT | 9.1±20%    | 0.096 | 0.074    | 24                         | 2.55            | 2.80 | 2.15 | 2.40          |
| SWPA6028S100MT | 10±20%     | 0.094 | 0.072    | 23                         | 2.04            | 2.50 | 1.95 | 2.40          |
| SWPA6028S120MT | 12±20%     | 0.104 | 0.080    | 18                         | 1.80            | 2.00 | 1.85 | 2.00          |
| SWPA6028S150MT | 15±20%     | 0.163 | 0.125    | 18                         | 1.75            | 1.90 | 1.45 | 1.60          |
| SWPA6028S180MT | 18±20%     | 0.156 | 0.120    | 15                         | 1.52            | 1.80 | 1.45 | 1.60          |
| SWPA6028S220MT | 22±20%     | 0.182 | 0.140    | 14                         | 1.45            | 1.80 | 1.40 | 1.60          |
| SWPA6028S270MT | 27±20%     | 0.202 | 0.155    | 13                         | 1.50            | 1.60 | 1.32 | 1.40          |
| SWPA6028S330MT | 33±20%     | 0.241 | 0.185    | 12                         | 1.35            | 1.50 | 1.22 | 1.30          |
| SWPA6028S360MT | 36±20%     | 0.280 | 0.215    | 11                         | 1.25            | 1.40 | 1.13 | 1.20          |
| SWPA6028S390MT | 39±20%     | 0.293 | 0.225    | 11                         | 1.25            | 1.40 | 1.10 | 1.20          |
| SWPA6028S470MT | 47±20%     | 0.410 | 0.315    | 9.5                        | 1.15            | 1.30 | 1.06 | 1.10          |
| SWPA6028S560MT | 56±20%     | 0.449 | 0.345    | 8.2                        | 1.05            | 1.20 | 0.89 | 1.00          |
| SWPA6028S680MT | 68±20%     | 0.468 | 0.360    | 7.7                        | 0.80            | 0.95 | 0.86 | 0.95          |
| SWPA6028S750MT | 75±20%     | 0.533 | 0.410    | 7.7                        | 0.90            | 0.99 | 0.81 | 0.90          |
| SWPA6028S820MT | 82±20%     | 0.650 | 0.50     | 7.7                        | 0.80            | 0.88 | 0.70 | 0.77          |
| SWPA6028S101MT | 100±20%    | 0.650 | 0.50     | 7.1                        | 0.65            | 0.71 | 0.70 | 0.77          |
| SWPA6028S401MT | 400±20%    | 2.808 | 2.160    | 2.8                        | 0.30            | 0.33 | 0.40 | 0.45          |

## SWPA6045S Series

| Part Number    | Inductance | DC Re | sistance | Self-resonant<br>Frequency | Saturation Current*3 |       | Heat Rating<br>Current*4 |      |
|----------------|------------|-------|----------|----------------------------|----------------------|-------|--------------------------|------|
|                | @100kHz,1V | Max.  | Тур.     | Min.                       | Max.                 | Тур.  | Max.                     | Тур. |
| Units          | μH         |       | Ω        | MHz                        |                      | A     |                          | Α    |
| Symbol         | L          | D     | CR       | S.R.F                      | ls                   | sat   | lr                       | ms   |
| SWPA6045SR47NT | 0.47±30%   | 0.008 | 0.006    | 155                        | 15.00                | 16.50 | 6.50                     | 6.60 |
| SWPA6045SR56NT | 0.56±30%   | 0.008 | 0.006    | 142                        | 14.00                | 15.00 | 6.50                     | 7.50 |
| SWPA6045SR68NT | 0.68±30%   | 0.008 | 0.006    | 99                         | 11.00                | 12.00 | 5.70                     | 6.50 |
| SWPA6045SR82NT | 0.82±30%   | 0.010 | 0.008    | 140                        | 10.35                | 11.00 | 5.90                     | 6.50 |
| SWPA6045S1R0NT | 1.0±30%    | 0.014 | 0.011    | 100                        | 9.85                 | 10.00 | 5.14                     | 5.60 |
| SWPA6045S1R2NT | 1.2±30%    | 0.013 | 0.010    | 100                        | 8.35                 | 9.10  | 5.40                     | 5.90 |
| SWPA6045S1R3NT | 1.3±30%    | 0.013 | 0.010    | 100                        | 8.35                 | 9.10  | 5.40                     | 5.90 |
| SWPA6045S1R5NT | 1.5±30%    | 0.016 | 0.012    | 65                         | 8.80                 | 9.70  | 4.95                     | 5.40 |
| SWPA6045S1R8NT | 1.8±30%    | 0.016 | 0.012    | 74                         | 7.60                 | 8.40  | 4.95                     | 5.40 |
| SWPA6045S2R2NT | 2.2±30%    | 0.018 | 0.014    | 52                         | 6.75                 | 7.40  | 4.60                     | 5.00 |
| SWPA6045S2R3NT | 2.3±30%    | 0.027 | 0.021    | 60                         | 6.00                 | 6.60  | 3.50                     | 3.80 |
| SWPA6045S2R7NT | 2.7±30%    | 0.020 | 0.015    | 38                         | 5.75                 | 6.30  | 4.30                     | 4.70 |
| SWPA6045S3R0NT | 3.0±30%    | 0.026 | 0.020    | 35                         | 5.60                 | 6.20  | 3.80                     | 4.20 |
| SWPA6045S3R3NT | 3.3±30%    | 0.027 | 0.021    | 32                         | 5.90                 | 6.20  | 3.70                     | 4.00 |



