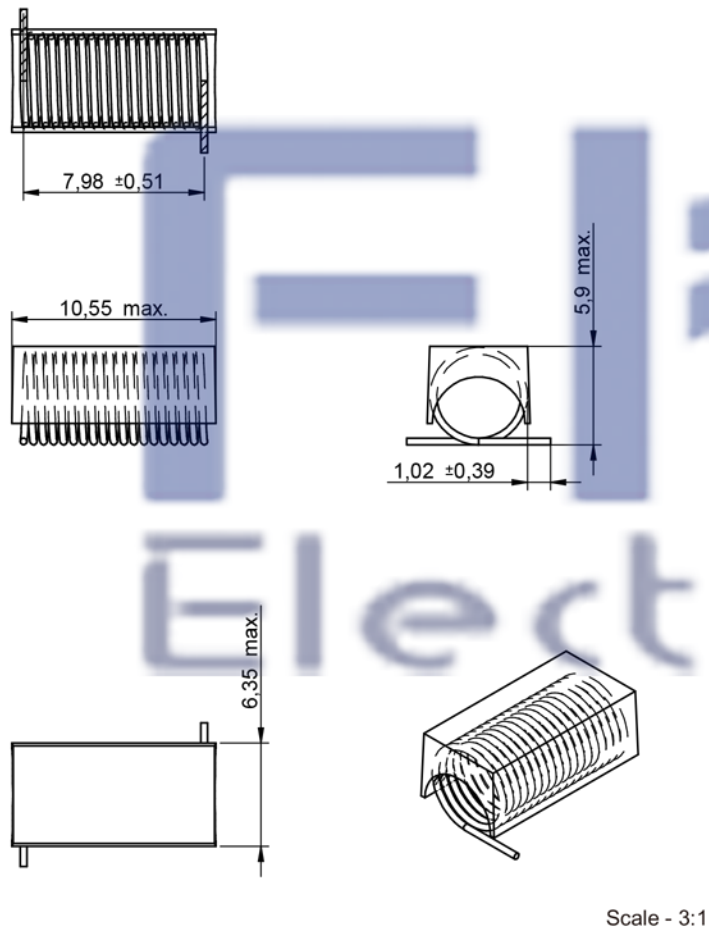
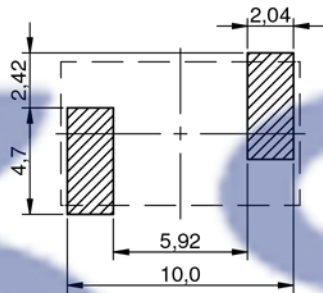


Dimensions: [mm]



Recommended Land Pattern: [mm]



Schematic:



Electrical Properties:

| Properties              |           | Test conditions           | Value | Unit | Tol.      |
|-------------------------|-----------|---------------------------|-------|------|-----------|
| Inductance              | L         | 50 MHz                    | 169   | nH   | $\pm 5\%$ |
| Q-Factor                | Q         | 50 MHz                    | 100   |      | min.      |
| DC Resistance           | $R_{DC}$  | @ 20 °C                   | 25    | mΩ   | max.      |
| Rated Current           | $I_R$     | $\Delta T = 15 \text{ K}$ | 3     | A    | max.      |
| Self Resonant Frequency | $f_{res}$ |                           | 875   | MHz  | 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 $I_R$ )                                                                   | -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                      |                     |



