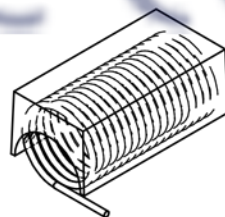
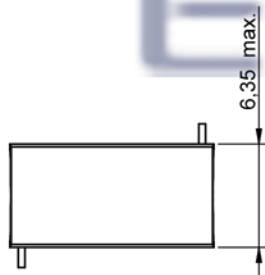
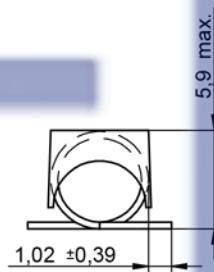
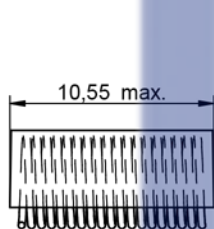
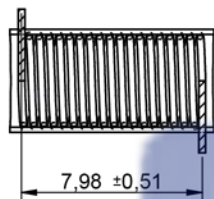
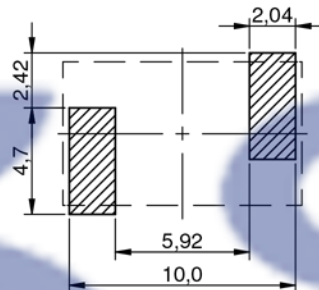


## Dimensions: [mm]



Scale - 3:1

## Recommended Land Pattern: [mm]



Scale - 3:1

## Schematic:



## Electrical Properties:

| Properties              |                  | Test conditions | Value | Unit | Tol. |
|-------------------------|------------------|-----------------|-------|------|------|
| Inductance              | L                | 50 MHz          | 222   | nH   | ±5%  |
| Q-Factor                | Q                | 50 MHz          | 100   |      | min. |
| DC Resistance           | R <sub>DC</sub>  | @ 20 °C         | 35    | mΩ   | max. |
| Rated Current           | I <sub>R</sub>   | ΔT = 15 K       | 3     | A    | max. |
| Self Resonant Frequency | f <sub>res</sub> |                 | 730   | 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 <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                      |                     |