# SWPA6045S Series

| Part Number    | Inductance |       | sistance | Self-resonant<br>Frequency | Satura<br>Curre | ent <sup>*3</sup> | Heat Rating Current*4 |       |
|----------------|------------|-------|----------|----------------------------|-----------------|-------------------|-----------------------|-------|
|                | @100kHz,1V | Max.  | Тур.     | Min.                       | Max.            | Тур.              | Max.                  | Тур.  |
| Units          | μH         |       | Ω        | MHz                        |                 | Α                 |                       | A     |
| Symbol         | L          |       | CR       | S.R.F                      |                 | sat               |                       | ms    |
| SWPA6045S3R6NT | 3.6±30%    | 0.027 | 0.021    | 28                         | 5.25            | 5.70              | 3.70                  | 4.00  |
| SWPA6045S4R3MT | 4.3±20%    | 0.030 | 0.023    | 23                         | 4.45            | 4.90              | 3.50                  | 3.80  |
| SWPA6045S4R5MT | 4.5±20%    | 0.034 | 0.026    | 24                         | 4.97            | 5.50              | 3.30                  | 3.60  |
| SWPA6045S4R7MT | 4.7±20%    | 0.034 | 0.026    | 24                         | 4.97            | 5.50              | 3.30                  | 3.60  |
| SWPA6045S5R1MT | 5.1±20%    | 0.034 | 0.026    | 23                         | 4.40            | 4.80              | 3.30                  | 3.60  |
| SWPA6045S5R6MT | 5.6±20%    | 0.038 | 0.029    | 23                         | 4.15            | 4.60              | 3.15                  | 3.40  |
| SWPA6045S6R2MT | 6.2±20%    | 0.040 | 0.031    | 26                         | 4.43            | 4.80              | 3.00                  | 3.30  |
| SWPA6045S6R3MT | 6.3±20%    | 0.040 | 0.031    | 26                         | 4.43            | 4.70              | 3.00                  | 3.30  |
| SWPA6045S6R8MT | 6.8±20%    | 0.040 | 0.031    | 20                         | 3.90            | 4.30              | 3.00                  | 3.30  |
| SWPA6045S7R5MT | 7.5±20%    | 0.044 | 0.034    | 18                         | 3.50            | 3.80              | 2.90                  | 3.20  |
| SWPA6045S8R2MT | 8.2±20%    | 0.056 | 0.043    | 21                         | 3.90            | 4.30              | 2.60                  | 2.80  |
| SWPA6045S9R1MT | 9.1±20%    | 0.056 | 0.043    | 17                         | 3.35            | 3.70              | 2.60                  | 2.80  |
| SWPA6045S100MT | 10±20%     | 0.062 | 0.048    | 15                         | 3.20            | 3.50              | 2.45                  | 2.70  |
| SWPA6045S120MT | 12±20%     | 0.075 | 0.058    | 13                         | 2.80            | 3.00              | 2.20                  | 2.40  |
| SWPA6045S150MT | 15±20%     | 0.088 | 0.068    | 12                         | 2.50            | 2.70              | 2.05                  | 2.20  |
| SWPA6045S180MT | 18±20%     | 0.105 | 0.081    | 10                         | 2.20            | 2.40              | 1.85                  | 2.00  |
| SWPA6045S220MT | 22±20%     | 0.116 | 0.089    | 10                         | 2.05            | 2.20              | 1.80                  | 2.00  |
| SWPA6045S270MT | 27±20%     | 0.133 | 0.102    | 9.2                        | 1.90            | 2.10              | 1.65                  | 1.80  |
| SWPA6045S300MT | 30±20%     | 0.172 | 0.132    | 7.8                        | 1.70            | 1.80              | 1.50                  | 1.60  |
| SWPA6045S330MT | 33±20%     | 0.178 | 0.137    | 7.8                        | 1.65            | 1.80              | 1.45                  | 1.60  |
| SWPA6045S360MT | 36±20%     | 0.225 | 0.173    | 7.8                        | 1.62            | 1.80              | 1.40                  | 1.50  |
