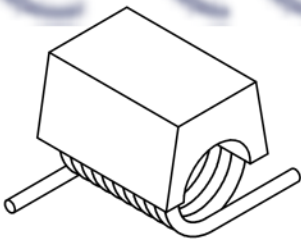
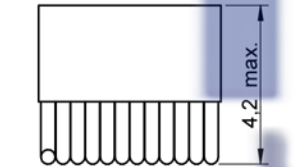
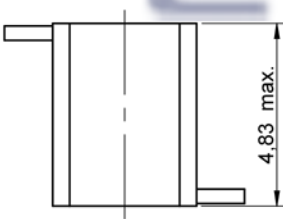
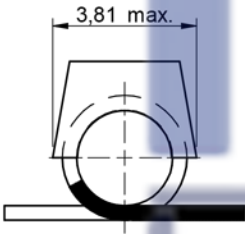
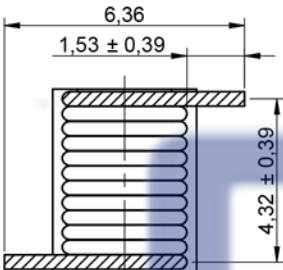
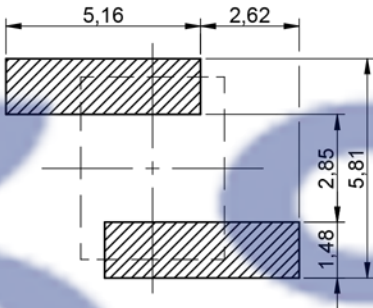


Dimensions: [mm]



Scale - 5:1

Recommended Land Pattern: [mm]



Scale - 5:1

Schematic:



Electrical Properties:

| Properties              |                  | Test conditions | Value | Unit | Tol. |
|-------------------------|------------------|-----------------|-------|------|------|
| Inductance              | L                | 150 MHz         | 68    | nH   | ±2%  |
| Q-Factor                | Q                | 150 MHz         | 100   |      | min. |
| DC Resistance           | R <sub>DC</sub>  | @ 20 °C         | 8.2   | mΩ   | max. |
| Rated Current           | I <sub>R</sub>   | ΔT = 15 K       | 2.5   | A    | max. |
| Self Resonant Frequency | f <sub>res</sub> |                 | 1.5   | GHz  | min. |

Certification:

|                |                                       |
|----------------|---------------------------------------|
| RoHS Approval  | Compliant [ 2011/65/EU&2015/863 ]     |
| REACH Approval | Conform or declared [ (EC)1907/2006 ] |
| Halogen Free   | Conform [ JEDEC JS709B ]              |
| Halogen Free   | Conform [ IEC 61249-2-21 ]            |

General Information:

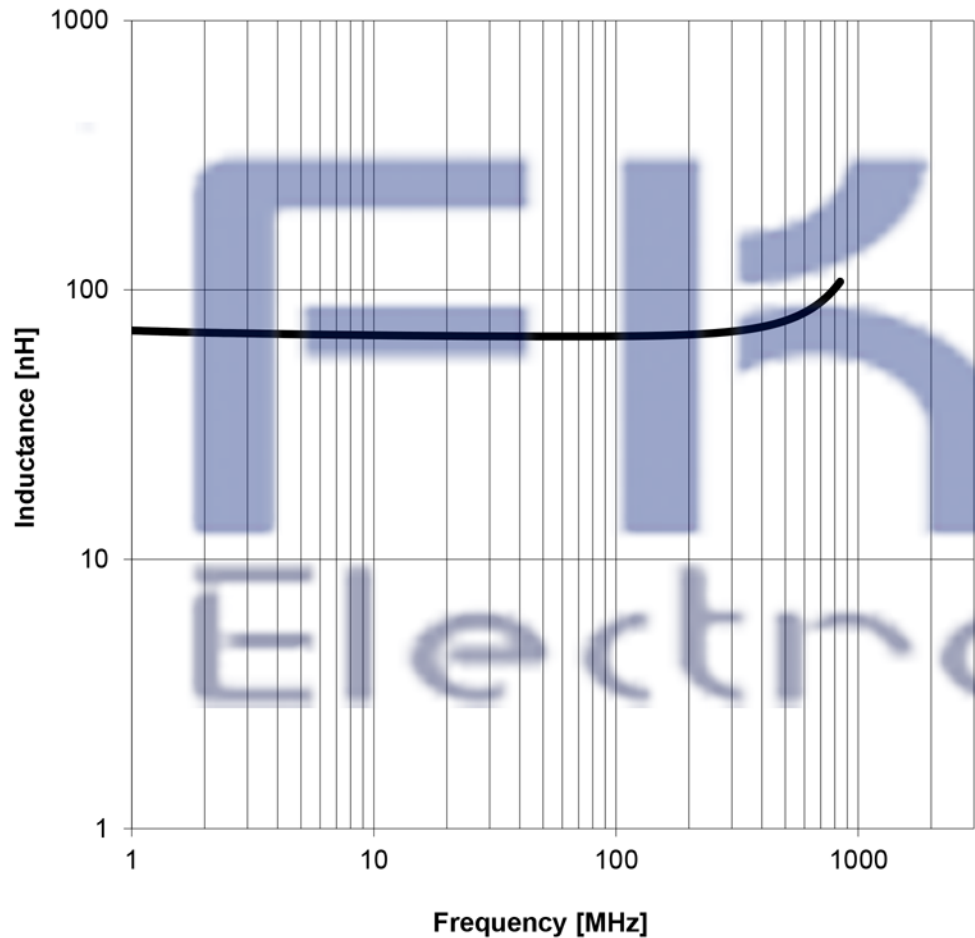
|                                                                                                             |                     |
|-------------------------------------------------------------------------------------------------------------|---------------------|
| It is recommended that the temperature of the component does not exceed +125 °C under worst case conditions |                     |
| Ambient Temperature (referring to I <sub>R</sub> )                                                          | -40 up to +110 °C   |
| Operating Temperature                                                                                       | -40 up to +125 °C   |
| Storage Conditions (in original packaging)                                                                  | < 40 °C ; < 75 % RH |
| Moisture Sensitivity Level (MSL)                                                                            | 1                   |
| Test conditions of Electrical Properties: +20 °C, 33 % RH if not specified differently                      |                     |



