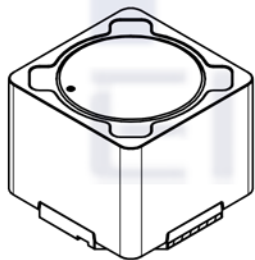
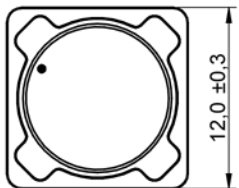
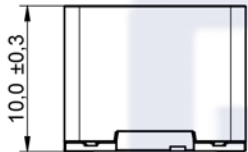
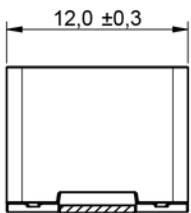
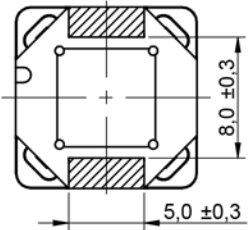


Dimensions: [mm]

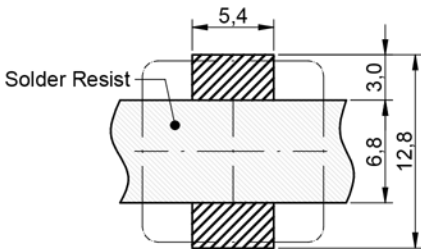


Scale - 2:1

Product Marking:

|                  |                        |
|------------------|------------------------|
| Start of Winding | •                      |
| Marking          | *221 (Inductance Code) |

Recommended Land Pattern: [mm]



No vias and traces in restricted area

Scale - 2:1

Schematic:



Electrical Properties:

| Properties              |                  | Test conditions | Value | Unit | Tol. |
|-------------------------|------------------|-----------------|-------|------|------|
| Inductance              | L                | 100 kHz/ 250 mV | 220   | µH   | ±20% |
| Rated Current           | I <sub>R</sub>   | ΔT = 40 K       | 1.45  | A    | max. |
| Saturation Current      | I <sub>SAT</sub> | ΔL/LI < 10 %    | 1.6   | A    | typ. |
| DC Resistance           | R <sub>DC</sub>  | @ 20 °C         | 205   | mΩ   | typ. |
| DC Resistance           | R <sub>DC</sub>  | @ 20 °C         | 245   | mΩ   | max. |
| Self Resonant Frequency | f <sub>res</sub> |                 | 2.9   | MHz  | typ. |

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 Properties:

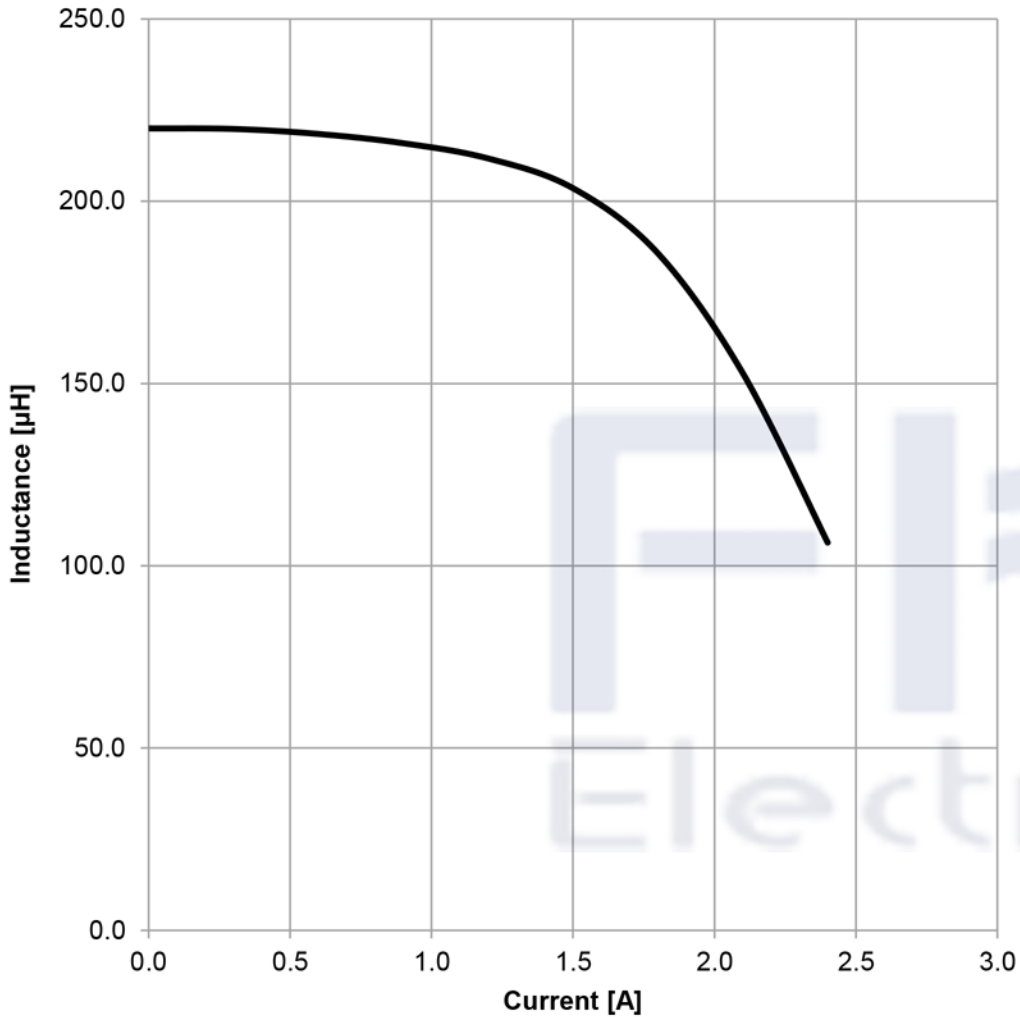
|                                                                                                             |                     |
|-------------------------------------------------------------------------------------------------------------|---------------------|
| It is recommended that the temperature of the component does not exceed +125 °C under worst case conditions |                     |
| Ambient Temperature (referring to I <sub>R</sub> )                                                          | -40 up to +85 °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                      |                     |
| Coplanarity of the terminal pads: 120 µm                                                                    |                     |