| SWPA6045S390MT | 39±20%     | 0.234 | 0.180    | 7.8                        | 1.50            | 1.60              | 1.25                  | 1.40  |
| SWPA6045S430MT | 43±20%     | 0.260 | 0.20     | 7.7                        | 1.63            | 1.80              | 1.20                  | 1.30  |
| SWPA6045S470MT | 47±20%     | 0.260 | 0.20     | 6.4                        | 1.40            | 1.50              | 1.20                  | 1.30  |
| SWPA6045S510MT | 51±20%     | 0.269 | 0.207    | 6.4                        | 1.35            | 1.50              | 1.15                  | 1.20  |
| SWPA6045S560MT | 56±20%     | 0.287 | 0.221    | 6.4                        | 1.30            | 1.40              | 1.10                  | 1.20  |
| SWPA6045S620MT | 62±20%     | 0.306 | 0.235    | 6.4                        | 1.25            | 1.40              | 1.10                  | 1.20  |
| SWPA6045S680MT | 68±20%     | 0.376 | 0.289    | 6.4                        | 1.20            | 1.30              | 1.00                  | 1.10  |
| SWPA6045S750MT | 75±20%     | 0.397 | 0.305    | 5                          | 1.15            | 1.20              | 0.95                  | 1.00  |
| SWPA6045S820MT | 82±20%     | 0.443 | 0.341    | 4.9                        | 1.05            | 1.10              | 0.90                  | 0.99  |
| SWPA6045S910MT | 91±20%     | 0.467 | 0.359    | 4.9                        | 1.00            | 1.10              | 0.85                  | 0.94  |
| SWPA6045S101MT | 100±20%    | 0.563 | 0.433    | 4.2                        | 0.95            | 1.00              | 0.80                  | 0.88  |
| SWPA6045S121MT | 120±20%    | 0.629 | 0.484    | 4.2                        | 0.85            | 0.94              | 0.77                  | 0.85  |
| SWPA6045S151MT | 150±20%    | 0.754 | 0.580    | 4.2                        | 0.80            | 0.88              | 0.70                  | 0.77  |
| SWPA6045S221MT | 220±20%    | 1.084 | 0.834    | 3.5                        | 0.70            | 0.77              | 0.59                  | 0.65  |
| SWPA6045S331MT | 330±20%    | 1.651 | 1.270    | 2.8                        | 0.57            | 0.63              | 0.57                  | 0.63  |
| SWPA6045S471MT | 470±20%    | 2.340 | 1.80     | 2.0                        | 0.500           | 0.560             | 0.420                 | 0.480 |
| SWPA6045S681MT | 680±20%    | 3.250 | 2.50     | 1.7                        | 0.420           | 0.460             | 0.330                 | 0.380 |

# SWPA8040S Series

| Part Number    | Inductance | DC Resistance |       | Self-resonant<br>Frequency | Saturation<br>Current*3 |       | Heat Rating<br>Current*4 |      |  |
|----------------|------------|---------------|-------|----------------------------|-------------------------|-------|--------------------------|------|--|
|                | @100kHz,1V | Max.          | Тур.  | Min.                       | Max.                    | Тур.  | Max.                     | Тур. |  |
| Units          | μH         | Ω             |       | MHz                        | Α                       |       | Α                        |      |  |
| Symbol         | L          | DCR           |       | S.R.F                      | Isat                    |       | Irms                     |      |  |
| SWPA8040SR82NT | 0.82±30%   | 0.010         | 0.008 | 94                         | 13.80                   | 16.00 | 6.30                     | 6.90 |  |
| SWPA8040S1R0NT | 1.0±30%    | 0.010         | 0.008 | 89                         | 9.85                    | 14.00 | 6.30                     | 6.90 |  |
| SWPA8040S1R2NT | 1.2±30%    | 0.013         | 0.010 | 59                         | 10.00                   | 14.00 | 5.65                     | 6.20 |  |



