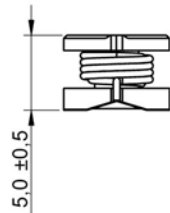
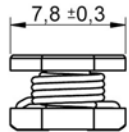
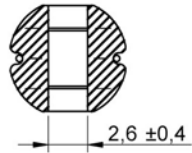


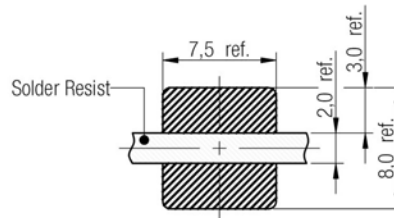
**A Dimensions: [mm]**



Scale - 2:1

Reference on drawing	Description
•	Start of winding
Marking	150 (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.
<b>Inductance</b>	10 KHz/ 100 mV	L	15	μH	±10%
<b>Rated Current</b>	ΔT = 40 K	I <sub>R</sub>	1.93	A	max.
<b>Saturation Current</b>	ΔL/L  < 10%	I <sub>sat</sub>	2.20	A	typ.
<b>DC Resistance</b>	@ 20°C	R <sub>DC</sub>	0.090	Ω	max.
<b>DC Resistance</b>	@ 20°C	R <sub>DC</sub>	0.044	Ω	typ.
<b>Self Resonant Freq.</b>	@ 20°C	f <sub>res</sub>	18	MHz	typ.
<b>Rated Voltage</b>	@ 20°C	U <sub>R</sub>	80	V <sub>DC</sub>	max.

**E General information:**

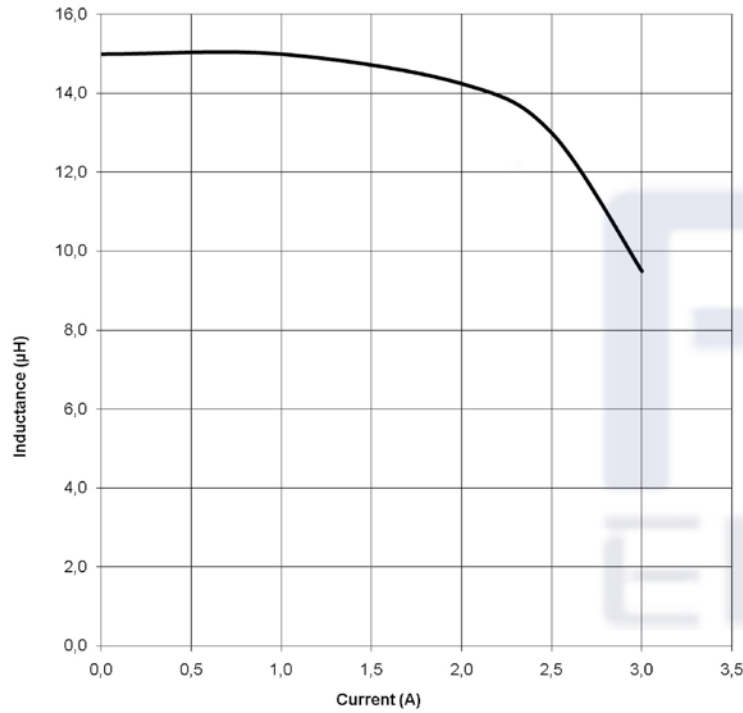
It is recommended that the temperature of the part does not exceed 125°C under worst case operating conditions.

- Ambient temperature: -40°C to +85°C (referring to I<sub>R</sub>)
- 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

