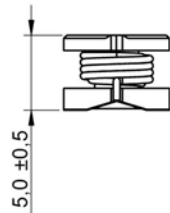
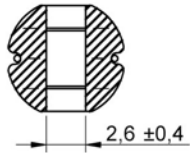


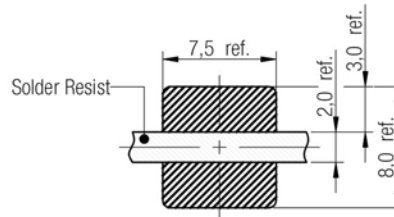
A Dimensions: [mm]



Scale - 2:1

| Reference on drawing | Description |
|----------------------|-----------------------|
| • | Start of winding |
| Marking | 151 (Inductance Code) |

B Recommended land pattern: [mm]



no vias and traces in restricted area

Scale - 2:1

C Schematic:



D Electrical Properties:

| Properties | Test conditions | | Value | Unit | Tol. |
|----------------------------|-----------------|------------------|-------|-----------------|------|
| Inductance | 10 KHz/ 100 mV | L | 150 | μH | ±10% |
| Rated Current | ΔT = 40 K | I _R | 0.60 | A | max. |
| Saturation Current | IΔL/LI < 10% | I _{sat} | 0.71 | A | typ. |
| DC Resistance | @ 20°C | R _{DC} | 0.64 | Ω | max. |
| DC Resistance | @ 20°C | R _{DC} | 0.467 | Ω | typ. |
| Self Resonant Freq. | @ 20°C | f _{res} | 6 | MHz | typ. |
| Rated Voltage | @ 20°C | U _R | 80 | V _{DC} | max. |

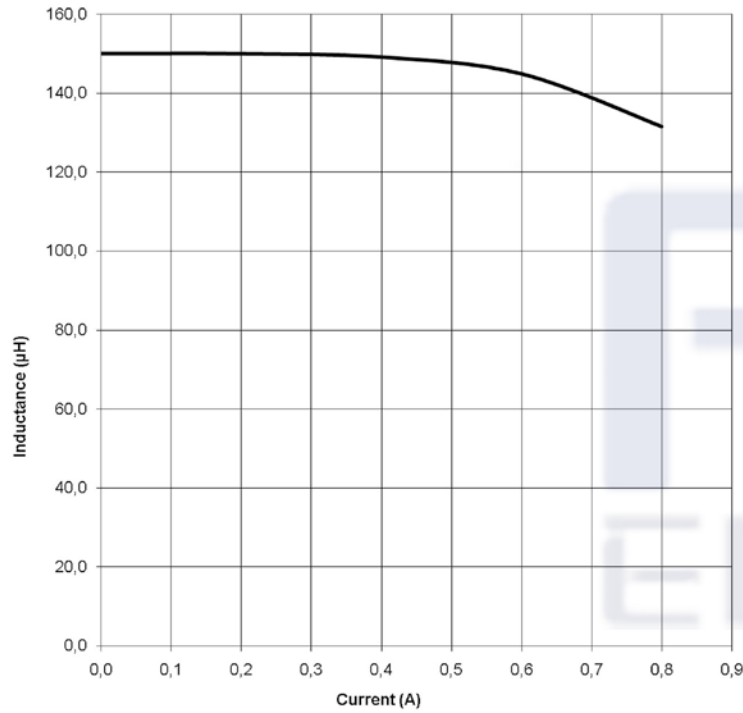
E General information:

It is recommended that the temperature of the part does not exceed 125°C under worst case operating conditions.