# SWPA8040S Series

| Part Number                      | Inductance         | DC Resistance |           | Self-resonant<br>Frequency | Satura     |       | Heat Rating Current*4 |      |
|----------------------------------|--------------------|---------------|-----------|----------------------------|------------|-------|-----------------------|------|
|                                  | @100kHz,1V         |               |           | Min.                       | 1          |       | Max.                  | ı    |
| Units                            | μH                 | Max.          | Typ.<br>Ω | MHz                        | Max.       | Тур.  |                       | Typ. |
| Symbol                           | μιι                | DCR           |           | S.R.F                      | A<br>Isat  |       | A<br>Irms             |      |
| SWPA8040S1R5NT                   | 1.5±30%            | 0.013 0.010   |           | 67                         | 8.15 11.00 |       | 5.65 6.20             |      |
| SWPA8040S1R3NT                   | 2.0±30%            | 0.013         | 0.010     | 43                         | 9.25       | 10.00 | 5.15                  | 5.60 |
| SWPA8040S2R0NT<br>SWPA8040S2R2NT | 2.0±30%<br>2.2±30% | 0.016         | 0.012     | 43                         | 7.10       | 8.00  | 5.15                  | 5.60 |
| SWPA8040S2R2NT<br>SWPA8040S3R0NT | 2.2±30%<br>3.0±30% | 0.018         | 0.012     | 32                         | 6.10       | 7.00  | 4.70                  | 5.20 |
| SWPA804033R0NT<br>SWPA8040S3R3NT | 3.0±30%<br>3.3±30% | 0.018         | 0.014     | 27                         | 6.50       | 7.00  | 4.40                  | 4.80 |
| SWPA8040S3R5NT                   | 3.6±30%            | 0.022         | 0.017     | 30                         | 7.52       | 8.50  | 4.40                  | 4.80 |
| SWPA8040S3R0NT                   | 3.0±30%<br>3.9±30% | 0.022         | 0.017     | 26                         | 5.75       | 6.50  | 4.35                  | 4.80 |
| SWPA8040S4R7NT                   | 4.7±30%            | 0.025         | 0.017     | 24                         | 5.90       | 6.50  | 4.10                  | 4.50 |
| SWPA8040S5R1NT                   | 5.1±30%            | 0.025         | 0.019     | 22                         | 4.70       | 5.40  | 4.10                  | 4.40 |
| SWPA8040S5R6NT                   | 5.6±30%            | 0.027         | 0.013     | 24                         | 6.00       | 6.90  | 3.85                  | 4.20 |
| SWPA8040S6R2NT                   | 6.2±30%            | 0.027         | 0.021     | 20                         | 4.45       | 5.10  | 3.85                  | 4.20 |
| SWPA8040S6R8MT                   | 6.8±20%            | 0.027         | 0.021     | 20                         | 4.55       | 5.20  | 3.60                  | 4.00 |
| SWPA8040S8R2MT                   | 8.2±20%            | 0.034         | 0.024     | 17                         | 4.20       | 4.80  | 3.45                  | 3.80 |
| SWPA8040S100MT                   | 10±20%             | 0.038         | 0.029     | 15                         | 3.60       | 4.10  | 3.30                  | 3.60 |
| SWPA8040S120MT                   | 12±20%             | 0.053         | 0.023     | 13                         | 3.50       | 4.00  | 2.80                  | 3.00 |
| SWPA8040S150MT                   | 15±20%             | 0.061         | 0.047     | 12                         | 2.95       | 3.40  | 2.60                  | 2.80 |