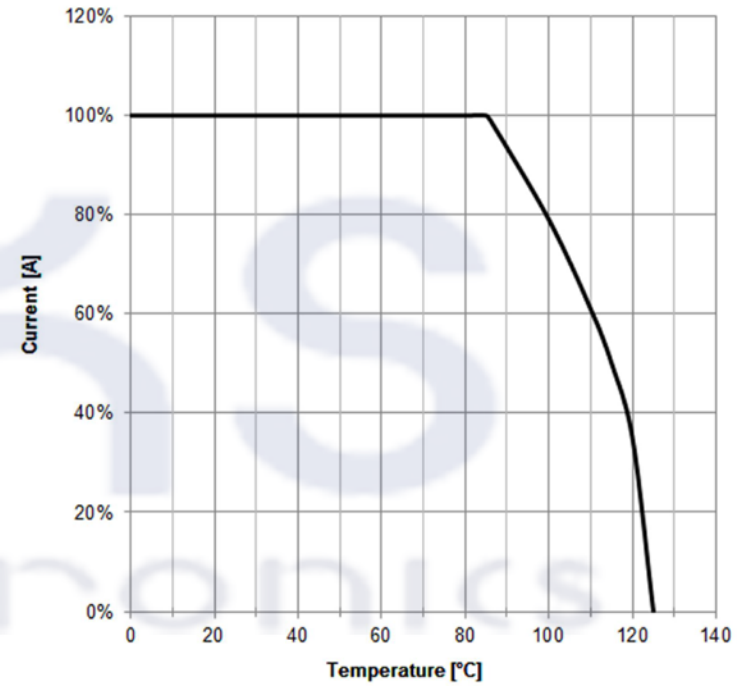
2015-01-07		Projection	DESCRIPTION	SIZE
		Shaansi FKS Electronic Parts Import&Export Co.,Ltd. FKS(Xi'an) Electronic Technology Co.,Ltd. Address: B1 Building,Western Cloud Valley,Fengxi New Town Xixian New Area,Xi'an City, Shaansi Province,China. Tel: +86-29-8868 5333 Fax: +86-29-8868 0913	<b>SMD Power Inductor</b>  Order.- No. <b>FKS784775115</b>	
DATE				