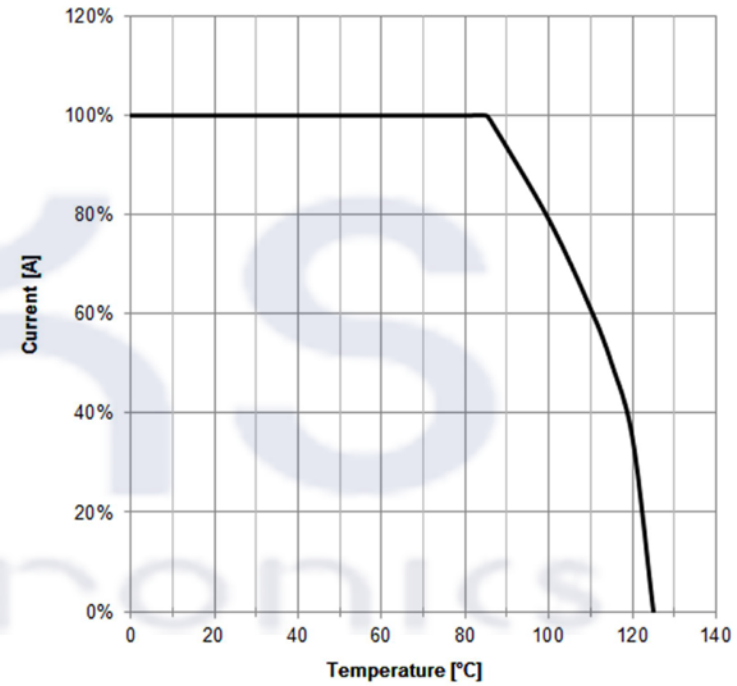
- Ambient temperature: -40°C to +85°C (referring to I_R)
- Operating temperature: -40°C to +125°C
- Storage temperature (on tape & reel): -20°C to +40°C; 75% RH max.
- Coplanarity of the terminal pads: 120μm
- Test conditions of Electrical Properties: 20°C, 33% RH
- AEC-Q 200 qualified

| | | | | |
|--|--|------------|--|------------|
| 2015-01-07 | | Projection | DESCRIPTION | SIZE |
| | | | | |
| Shaanxi FKS Electronic Parts Import&Export Co.,Ltd. FKS(Xi'an) Electronic Technology Co.,Ltd. Address: B1 Building,Western Cloud Valley,Fengxi New Town Xixian New Area,Xi'an City, Shaanxi Province,China. Tel: +86-29-8868 5333 Fax: +86-29-8868 0913 | | | SMD Power Inductor Order.- No. FKS784775215 | A4 |
| | | | | Size: 7850 |
| DATE | | | | |

F1 Typical Inductance vs. Current Characteristics:



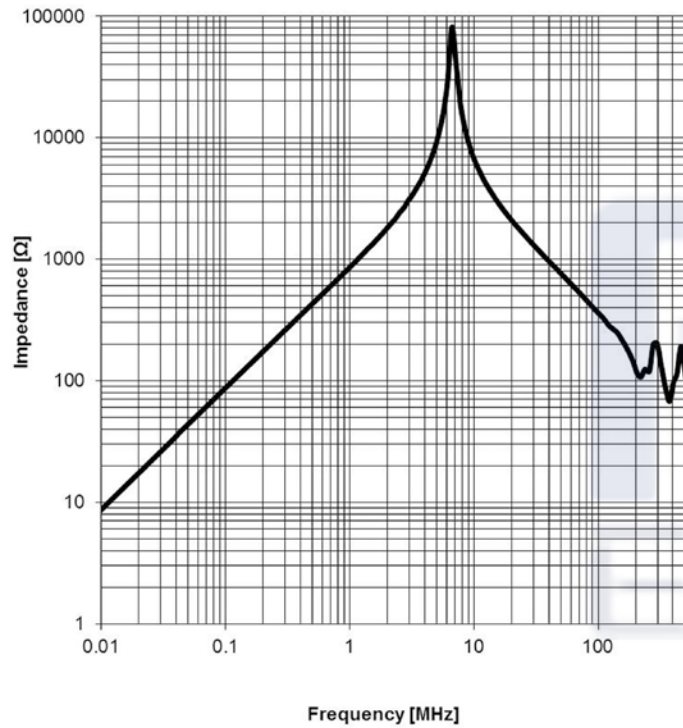
F2 Derating Curve:



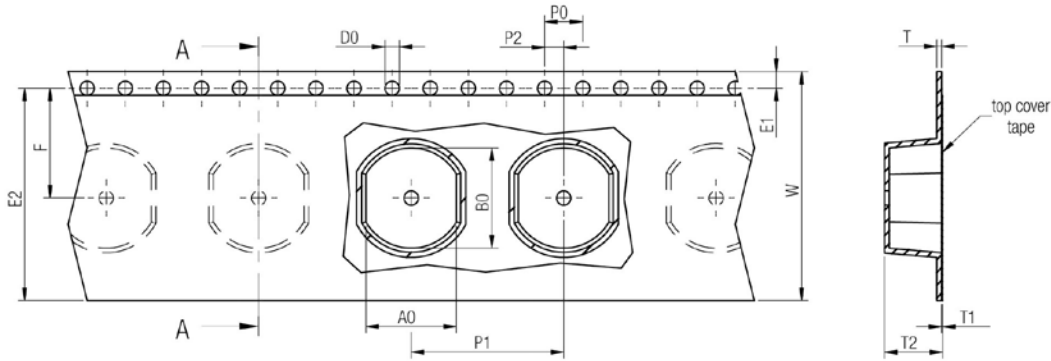
| | | | | | |
|--|------------|--|---|---------------------------|------|
| | | | Projection | DESCRIPTION | |
| | 2015-01-07 | | | SMD Power Inductor | |
| | | | Shaanxi FKS Electronic Parts Import&Export Co.,Ltd. FKS(Xi'an) Electronic Technology Co.,Ltd. Address: B1 Building,Western Cloud Valley,Fengxi New Town Xi'an New Area,Xi'an City, Shaanxi Province,China. Tel: +86-29-8868 5333 Fax: +86-29-8868 0913 | | |
| | DATE | | | FKS784775215 | SIZE |
| | | | | Size: 7850 | A4 |



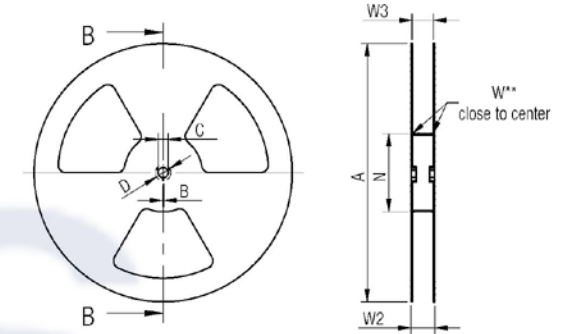
F3 Typical Impedance Characteristics:



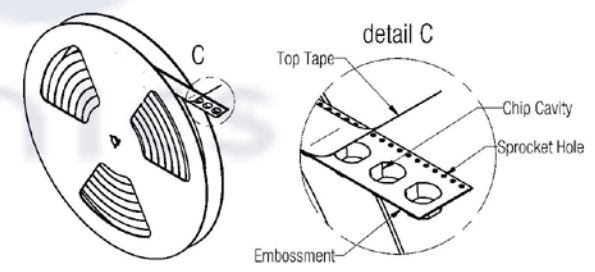
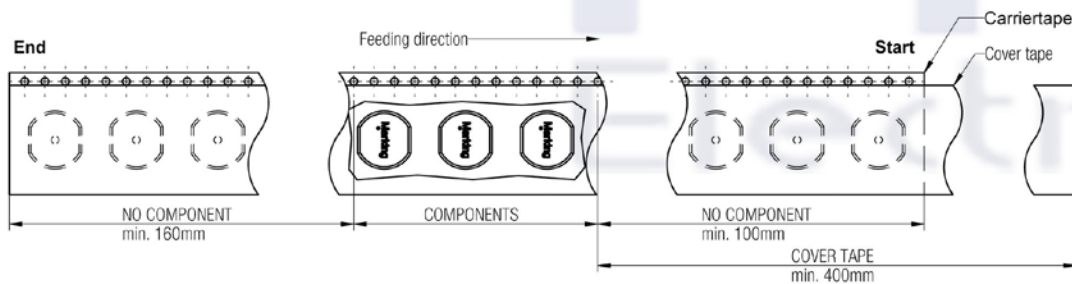
| | | | | | | | |
|--|------------|--|--|--|---------------------------|--|--------------|
| | | | | Projection | DESCRIPTION | | |
| | 2015-01-07 | | | | SMD Power Inductor | | |
| | | | | Shaanxi FKS Electronic Parts Import&Export Co.,Ltd. FKS(Xi'an) Electronic Technology Co.,Ltd. Address: B1 Building,Western Cloud Valley,Fengxi New Town Xixian New Area,Xi'an City, Shaanxi Province,China. Tel: +86-29-8868 5333 Fax: +86-29-8868 0913 | Order.- No. | | SIZE |
| | | | | | | | FKS784775215 |
| | DATE | | | | Size: 7850 | | |