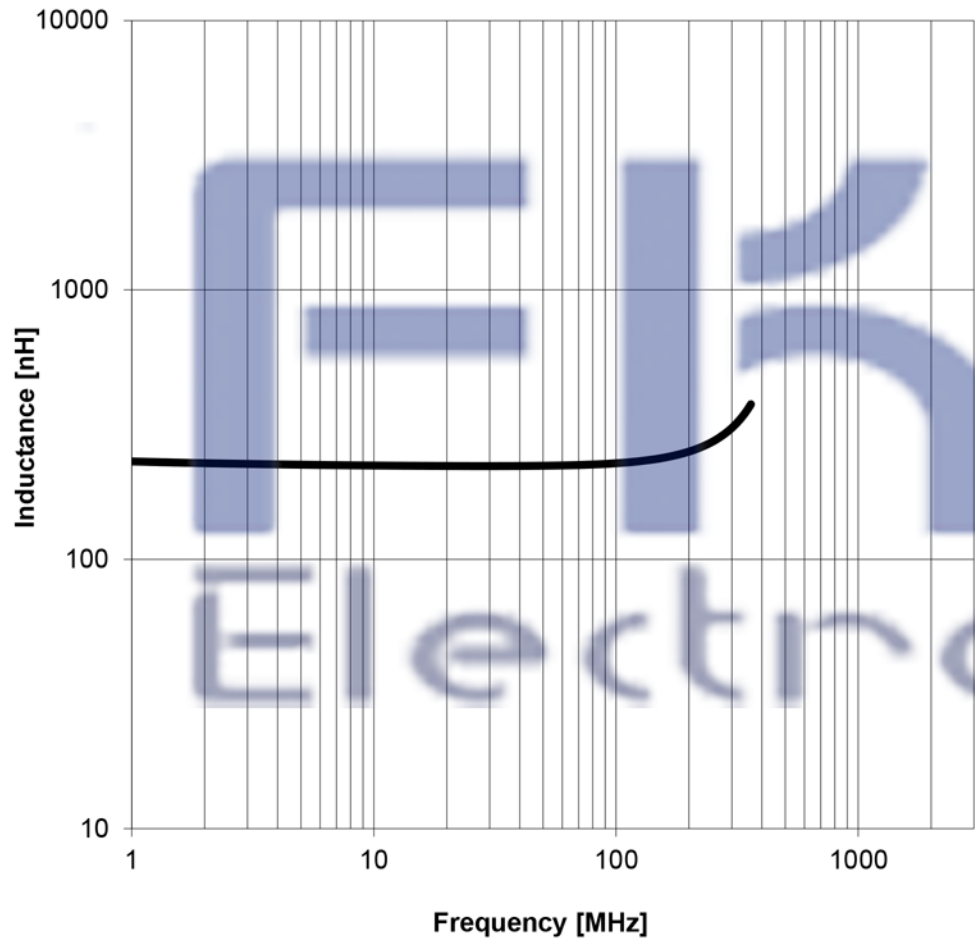
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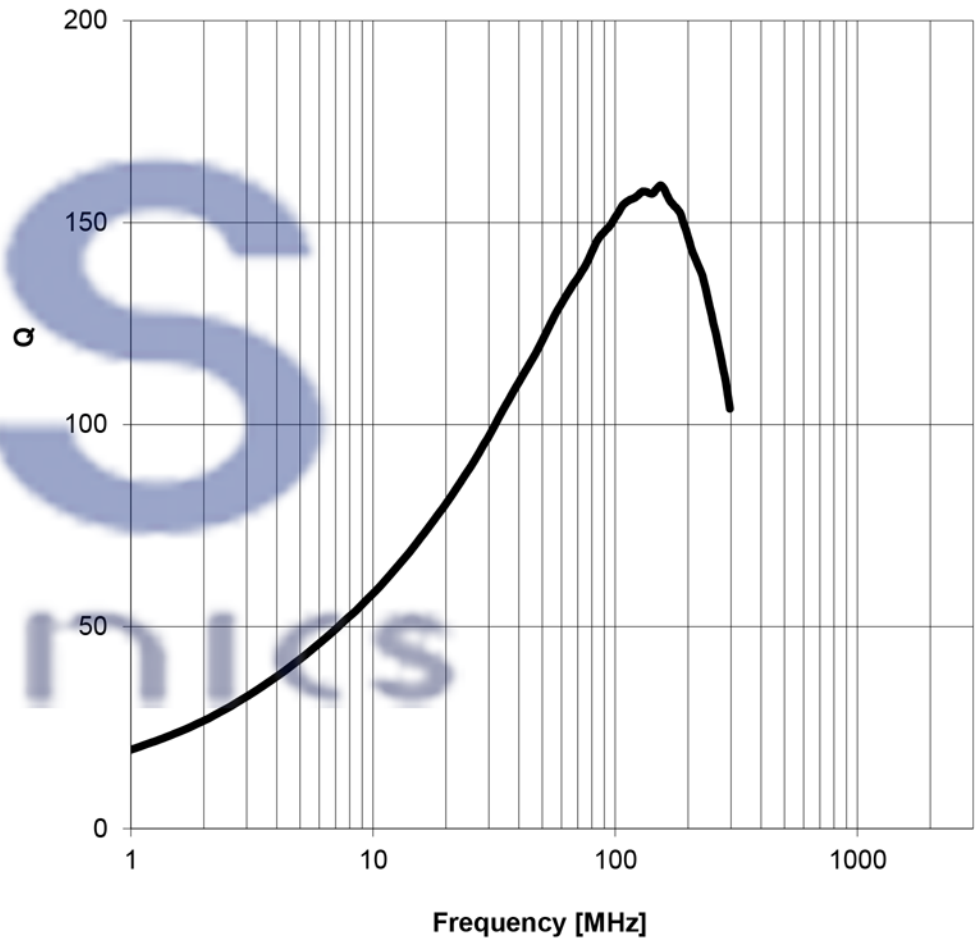
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|                                 |                                      |                                   |
|---------------------------------|--------------------------------------|-----------------------------------|
| DATE (YYYY-MM-DD)<br>2019-05-29 | GENERAL TOLERANCE<br>DIN ISO 2768-1m | PROJECTION METHOD<br>             |
| DESCRIPTION<br><b>Air coil</b>  |                                      | ORDER CODE<br><b>FKS744918222</b> |
| SIZE/TYPE<br>5910               |                                      | STATUS<br>Valid                   |