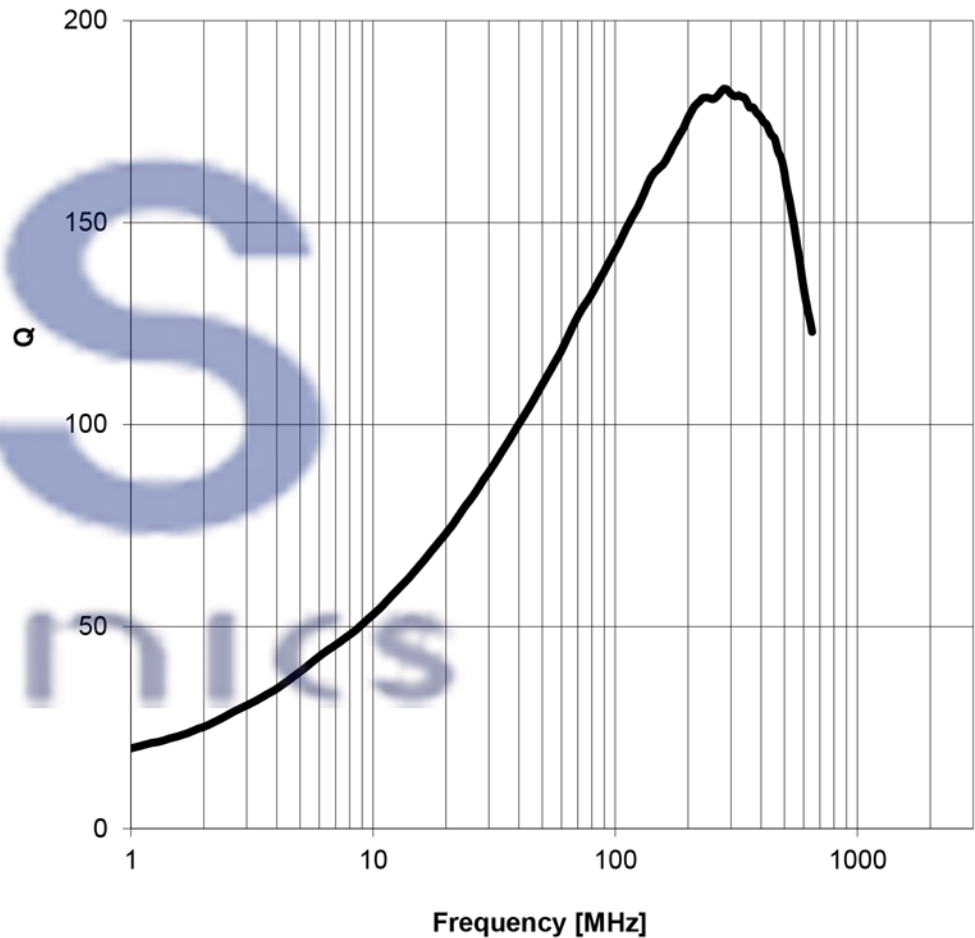
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|                                 |                                      |                                    |
|---------------------------------|--------------------------------------|------------------------------------|
| DATE (YYYY-MM-DD)<br>2019-05-15 | GENERAL TOLERANCE<br>DIN ISO 2768-1m | PROJECTION METHOD<br>              |
| DESCRIPTION<br><b>Air coil</b>  |                                      | ORDER CODE<br><b>FKS744912168G</b> |
| SIZE/TYPE<br>4248               |                                      | STATUS<br>Valid                    |