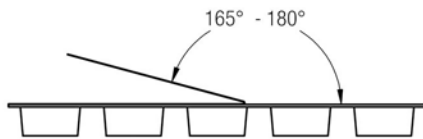
| size | tolerance | | A0 | B0 | W | P1 | T | T1 | T2 | D0 | E1 | E2 | F | P0 | P2 | VPE / packaging unit |
|------|-----------|-------|-------|-------|------|------|------|------|------|-------|-------|------|------|------|------|----------------------|
| | typ. | typ. | typ. | typ. | typ. | typ. | typ. | typ. | typ. | typ. | typ. | typ. | typ. | typ. | typ. | |
| 4532 | 4.50 | 5.50 | 16,00 | 8,00 | 0,25 | 0,10 | 4,00 | 1,50 | 1,75 | 14,25 | 7,50 | 4,00 | 2,00 | | | 1500 |
| 5848 | 5.50 | 6.50 | 16,00 | 8,00 | 0,25 | 0,10 | 5,50 | 1,50 | 1,75 | 14,25 | 7,50 | 4,00 | 2,00 | | | 1500 |
| 7850 | 7.50 | 8.50 | 16,00 | 12,00 | 0,25 | 0,10 | 6,00 | 1,50 | 1,75 | 14,25 | 7,50 | 4,00 | 2,00 | | | 500 |
| 1054 | 9.50 | 10.50 | 24,00 | 16,00 | 0,50 | 0,10 | 7,00 | 1,50 | 1,75 | 22,25 | 11,50 | 4,00 | 2,00 | | | 500 |



| tolerance | | A | B | C | D | N | W1 | W2 | W3 | W3 |
|------------|-------|--------|------|------------|-------|--------|------------|-------|-------|-------|
| | | min. | min. | ± 0.8 min. | min. | min. | + 1.5 max. | min. | min. | max. |
| Tape width | 16 mm | 330,00 | 1.50 | 13,00 | 20,20 | 100,00 | 16,40 | 22,40 | 15,90 | 19,40 |
| | 24 mm | 330,00 | 1.50 | 13,00 | 20,20 | 100,00 | 24,40 | 30,40 | 23,90 | 27,40 |