Typical Inductance vs. Frequency Characteristics:

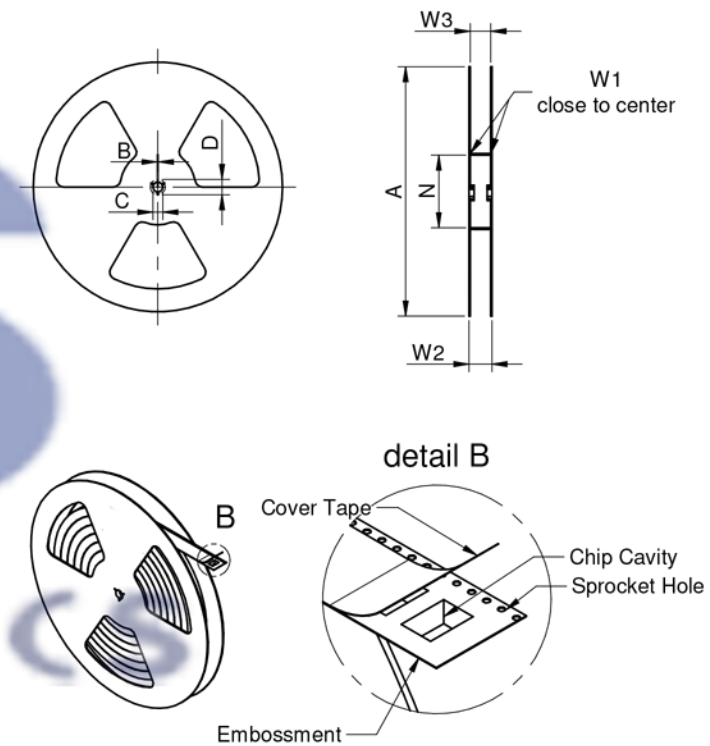
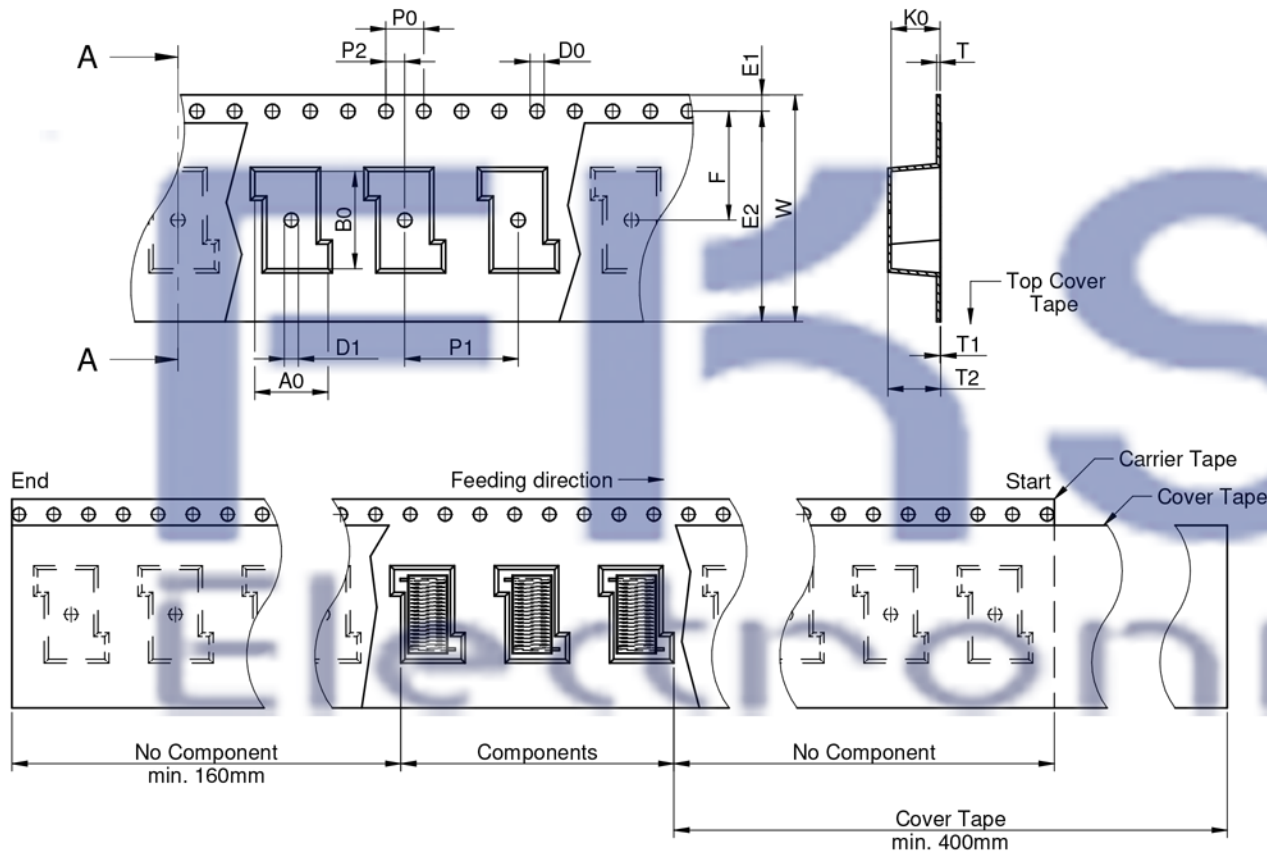