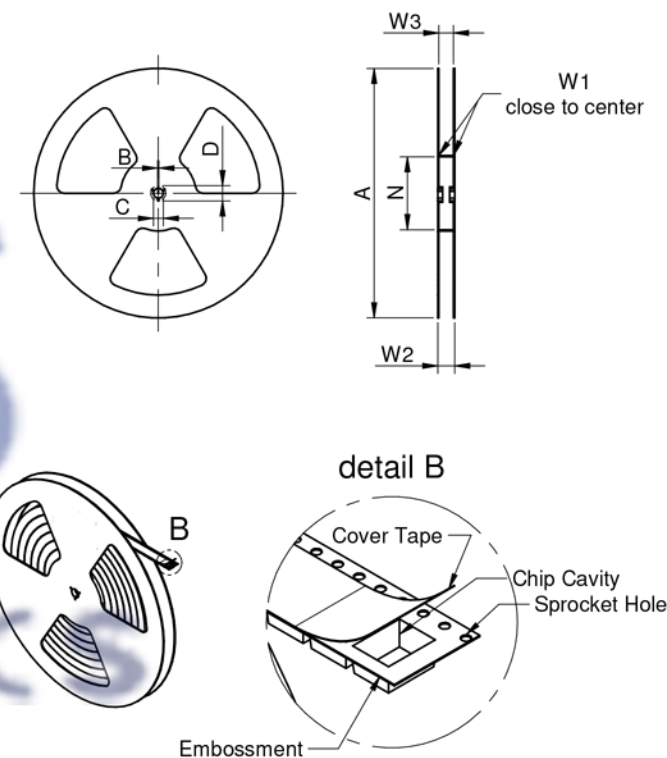
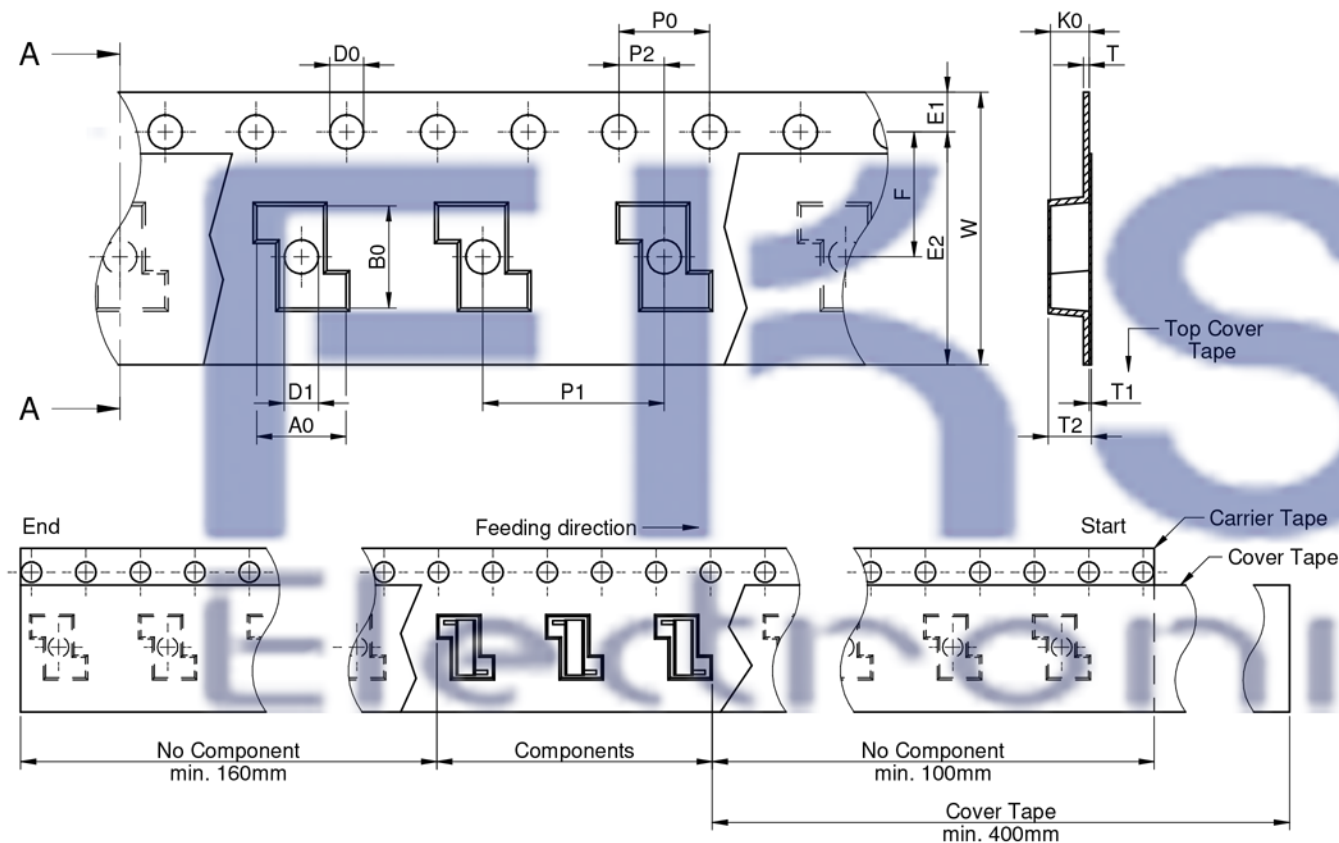
Typical Inductance vs. Frequency Characteristics:



Q-Factor vs. Frequency:



|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |  |                                 |  |                                      |                                                                                                            |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|---------------------------------|--|--------------------------------------|------------------------------------------------------------------------------------------------------------|
| <div><div><div>RoHS<br/>COMPLIANT</div></div><div><div>REACH<br/>COMPLIANT</div></div><div><div>HALOGEN<br/>FREE</div></div></div>                                                                                                                           |  |  | DATE (YYYY-MM-DD)<br>2019-05-15 |  | GENERAL TOLERANCE<br>DIN ISO 2768-1m | PROJECTION METHOD<br> |
| <div><div></div><div></div><div>Shaanxi FKS Electronic Parts Import&amp;Export Co.,Ltd.<br/>Address:Building B1,The West Cloud Valley, Fengxi New City,<br/>Xixian New Area,Xianyang City,Shaanxi Province,China.<br/>Tel:0086 29 8868 5333 Fax:0086 29 8868 0913<br/><a href="http://www.fks-tech.com">Http://www.fks-tech.com</a></div></div> |  |  | DESCRIPTION<br><b>Air coil</b>  |  |                                      | ORDER CODE<br><b>FKS744912168G</b>                                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |  | SIZE/TYPE<br>4248               |  |                                      | STATUS<br>Valid                                                                                            |

**Packaging Specification - Tape and Reel: [mm]**

| Tape Type | A0 (mm) | B0 (mm) | W (mm)    | T (mm) | T1 (mm) | T2 (mm) | K0 (mm) | P0 (mm) | P1 (mm) | P2 (mm)   | D0 (mm) | D1 (mm) | E1 (mm) | E2 (mm) | F (mm) | Material    | Qty. (pcs.) |
|-----------|---------|---------|-----------|--------|---------|---------|---------|---------|---------|-----------|---------|---------|---------|---------|--------|-------------|-------------|
|           | typ.    | typ.    | +0.3/-0.1 | max.   | ref.    | typ.    | typ.    | ±0.1    | ±0.1    | +0.1/-0.0 | min.    | ±0.1    | min.    | min.    | ±0.1   |             |             |
| 2a        | 9.50    | 5.50    | 16.00     | 0.60   | 0.10    | 4.90    | 4.70    | 4.00    | 12.00   | 2.00      | 1.50    | 1.50    | 1.75    | 14.25   | 7.50   | Polystyrene | 1000        |

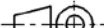
| A<br>(mm) | B<br>(mm) | C<br>(mm) | D<br>(mm) | N<br>(mm) | W1<br>(mm) | W2<br>(mm) | W3<br>(mm) | W3<br>(mm) | Material                  |
|-----------|-----------|-----------|-----------|-----------|------------|------------|------------|------------|---------------------------|
| ± 2,0     | min.      | min.      | min.      | min.      | ± 2,0      | max.       | min.       | max.       |                           |
| 330.00    | 1.50      | 12.80     | 20.20     | 60.00     | 16.40      | 22.40      | 15.90      | 19.40      | Polystyrene/ Polyurethane |