Packaging is referred to the international standard IEC 60286 -3:2007



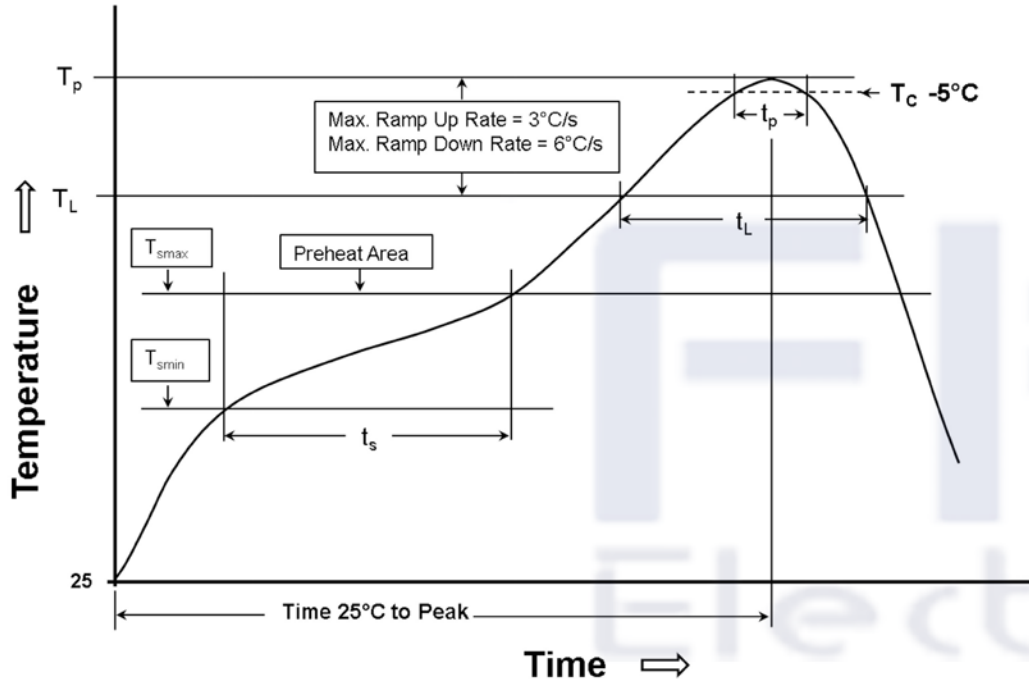
| Tape width | Pull-of force | |
|------------|---------------|---------------|
| | 16 mm | 0,1 N - 1,3 N |
| 24 mm | 0,1 N - 1,3 N | |

| | | |
|------------|--|------------------------------------|
| 2015-01-07 | Projection | DESCRIPTION |
| | | SMD Power Inductor |
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| | | |
| DATE | | SIZE A4 |
| | | Size: 7850 |

H Soldering Specifications:



H1: Classification Reflow Profile for SMT components:



H2: Classification Reflow Profiles

| Profile Feature | Pb-Free Assembly | Sn-Pb Assembly |
|---|----------------------------------|----------------------------------|
| Preheat - Temperature Min (T_{smin}) - Temperature Max (T_{smax}) - Time (t_s) from (T_{smin} to T_{smax}) | 150°C 200°C 60-120 seconds | 100°C 150°C 60-120 seconds |
| Ramp-up rate (T_L to T_p) | 3°C/ second max. | 3°C/ second max. |
| Liquidous temperature (T_L) Time (t_L) maintained above T_L | 217°C 60-150 seconds | 183°C 60-150 seconds |
| Peak package body temperature (T_p) | See Table H3 | See table H3 |
| Time within 5°C of actual peak temperature (t_p) | 30 seconds | 20 seconds |
| Ramp-down rate (T_p to T_L) | 6°C/ second max. | 6°C/ second max. |
| Time 25°C to peak temperature | 8 minutes max. | 6 minutes max. |

refer to IPC/JEDEC J-STD-020D

H3: Package Classification Reflow Temperature

| | Package Thickness | Volume mm ³ <350 | Volume mm ³ >350 | Volume mm ³ 350 - 2000 | Volume mm ³ >2000 |
|-------------------------|-------------------|--------------------------------|--------------------------------|--------------------------------------|---------------------------------|
| PB-Free Assembly | < 1.6 mm | 260°C | | 260°C | 260°C |
| PB-Free Assembly | 1.6 - 2.5 mm | 260°C | | 250°C | 245°C |
| PB-Free Assembly | > 2.5 mm | 250°C | | 245°C | 245°C |
| Sn-Pb Assembly | < 2.5 mm | 235°C | 220°C | | |
| Sn-Pb Assembly | ≥ 2.5 mm | 220°C | 220°C | | |

| | | |
|------------|--|--|
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| DATE | | SIZE A4 |
| | | Size: 7850 |