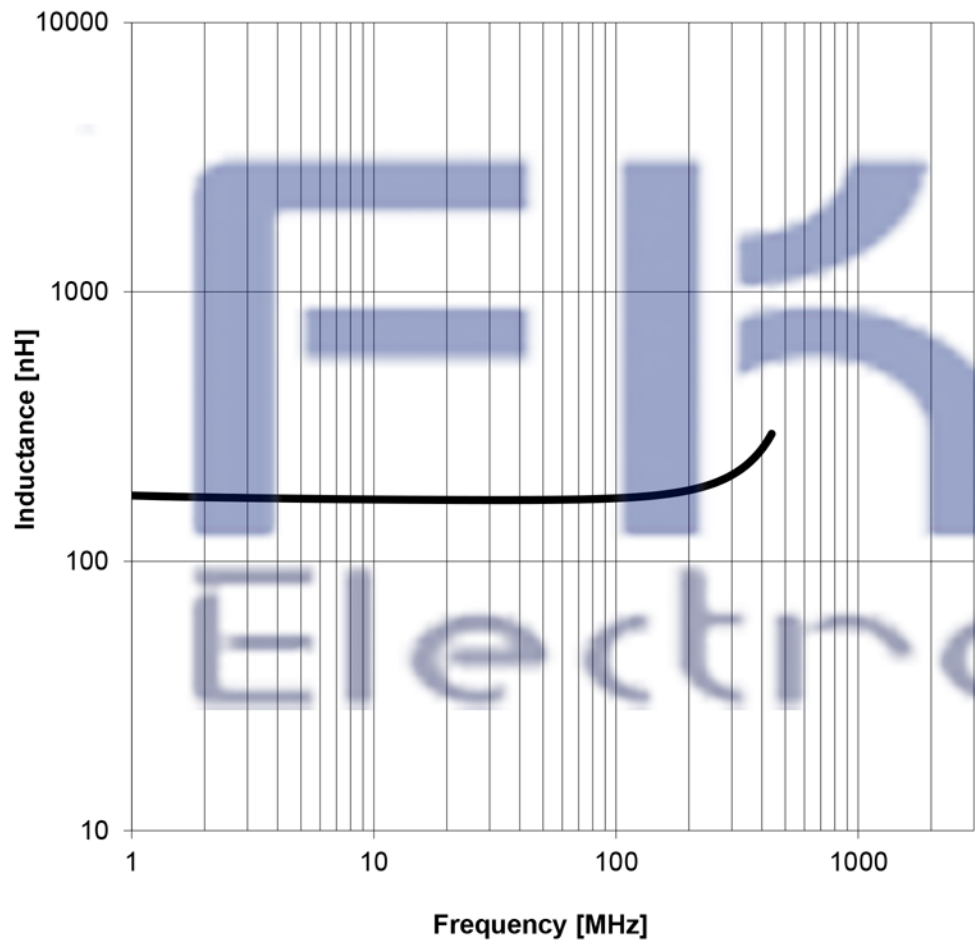
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Electronics