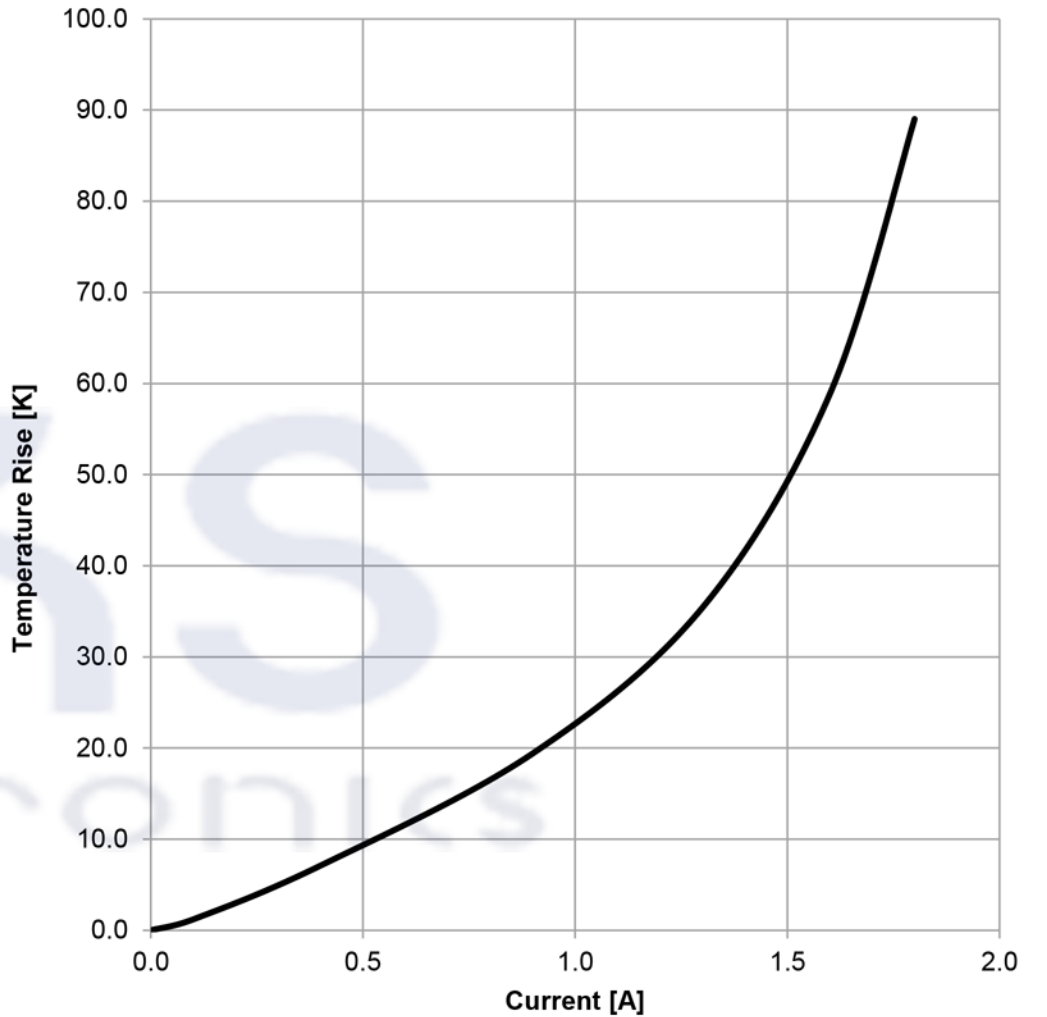
Shaanxi FKS Electronic Parts Import&Export Co.,Ltd.  
Address:Building B1,The West Cloud Valley, Fengxi New City  
Xixian New Area,Xianyang City,Shaanxi Province,China.  
Tel:0086 29 8868 5333 Fax:0086 29 8868 0913  
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|                                                   |                                      |                                    |
|---------------------------------------------------|--------------------------------------|------------------------------------|
| DATE (YYYY-MM-DD)<br>2019-02-15                   | GENERAL TOLERANCE<br>DIN ISO 2768-1m | PROJECTION METHOD<br>              |
| DESCRIPTION<br><b>SMT Shielded Power Inductor</b> |                                      | ORDER CODE<br><b>FKS7847709221</b> |
| SIZE/TYPE<br>1210                                 |                                      | STATUS<br>Valid                    |

Typical Inductance vs. Current Characteristics:

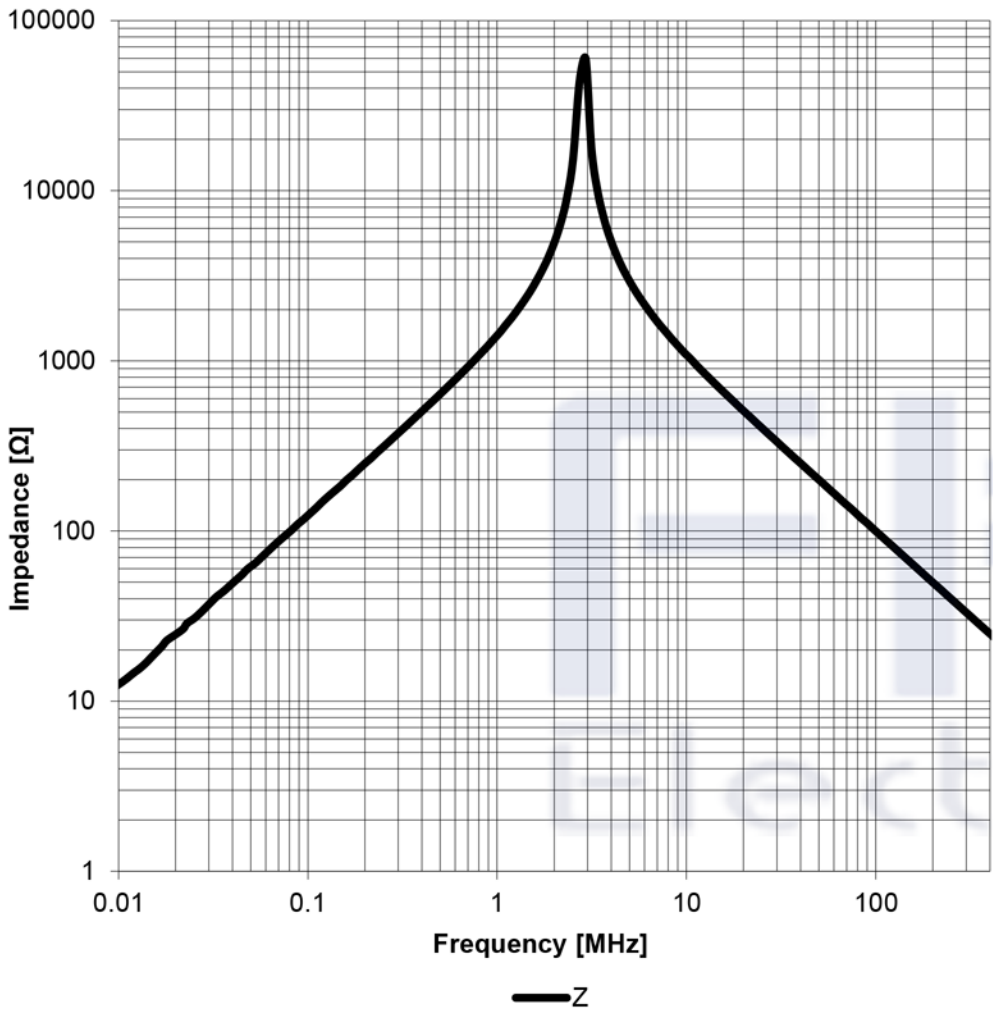


Typical Temperature Rise vs. Current Characteristics:



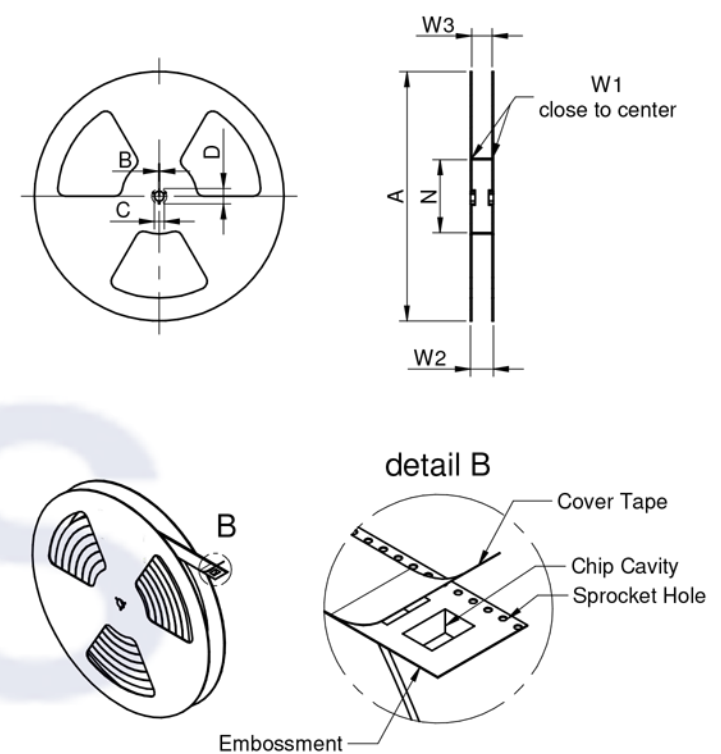
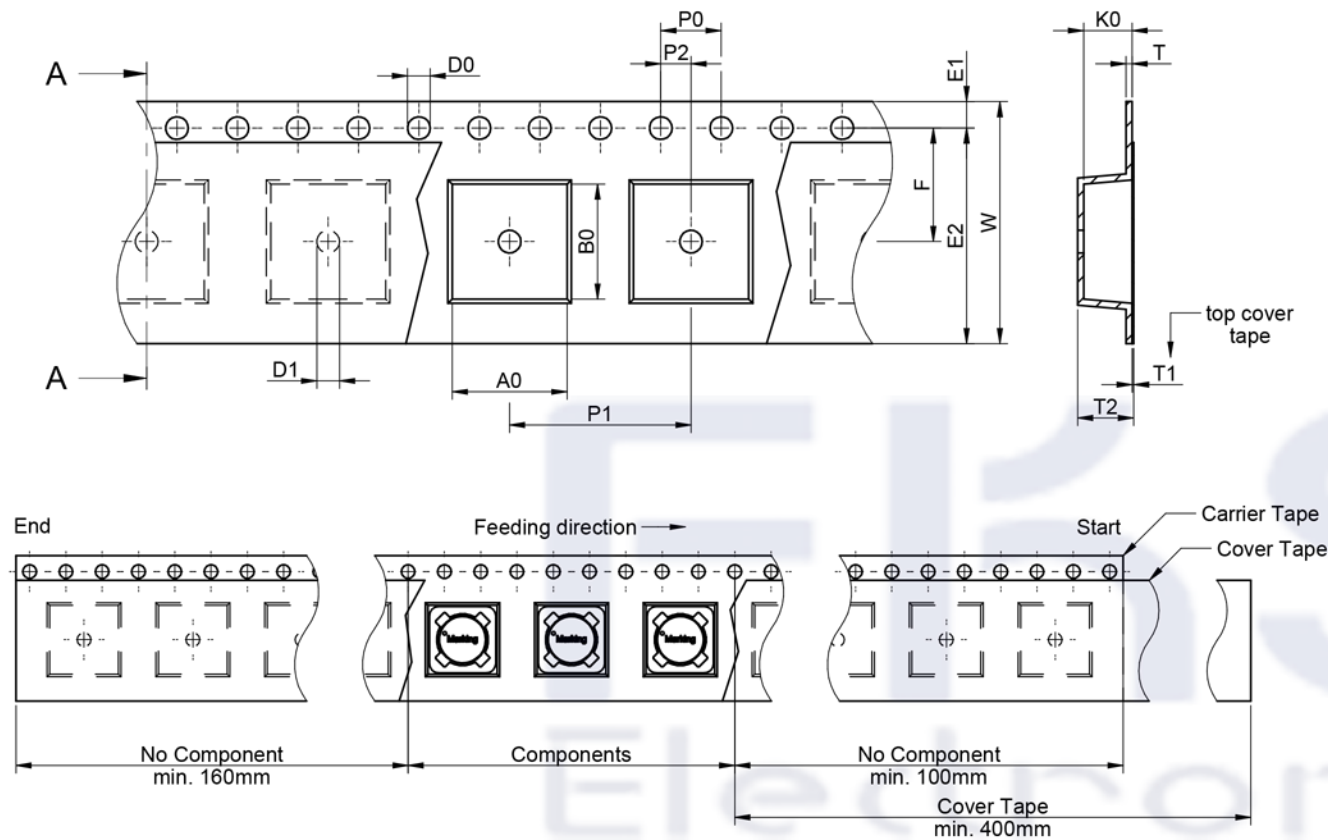
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |  |                                                          |  |                                      |                                    |                                                                                                            |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|----------------------------------------------------------|--|--------------------------------------|------------------------------------|------------------------------------------------------------------------------------------------------------|--|
| <div><div><div>RoHS<br/>COMPLIANT</div></div><div><div>REACH<br/>COMPLIANT</div></div><div><div>HALOGEN<br/>FREE</div></div><div><div>AEC<br/>Q200</div></div><div><div>125 °C<br/>GRADE 1</div></div></div> |  |  |  | DATE (YYYY-MM-DD)<br>2019-02-15                          |  | 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>WE-PDA SMT Shielded Power Inductor</b> |  |                                      | ORDER CODE<br><b>FKS7847709221</b> |                                                                                                            |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |  | SIZE/TYPE<br>1210                                        |  |                                      | STATUS<br>Valid                    |                                                                                                            |  |