| SWPA8040S180MT                   | 18±20%             | 0.069         | 0.053     | 11                         | 2.70       | 3.10  | 2.40                  | 2.60 |
| SWPA8040S220MT                   | 22±20%             | 0.090         | 0.069     | 9.5                        | 2.40       | 2.70  | 2.10                  | 2.30 |
| SWPA8040S270MT                   | 27±20%             | 0.101         | 0.078     | 9.2                        | 2.15       | 2.50  | 2.00                  | 2.20 |
| SWPA8040S330MT                   | 33±20%             | 0.126         | 0.097     | 7.8                        | 2.05       | 2.40  | 1.80                  | 2.00 |
| SWPA8040S360MT                   | 36±20%             | 0.133         | 0.102     | 7.8                        | 2.00       | 2.30  | 1.75                  | 1.90 |
| SWPA8040S390MT                   | 39±20%             | 0.139         | 0.107     | 7.8                        | 1.95       | 2.20  | 1.70                  | 1.90 |
| SWPA8040S430MT                   | 43±20%             | 0.147         | 0.113     | 7.8                        | 1.90       | 2.20  | 1.65                  | 1.80 |
| SWPA8040S470MT                   | 47±20%             | 0.177         | 0.136     | 6.4                        | 1.75       | 2.00  | 1.55                  | 1.70 |
| SWPA8040S510MT                   | 51±20%             | 0.185         | 0.142     | 6.4                        | 1.70       | 1.90  | 1.50                  | 1.60 |
| SWPA8040S560MT                   | 56±20%             | 0.192         | 0.148     | 6.4                        | 1.55       | 1.70  | 1.45                  | 1.60 |
| SWPA8040S620MT                   | 62±20%             | 0.237         | 0.182     | 6.4                        | 1.50       | 1.60  | 1.30                  | 1.40 |
| SWPA8040S680MT                   | 68±20%             | 0.255         | 0.196     | 4.9                        | 1.45       | 1.60  | 1.25                  | 1.40 |
| SWPA8040S750MT                   | 75±20%             | 0.274         | 0.211     | 4.9                        | 1.35       | 1.50  | 1.20                  | 1.30 |
| SWPA8040S820MT                   | 82±20%             | 0.293         | 0.225     | 5.9                        | 1.30       | 1.40  | 1.15                  | 1.20 |
| SWPA8040S910MT                   | 91±20%             | 0.354         | 0.272     | 4.9                        | 1.20       | 1.30  | 1.05                  | 1.10 |
| SWPA8040S101MT                   | 100±20%            | 0.377         | 0.290     | 4.2                        | 1.15       | 1.30  | 1.00                  | 1.10 |
| SWPA8040S121MT                   | 120±20%            | 0.434         | 0.334     | 3.5                        | 1.05       | 1.10  | 0.95                  | 1.00 |
| SWPA8040S151MT                   | 150±20%            | 0.533         | 0.410     | 3.5                        | 1.10       | 1.20  | 0.85                  | 0.94 |
| SWPA8040S181MT                   | 180±20%            | 0.676         | 0.520     | 3.5                        | 0.95       | 1.15  | 0.83                  | 0.92 |
| SWPA8040S221MT                   | 220±20%            | 0.779         | 0.599     | 3.5                        | 0.85       | 0.94  | 0.80                  | 0.88 |
| SWPA8040S331MT                   | 330±20%            | 1.156         | 0.889     | 2.8                        | 0.68       | 0.75  | 0.64                  | 0.70 |
| SWPA8040S471MT                   | 470±20%            | 1.625         | 1.260     | 2.1                        | 0.60       | 0.70  | 0.50                  | 0.60 |