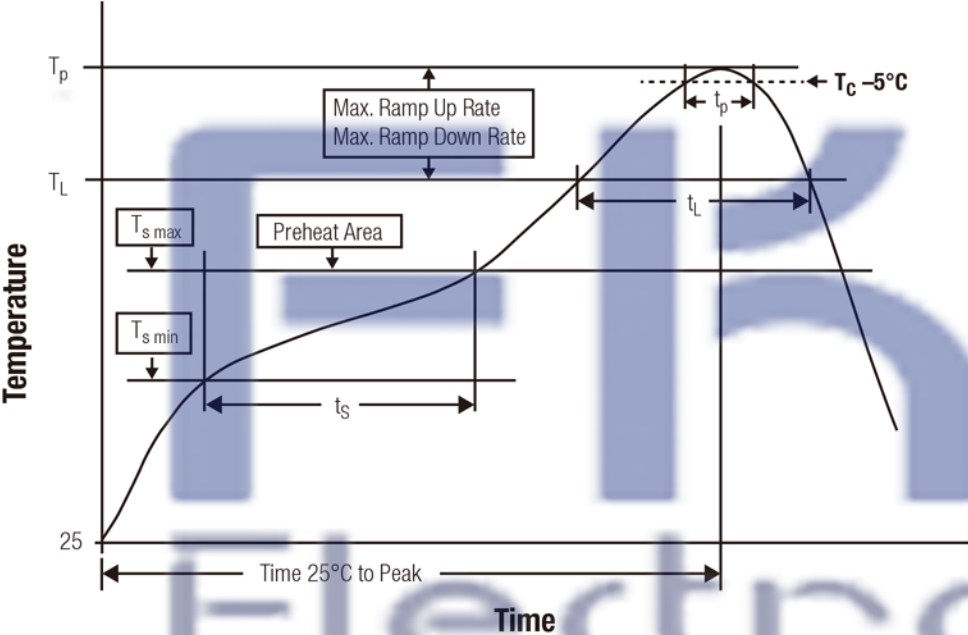
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|                   |          |                                 |                                      |                                                                                                               |
|-------------------|----------|---------------------------------|--------------------------------------|---------------------------------------------------------------------------------------------------------------|
|                   |          | DATE (YYYY-MM-DD)<br>2019-05-15 | GENERAL TOLERANCE<br>DIN ISO 2768-1m | PROJECTION<br>METHOD<br> |
| DESCRIPTION       | Air coil |                                 |                                      | ORDER CODE<br>FKS744912168G                                                                                   |
|                   |          |                                 |                                      |                                                                                                               |
| SIZE/TYPE<br>4248 |          |                                 | STATUS<br>Valid                      |                                                                                                               |

Classification Reflow Profile for SMT components:



Classification Reflow Soldering Profile:

| Profile Feature                                      |              | Value             |
|------------------------------------------------------|--------------|-------------------|
| Preheat Temperature Min                              | $T_{s\ min}$ | 150 °C            |
| Preheat Temperature Max                              | $T_{s\ max}$ | 200 °C            |
| Preheat Time $t_s$ from $T_{s\ min}$ to $T_{s\ max}$ | $t_s$        | 60 - 120 seconds  |
| Ramp-up Rate ( $T_L$ to $T_P$ )                      |              | 3 °C/ second max. |
| Liquidous Temperature                                | $T_L$        | 217 °C            |
| Time $t_L$ maintained above $T_L$                    | $t_L$        | 60 - 150 seconds  |
| Peak package body temperature                        | $T_P$        | see table below   |
| Time within 5°C of actual peak temperaure            | $t_p$        | 20 - 30 seconds   |
| Ramp-down Rate ( $T_L$ to $T_P$ )                    |              | 6 °C/ second max. |
| Time 25°C to peak temperature                        |              | 8 minutes max.    |

refer to IPC/ JEDEC J-STD-020E

Package Classification Reflow Temperature:

| Properties                                           | Volume mm <sup>3</sup><br><350 | Volume mm <sup>3</sup><br>350-2000 | Volume mm <sup>3</sup><br>>2000 |
|------------------------------------------------------|--------------------------------|------------------------------------|---------------------------------|
| PB-Free Assembly I Package Thickness < 1.6 mm        | 260 °C                         | 260 °C                             | 260 °C                          |
| PB-Free Assembly I Package Thickness 1.6 mm - 2.5 mm | 260 °C                         | 250 °C                             | 245 °C                          |
| PB-Free Assembly I Package Thickness ≥ 2.5 mm        | 250 °C                         | 245 °C                             | 245 °C                          |

refer to IPC/ JEDEC J-STD-020E

|                                       |  |                                    |                                      |                       |
|---------------------------------------|--|------------------------------------|--------------------------------------|-----------------------|
|                                       |  | DATE (YYYY-MM-DD)<br>2019-05-15    | GENERAL TOLERANCE<br>DIN ISO 2768-1m | PROJECTION METHOD<br> |
| <b>DESCRIPTION</b><br><b>Air coil</b> |  | <b>ORDER CODE</b><br>FKS744912168G |                                      |                       |
| <b>SIZE/TYPE</b><br>4248              |  | <b>STATUS</b><br>Valid             |                                      |                       |

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