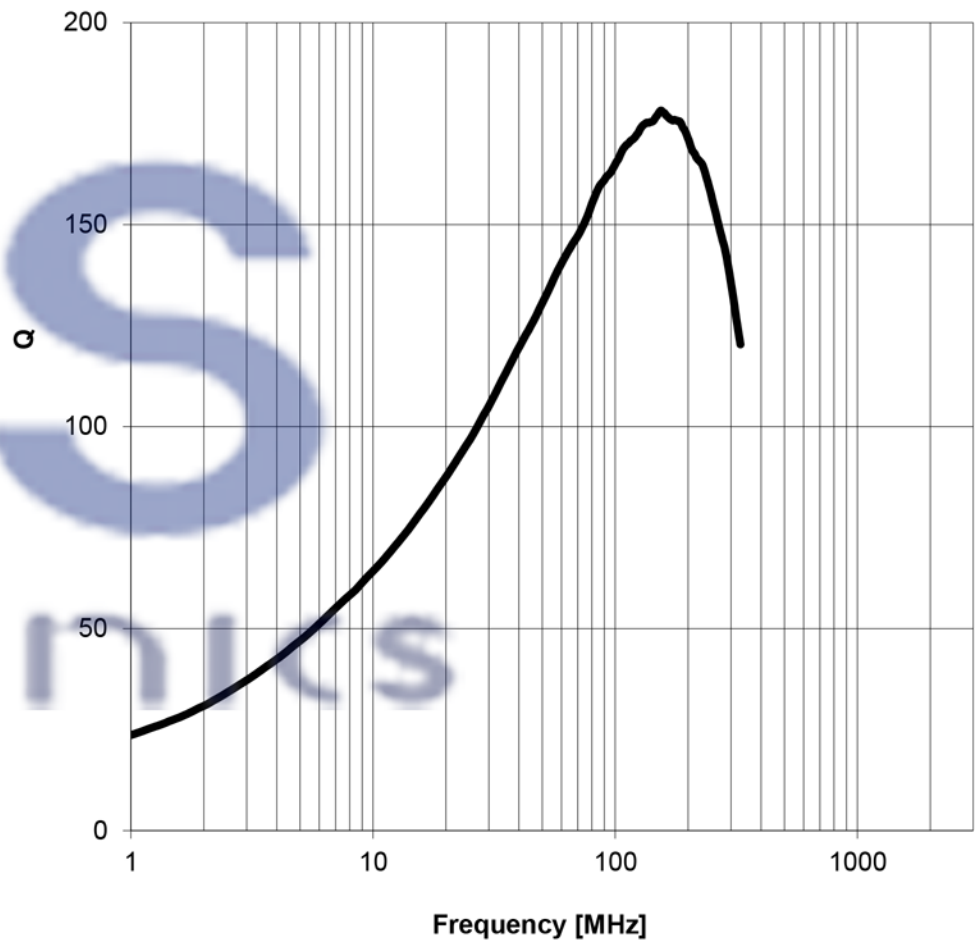
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|                   |            |                   |                 |                   |  |
|-------------------|------------|-------------------|-----------------|-------------------|--|
| DATE (YYYY-MM-DD) | 2019-05-29 | GENERAL TOLERANCE | DIN ISO 2768-1m | PROJECTION METHOD |  |
| DESCRIPTION       |            |                   |                 | ORDER CODE        |  |
| Air coil          |            |                   |                 | FKS744918217      |  |
| SIZE/TYPE         |            | STATUS            |                 |                   |  |
| 5910              |            | Valid             |                 |                   |  |

Typical Inductance vs. Frequency Characteristics:

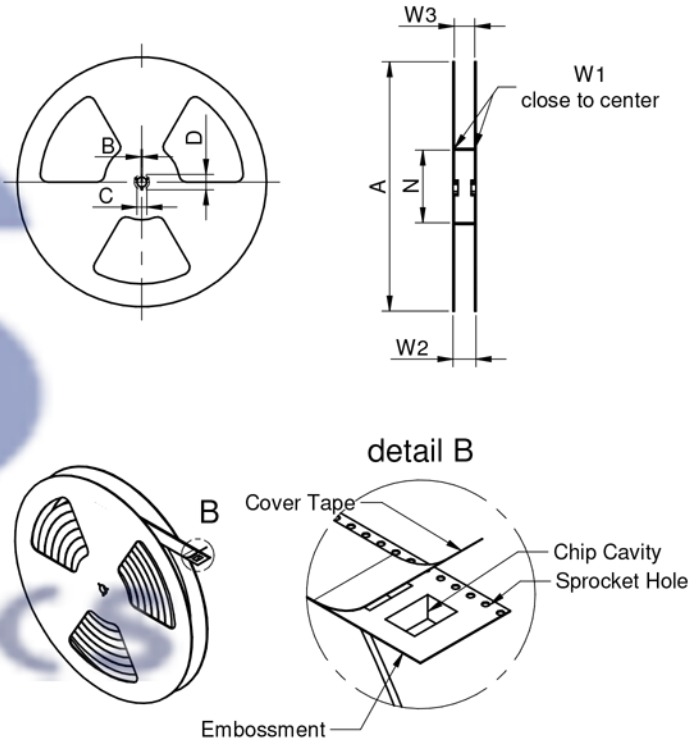
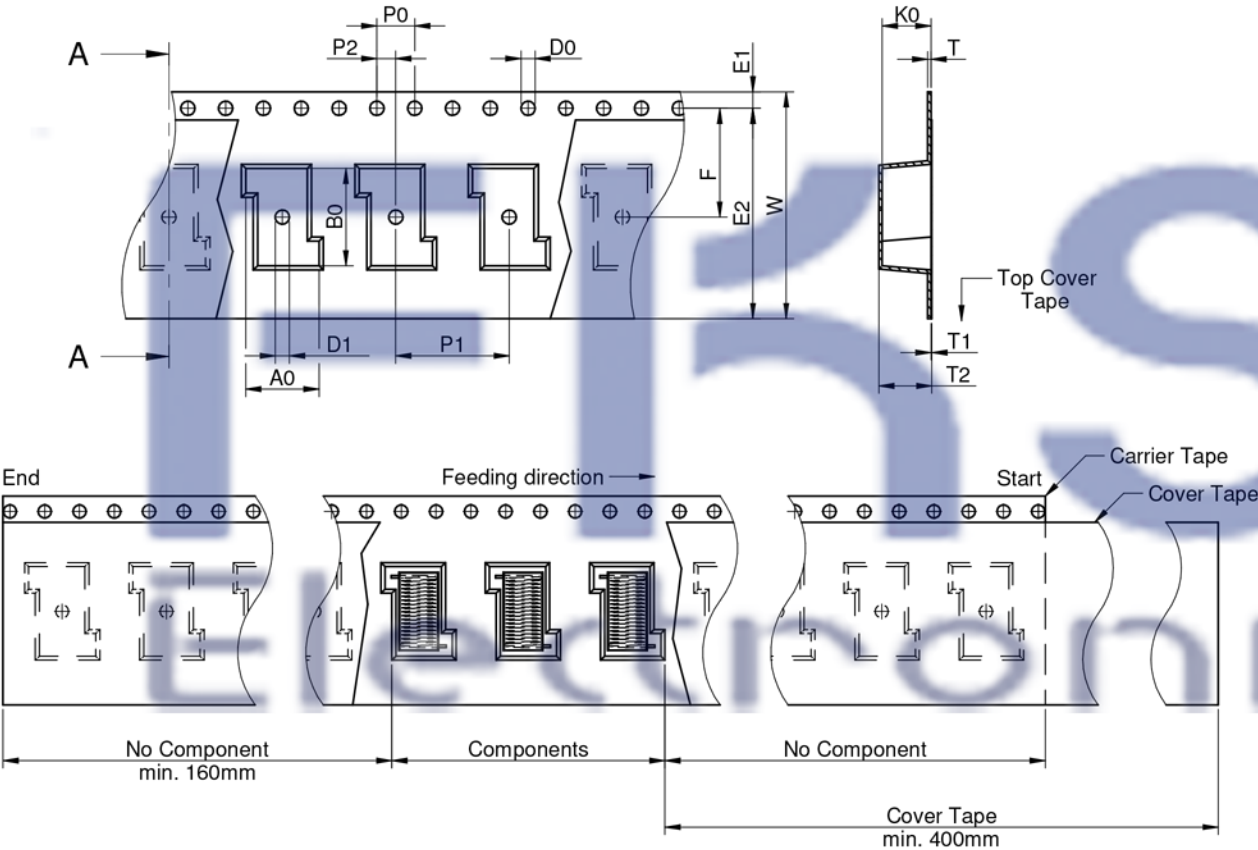


Q-Factor vs. Frequency:



|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |  |                                 |  |                                      |                                                                                                            |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|---------------------------------|--|--------------------------------------|------------------------------------------------------------------------------------------------------------|
| <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>2019-05-29 |  | GENERAL TOLERANCE<br>DIN ISO 2768-1m | PROJECTION METHOD<br> |
| <div><div><div>FKS<br/>Electronics</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>FKS744918217</b>                                                                          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |  | SIZE/TYPE<br>5910               |  |                                      | STATUS<br>Valid                                                                                            |

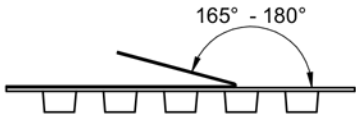
Packaging Specification - Tape and Reel: [mm]