Typical Impedance Characteristics:



|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |                                                   |  |                                      |                             |                                                                                                            |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|---------------------------------------------------|--|--------------------------------------|-----------------------------|------------------------------------------------------------------------------------------------------------|--|
| <div><div><div><div>RoHS<br/>COMPLIANT</div></div><div><div>REACH<br/>COMPLIANT</div></div><div><div>HALOGEN<br/>FREE</div></div><div><div>AEC<br/>Q200<br/>125 °C<br/>GRADE 1</div></div></div></div>  |  |  |  | DATE (YYY-MM-DD)<br>2019-02-15                    |  | GENERAL TOLERANCE<br>DIN ISO 2768-1m |                             | PROJECTION METHOD<br> |  |
| <div><div><div><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></div></div></div> |  |  |  | DESCRIPTION<br><b>SMT Shielded Power Inductor</b> |  |                                      | ORDER CODE<br>FKS7847709221 |                                                                                                            |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |                                                   |  |                                      | STATUS<br>Valid             |                                                                                                            |  |
| SIZE/TYPE<br>1210                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |  |  |                                                   |  |                                      |                             |                                                                                                            |  |

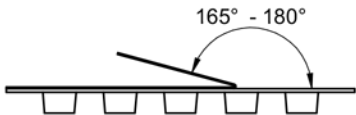
Packaging Specification - Tape and Reel: [mm]



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

|           | A0   | B0    | W         | T    | T1   | T2   | K0   | P0   | P1   | P2   | D0        | D1   | E1   | E2   | F     | Tape Type 2a | VPE / packaging unit |
|-----------|------|-------|-----------|------|------|------|------|------|------|------|-----------|------|------|------|-------|--------------|----------------------|
| tolerance | typ. | typ.  | +0,3/-0,1 | max. | max. | typ. | typ. | ±0,1 | ±0,1 | ±0,1 | +0,1/-0,0 | min. | ±0,1 | min. | ±0,1  |              | pcs.                 |
| size      | 1210 | 12,40 | 12,4      | 24,0 | 0,6  | 0,1  | 10,9 | 10,3 | 4,0  | 20,0 | 2,0       | 1,5  | 1,5  | 1,75 | 22,25 | 11,5         | Polystyrene 250      |

|            | A     | B      | C    | D     | N     | W1    | W2    | W3    | W3          |
|------------|-------|--------|------|-------|-------|-------|-------|-------|-------------|
| Tolerance  | ± 2,0 | min.   | min. | min.  | ± 2,0 | + 2   | max.  | min.  | max.        |
| Tape width | 24mm  | 330,00 | 1,50 | 12,80 | 20,20 | 60,00 | 24,40 | 30,40 | 23,90 27,40 |



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

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DATE (YYYY-MM-DD)  
2019-02-15

GENERAL TOLERANCE  
DIN ISO 2768-1m

PROJECTION METHOD

DESCRIPTION  
**SMT Shielded Power Inductor**

ORDER CODE  
**FKS7847709221**

SIZE/TYPE  
1210

STATUS  
Valid