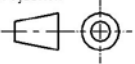





**F1 Typical Inductance vs. Current Characteristics:**



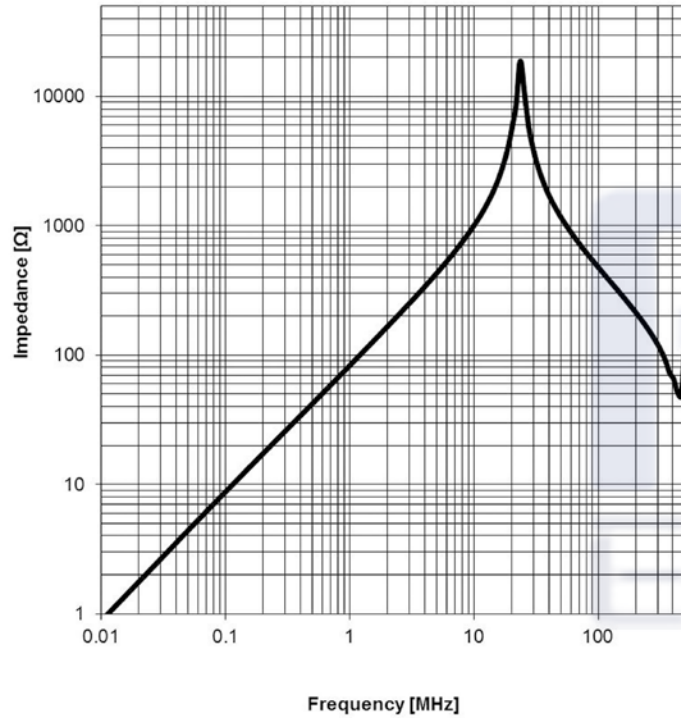
**F2 Derating Curve:**



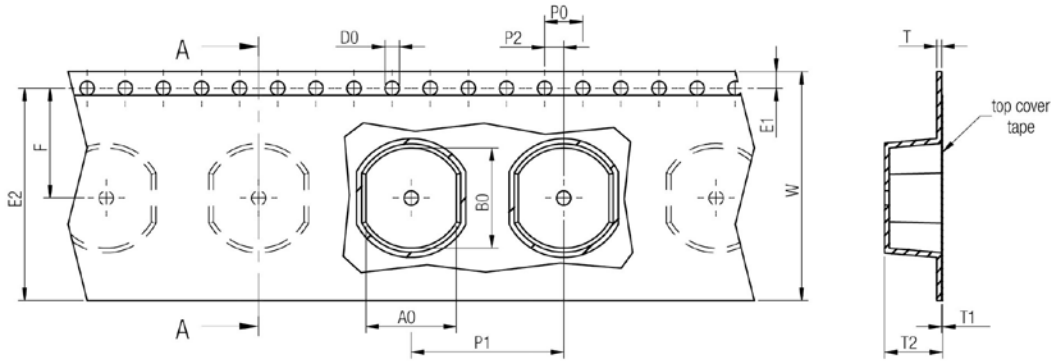
	2015-01-07		Projection 	DESCRIPTION  <h3 style="text-align: center;">SMD Power Inductor</h3>			
Shaanxi FKS Electronic Parts Import&Export Co.,Ltd. FKS(Xi'an) Electronic Technology Co.,Ltd. Address: B1 Building,Western Cloud Valley,Fengxi New Town Xi'an New Area,Xi'an City, Shaanxi Province,China. Tel: +86-29-8868 5333 Fax: +86-29-8868 0913   						Order.- No. <h2 style="text-align: center;">FKS784775115</h2>	 <b>COMPLIANT</b> <b>RoHS&amp;REACH</b> HALOGEN FREE
DATE						Size: 7850	



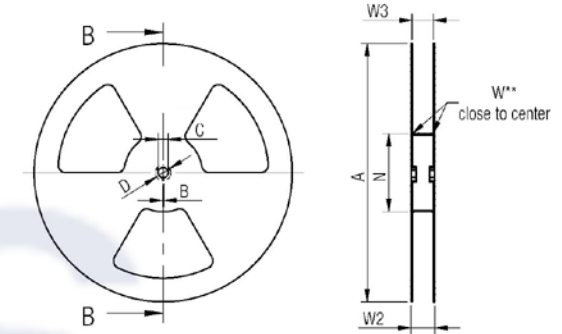
**F3 Typical Impedance Characteristics:**



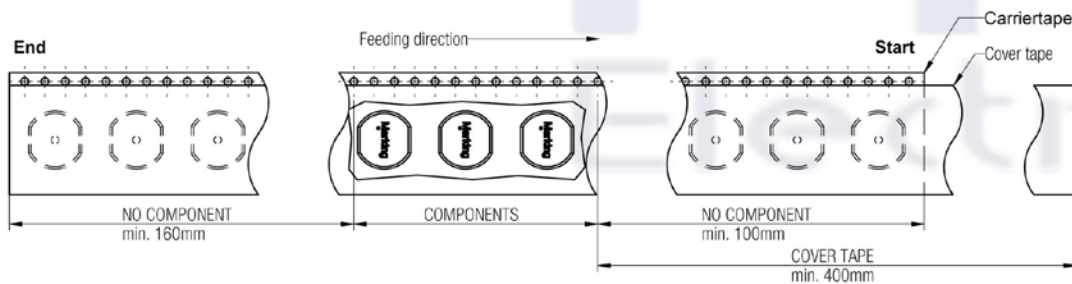
				Projection 	DESCRIPTION
	2015-01-07				<b>SMD Power Inductor</b>
				Shaanxi FKS Electronic Parts Import&Export Co.,Ltd. FKS(Xi'an) Electronic Technology Co.,Ltd. Address: B1 Building,Western Cloud Valley,Fengxi New Town Xixian New Area,Xi'an City, Shaanxi Province,China. Tel: +86-29-8868 5333 Fax: +86-29-8868 0913 	Order.- No. FKS784775115 
	DATE				SIZE A4
					Size: 7850



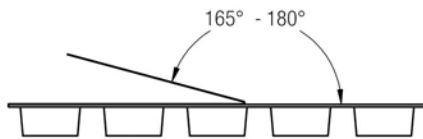
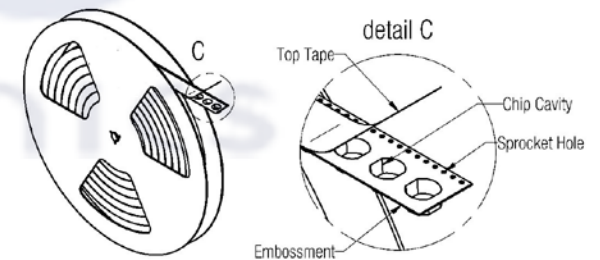
size	tolerance		A0	B0	W	P1	T	T1	T2	D0	E1	E2	F	P0	P2	VPE / packaging unit
	typ.	typ.	typ.	typ.	typ.	typ.	typ.	typ.	typ.	typ.	typ.	typ.	typ.	typ.	typ.	
4532	4.50	5.50	16,00	8,00	0,25	0,10	4,00	1,50	1,75	14,25	7,50	4,00	2,00			1500
5848	5.50	6.50	16,00	8,00	0,25	0,10	5,50	1,50	1,75	14,25	7,50	4,00	2,00			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
Tape width 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