Q-Factor vs. Frequency:



|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |                                   |                                      |                                                                                                               |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------|--------------------------------------|---------------------------------------------------------------------------------------------------------------|
| <div><div><div>RoHS<br/>COMPLIANT</div></div><div><div>REACH<br/>COMPLIANT</div></div><div><div>HALOGEN<br/>FREE</div></div></div> <div><div><div>FKS<br/>Electronics</div></div><div></div><div><div>Shaanxi FKS Electronic Parts Import&amp;Export Co.,Ltd.</div><div>Address:Building B1,The West Cloud Valley, Fengxi New City,<br/>Xixian New Area,Xianyang City,Shaanxi Province,China.</div><div>Tel:0086 29 8868 5333 Fax:0086 29 8868 0913</div><div><a href="http://www.fks-tech.com">Http://www.fks-tech.com</a></div></div></div> |  | DATE (YYYY-MM-DD)<br>2019-05-29   | GENERAL TOLERANCE<br>DIN ISO 2768-1m | PROJECTION<br>METHOD<br> |
| DESCRIPTION<br><b>Air coil</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  | ORDER CODE<br><b>FKS744918222</b> |                                      |                                                                                                               |
| SIZE/TYPE<br>5910                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  | STATUS<br>Valid                   |                                      |                                                                                                               |

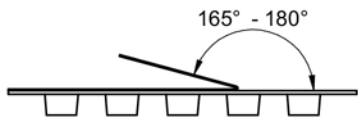
### Packaging Specification - Tape and Reel: [mm]



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.) |
|-----------|---------|---------|-----------|--------|---------|---------|---------|---------|---------|---------|-----------|---------|---------|---------|--------|-------------|-------------|
|           | typ.    | typ.    | +0,3/-0,1 | ref.   | max.    | typ.    | typ.    | ±0,1    | ±0,1    | ±0,1    | +0,1/-0,0 | min.    | ±0,1    | min.    | ±0,1   |             |             |
| 2a        | 7,10    | 9,75    | 24,00     | 0,35   | 0,10    | 4,95    | 5,30    | 4,00    | 12,00   | 2,00    | 1,50      | 1,50    | 1,75    | 22,25   | 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.    |                           |
| 330,00 | 1,50   | 12,80  | 20,20  | 60,00  | 24,40   | 30,40   | 23,90   | 27,40   | Polystyrene/ Polyurethane |