Packaging is referred to the international standard IEC 60286-3:2013

| 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.) |
|-----------|-----------|-----------|-----------------|-----------|-----------|-----------|-----------|-----------|------------|-----------|----------------|-----------|-----------|------------|------------|-------------|-------------|
| 2a        | typ. 7,10 | typ. 9,75 | +0,3/-0,1 24,00 | ref. 0,35 | max. 0,10 | typ. 4,95 | typ. 5,30 | ±0,1 4,00 | ±0,1 12,00 | ±0,1 2,00 | +0,1/-0,0 1,50 | min. 1,50 | ±0,1 1,75 | min. 22,25 | ±0,1 11,50 | Polystyrene | 1000        |

| A (mm) | B (mm) | C (mm) | D (mm) | N (mm) | W1 (mm) | W2 (mm) | W3 (mm) | W3 (mm) | Material                  |
|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------------------------|
| ± 2,0  | min.   | min.   | min.   | ± 2,0  | + 2,0   | max.    | min.    | max.    | Polystyrene/ Polyurethane |
| 330,00 | 1,50   | 12,80  | 20,20  | 60,00  | 24,40   | 30,40   | 23,90   | 27,40   |                           |

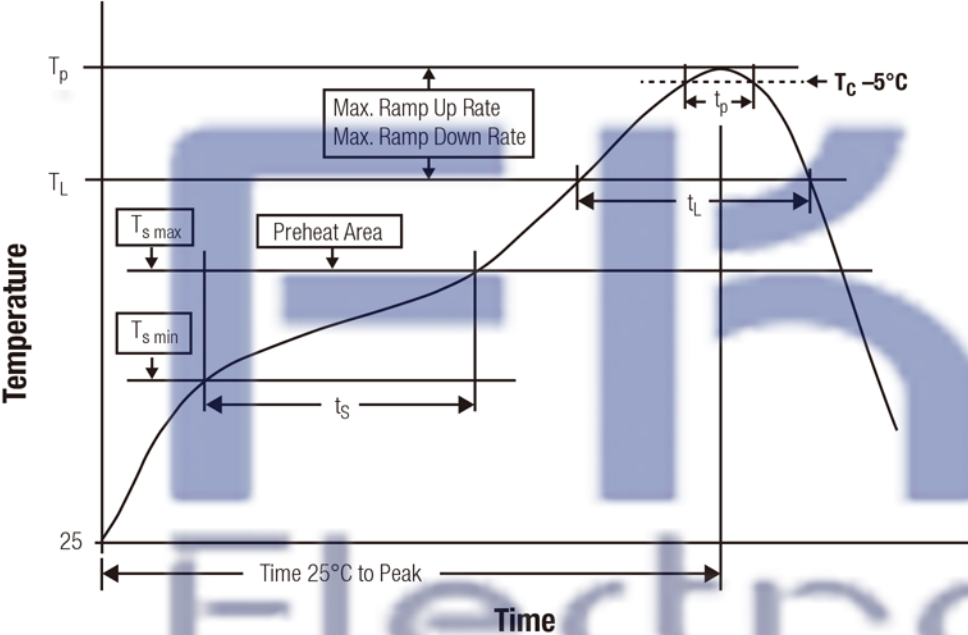


| Tape width | 24 mm | Pull-of force |
|------------|-------|---------------|
|            |       | 0,1 N - 1,3 N |

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|                                 |                                      |                                   |
|---------------------------------|--------------------------------------|-----------------------------------|
| DATE (YYYY-MM-DD)<br>2019-05-29 | GENERAL TOLERANCE<br>DIN ISO 2768-1m | PROJECTION METHOD<br>             |
| DESCRIPTION<br><b>Air coil</b>  |                                      | ORDER CODE<br><b>FKS744918217</b> |
| SIZE/TYPE<br>5910               |                                      | 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

|                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                   |                                      |                       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------|--------------------------------------|-----------------------|
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| DESCRIPTION<br><b>Air coil</b>                                                                                                                                                                                                                                                                                                                                                                         |  | ORDER CODE<br><b>FKS744918217</b> |                                      |                       |
| SIZE/TYPE<br>5910                                                                                                                                                                                                                                                                                                                                                                                      |  | STATUS<br>Valid                   |                                      |                       |