# SWPA8060S Series

| Part Number       | Inductance | DC Resistance |      | Self-resonant<br>Frequency | Saturation<br>Current*3 |      | Heat Rating<br>Current*4 |      |
|-------------------|------------|---------------|------|----------------------------|-------------------------|------|--------------------------|------|
|                   | @100kHz,1V | Max.          | Тур. | Min.                       | Max.                    | Тур. | Max.                     | Тур. |
| Units             | μH         | Ω             |      | MHz                        | Α                       |      | Α                        |      |
| Symbol            | L          | DCR           |      | S.R.F                      | Isat                    |      | Irms                     |      |
| SWPA8060S681KTY01 | 680±10%    | 2.17          | 1.81 | 1.26                       | 0.72                    | 0.82 | 0.46                     | 0.53 |



### SWPA8065S Series

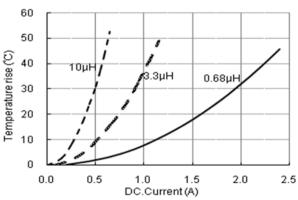
| Part Number    | Inductance | DC Resistance |       | Self-resonant<br>Frequency | Saturation<br>Current*3 |       | Heat Rating<br>Current*4 |      |
|----------------|------------|---------------|-------|----------------------------|-------------------------|-------|--------------------------|------|
|                | @100kHz,1V | Max.          | Тур.  | Min.                       | Max.                    | Тур.  | Max.                     | Тур. |
| Units          | μH         | Ω MHz         |       |                            | A                       | Α     |                          |      |
| Symbol         | L          | DCR           |       | S.R.F                      | Isat                    |       | Irms                     |      |
| SWPA8065S1R0MT | 1.0±20%    | 0.011         | 0.008 | 96                         | 20.0                    | 22.0  | 7.00                     | 8.00 |
| SWPA8065S3R3MT | 3.3±20%    | 0.018         | 0.015 | 27                         | 9.50                    | 10.00 | 5.10                     | 5.90 |
| SWPA8065S4R7MT | 4.7±20%    | 0.022         | 0.018 | 18                         | 8.50                    | 9.50  | 4.70                     | 5.40 |
| SWPA8065S5R6MT | 5.6±20%    | 0.026         | 0.022 | 17                         | 8.00                    | 9.00  | 4.50                     | 5.20 |
| SWPA8065S6R8MT | 6.8±20%    | 0.026         | 0.022 | 16                         | 7.50                    | 8.00  | 4.50                     | 5.20 |
| SWPA8065S8R2MT | 8.2±20%    | 0.031         | 0.026 | 15                         | 7.00                    | 7.70  | 4.20                     | 4.80 |
| SWPA8065S100MT | 10±20%     | 0.044         | 0.037 | 13                         | 8.00                    | 8.90  | 3.20                     | 3.70 |
| SWPA8065S220MT | 22±20%     | 0.072         | 0.060 | 8                          | 4.30                    | 4.80  | 2.70                     | 3.10 |
| SWPA8065S101MT | 100±20%    | 0.028         | 0.233 | 3.1                        | 2.00                    | 2.40  | 1.35                     | 1.45 |
| SWPA8065S151MT | 150±20%    | 0.440         | 0.353 | 2.5                        | 1.60                    | 2.00  | 0.95                     | 1.10 |
| SWPA8065S221MT | 220±20%    | 0.656         | 0.547 | 2.0                        | 1.20                    | 1.50  | 0.80                     | 0.90 |
| SWPA8065S331MT | 330±20%    | 0.840         | 0.700 | 1.7                        | 1.00                    | 1.20  | 0.75                     | 0.85 |
| SWPA8065S431MT | 430±20%    | 1.20          | 1.00  | 1.5                        | 0.95                    | 1.05  | 0.61                     | 0.69 |

<sup>※1:</sup> All test data is referenced to 20°C ambient;

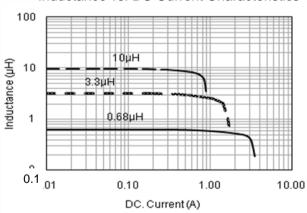
## TYPICAL ELECTRICAL CHARACTERISTICS

#### SWPA252010S Series

### Temperature vs. DC Current Characteristics

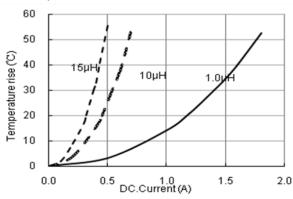


# Inductance vs. DC Current Characteristics

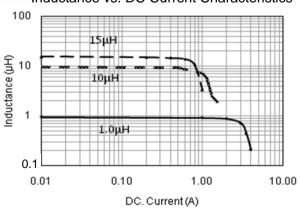


### SWPA252012S Series

### Temperature vs. DC Current Characteristics



### Inductance vs. DC Current Characteristics



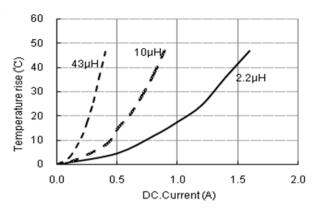
<sup>※2:</sup> Rated current: Isat or Irms, whichever is smaller;

<sup>\*\*3:</sup> Isat: DC current at which the inductance drops approximate 30% from its value without current;

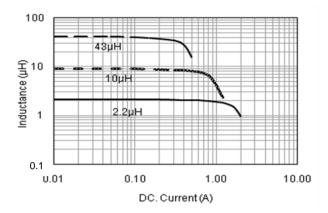
<sup>※\*4:</sup> Irms: DC current that causes the temperature rise (△T =40°C) from 20°C ambient.