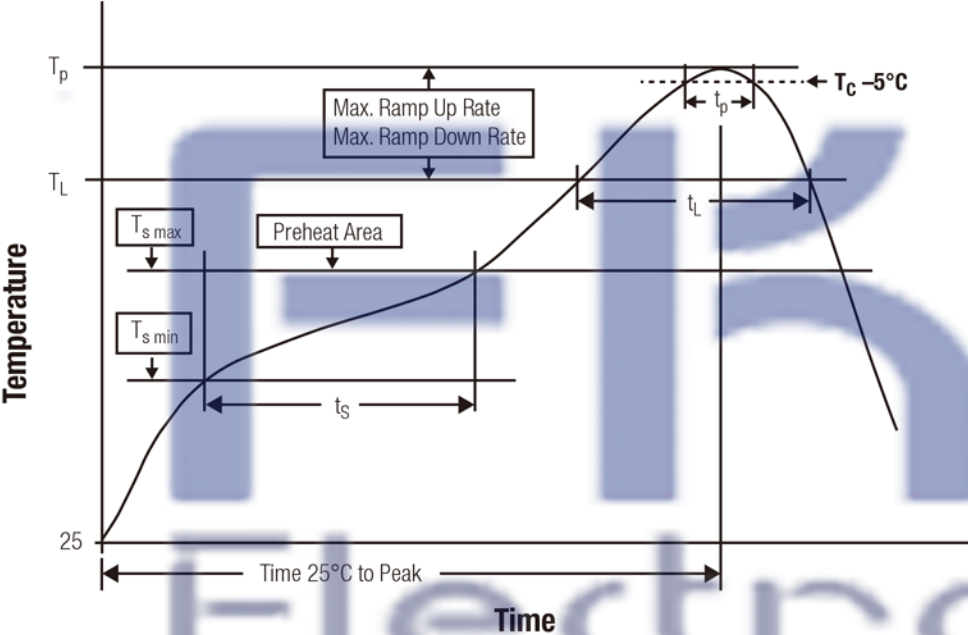
|            |       |               |
|------------|-------|---------------|
|            |       | Pull-of force |
| Tape width | 24 mm | 0,1 N - 1,3 N |



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|                          |                                 |                                      |                                                                                                               |
|--------------------------|---------------------------------|--------------------------------------|---------------------------------------------------------------------------------------------------------------|
|                          | DATE (YYYY-MM-DD)<br>2019-05-29 | GENERAL TOLERANCE<br>DIN ISO 2768-1m | PROJECTION<br>METHOD<br> |
| DESCRIPTION              | <b>Air coil</b>                 |                                      |                                                                                                               |
|                          |                                 | ORDER CODE<br><b>FKS744918222</b>    |                                                                                                               |
| SIZE/TYPE<br><b>5910</b> |                                 | STATUS<br><b>Valid</b>               |                                                                                                               |

Classification Reflow Profile for SMT components:



Classification Reflow Soldering Profile:

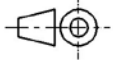
| Profile Feature                                      |              | Value             |
|------------------------------------------------------|--------------|-------------------|
| Preheat Temperature Min                              | $T_{s\ min}$ | 150 °C            |
| Preheat Temperature Max                              | $T_{s\ max}$ | 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

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |                                 |  |                                      |  |                                                                                                            |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------|--|--------------------------------------|--|------------------------------------------------------------------------------------------------------------|--|
| <div></div>                                                                                                                                                                                                                             |  | DATE (YYYY-MM-DD)<br>2019-05-29 |  | GENERAL TOLERANCE<br>DIN ISO 2768-1m |  | PROJECTION METHOD<br> |  |
| <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> |  | DESCRIPTION<br><b>Air coil</b>  |  |                                      |  | ORDER CODE<br><b>FKS744918222</b>                                                                          |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  | SIZE/TYPE<br>5910               |  |                                      |  | STATUS<br>Valid                                                                                            |  |