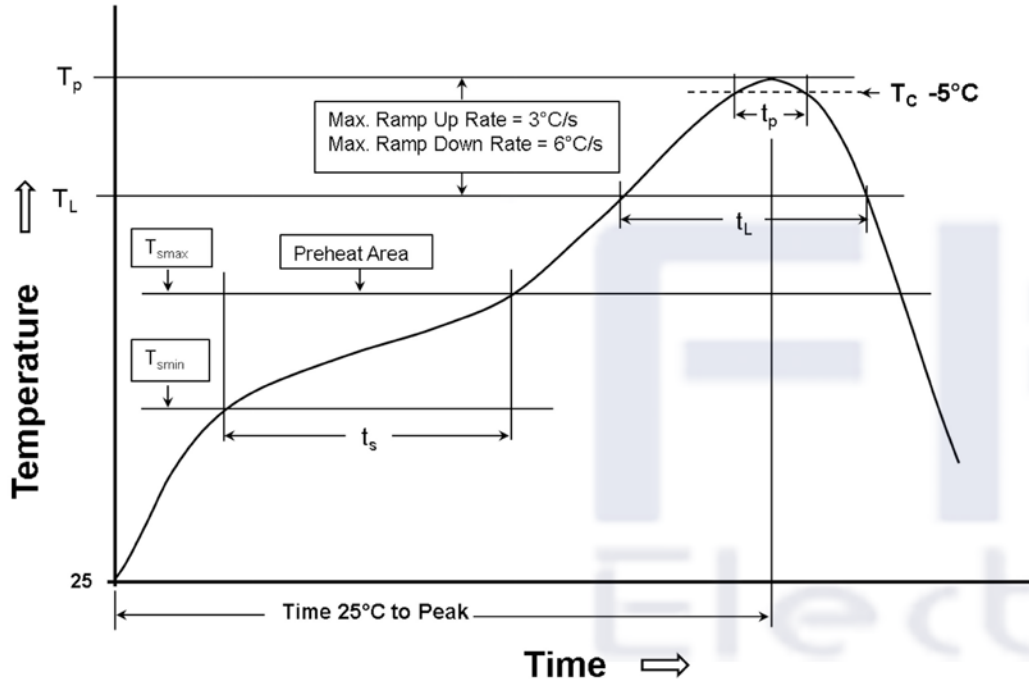
Tape width	Pull-of force	
	16 mm	0,1 N - 1,3 N
24 mm	0,1 N - 1,3 N	

2015-01-07	Projection	DESCRIPTION	
	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	<b>SMD Power Inductor</b>	
		Order.- No. FKS784775115	SIZE A4
DATE		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 <sup>3</sup> <350	Volume mm <sup>3</sup> >350	Volume mm <sup>3</sup> 350 - 2000	Volume mm <sup>3</sup> >2000
<b>PB-Free Assembly</b>	< 1.6 mm	260°C		260°C	260°C
<b>PB-Free Assembly</b>	1.6 - 2.5 mm	260°C		250°C	245°C
<b>PB-Free Assembly</b>	> 2.5 mm	250°C		245°C	245°C
<b>Sn-Pb Assembly</b>	< 2.5 mm	235°C	220°C		
<b>Sn-Pb Assembly</b>	≥ 2.5 mm	220°C	220°C		

2015-01-07	Projection 	DESCRIPTION
	Shaaxi 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, Shaaxi Province,China. Tel: +86-29-8868 5333 Fax: +86-29-8868 0913	<b>SMD Power Inductor</b>
		Order.- No. FKS784775115
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		COMPLIANT RoHS&REACH HALOGENFREE
		SIZE A4