### SWPA3010S Series

Temperature vs. DC Current Characteristics

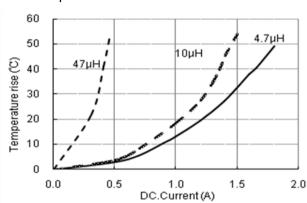


#### Inductance vs. DC Current Characteristics

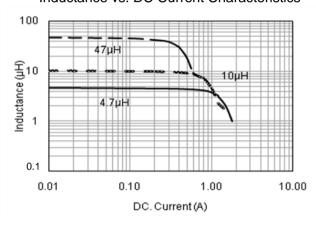


### SWPA3012S Series

Temperature vs. DC Current Characteristics

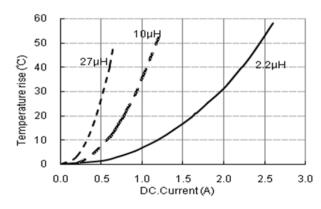


Inductance vs. DC Current Characteristics

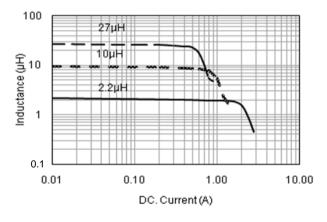


### SWPA3015S Series

Temperature vs. DC Current Characteristics

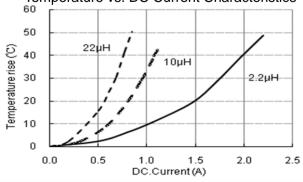


Inductance vs. DC Current Characteristics

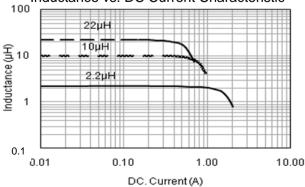


### SWPA4010S Series

Temperature vs. DC Current Characteristics



### Inductance vs. DC Current Characteristic



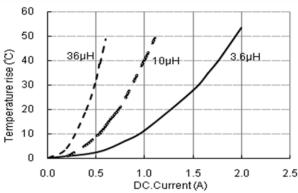


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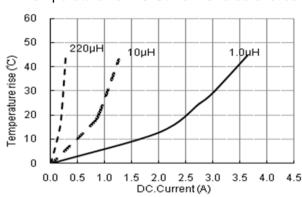
### SWPA4012S Series

Temperature vs. DC Current Characteristics



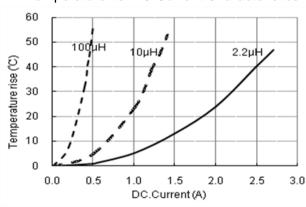
#### SWPA4018S Series

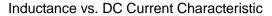
Temperature vs. DC Current Characteristics

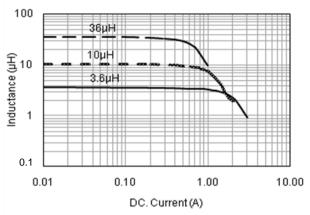


### SWPA4020S Series

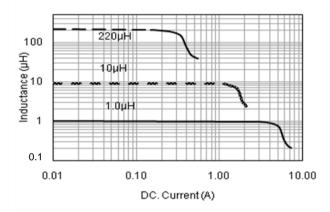
Temperature vs. DC Current Characteristics



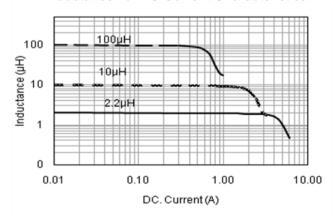




Inductance vs. DC Current Characteristics

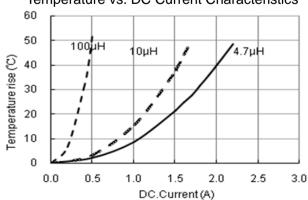


Inductance vs. DC Current Characteristics

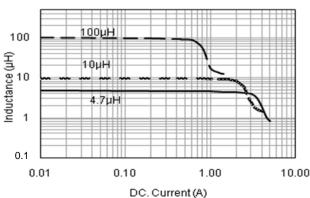


### SWPA4030S Series

Temperature vs. DC Current Characteristics



### Inductance vs. DC Current Characteristics



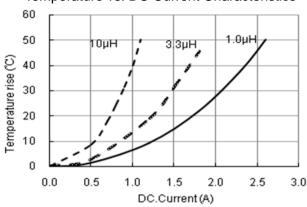
**Sunlord** 

 $\label{thm:continuous} \textbf{Specifications subject to change without notice. Please check our website for latest information.}$ 

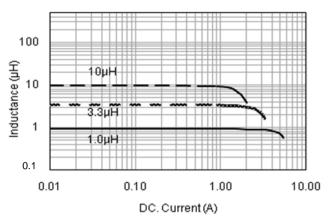
Revised 2021/05/15

#### SWPA5012S Series

Temperature vs. DC Current Characteristics

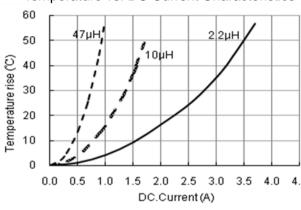


#### Inductance vs. DC Current Characteristics

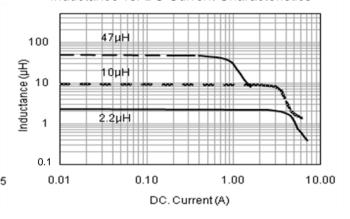


## SWPA5020S Series

Temperature vs. DC Current Characteristics

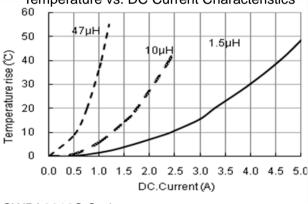


Inductance vs. DC Current Characteristics

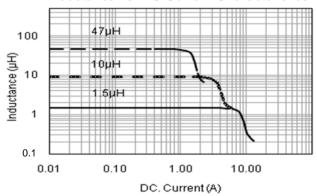


### SWPA5040S Series

Temperature vs. DC Current Characteristics

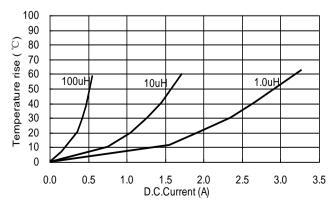


## Inductance vs. DC Current Characteristics

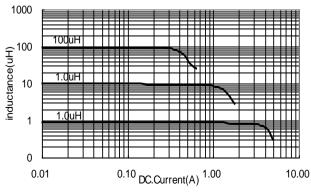


### SWPA6012S Series

Temperature vs. DC Current Characteristics



Inductance vs. DC Current Characteristics

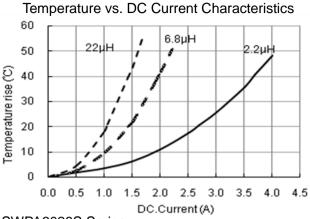




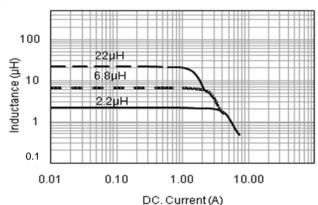
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### SWPA6020S Series

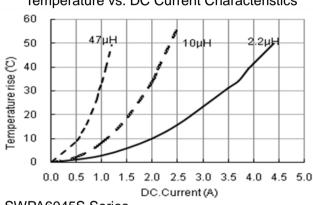


#### Inductance vs. DC Current Characteristics

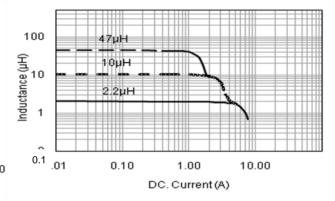


#### SWPA6028S Series

Temperature vs. DC Current Characteristics

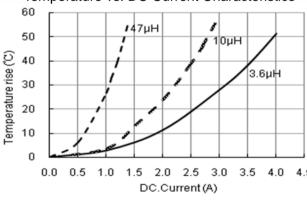


Inductance vs. DC Current Characteristics

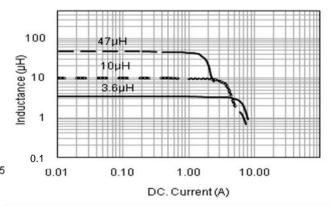


### SWPA6045S Series

Temperature vs. DC Current Characteristics

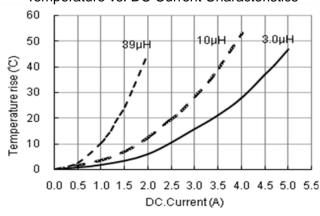


Inductance vs. DC Current Characteristics

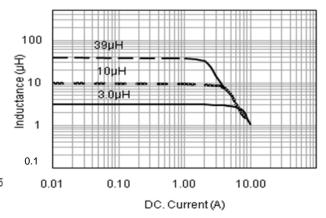


## SWPA8040S Series

Temperature vs. DC Current Characteristics



Inductance vs. DC Current Characteristics





SWPA8065S Series

Temperature vs. DC Current Characteristics

## Inductance vs. DC Current Characteristics

