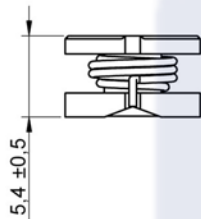
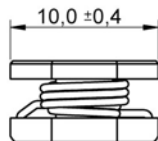
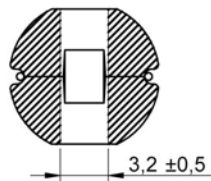


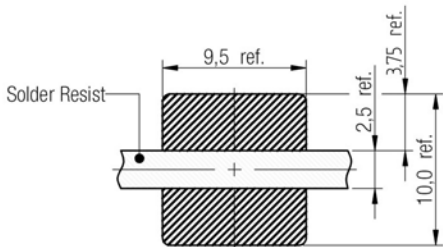
A Dimensions: [mm]



Scale - 2:1

Reference on drawing	Description
•	Start of winding
Marking	820 (Inductance Code)

B Recommended land pattern: [mm]



no vias and traces in restricted area

Scale - 2:1

C Schematic:



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D Electrical Properties:

Properties	Test conditions		Value	Unit	Tol.
Inductance	10 KHz/ 100 mV	L	82	μH	±10%
Rated Current	ΔT = 40 K	I _R	1.11	A	max.
Saturation Current	ΔL/L < 10%	I _{sat}	1.17	A	typ.
DC Resistance	@ 20°C	R _{DC}	0.25	Ω	max.
DC Resistance	@ 20°C	R _{DC}	0.150	Ω	typ.
Self Resonant Freq.	@ 20°C	f _{res}	7	MHz	typ.
Rated Voltage	@ 20°C	U _R	80	V _{DC}	max.

E General information:

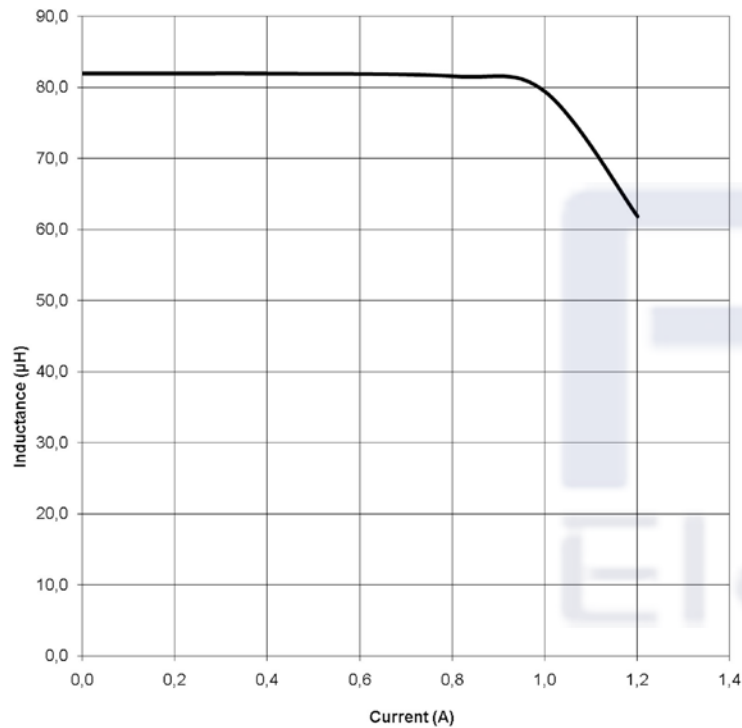
It is recommended that the temperature of the part does not exceed 125°C under worst case operating conditions.

- 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

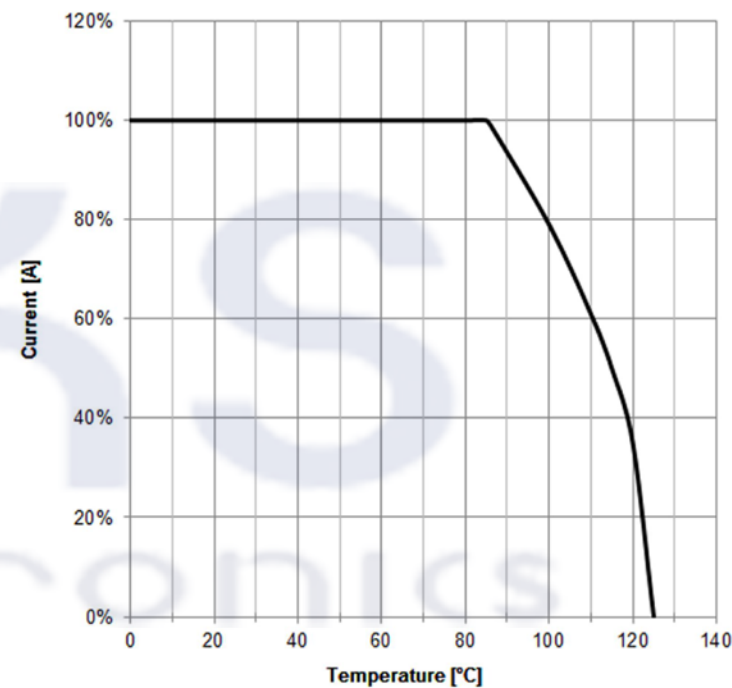
				Projection		DESCRIPTION
	2015-01-07					SMD Power Inductor
				Shaanxi FKS Electronic Parts Import&Export Co.,Ltd. FKS(Xi'an) Electronic Technology Co.,Ltd. Address: B1 Building,Western Cloud Valley,Fengxi New Town, Xixian New Area,Xi'an City, Shaanxi Province,China. Tel: +86-29-8868 5333 Fax: +86-29-8868 0913		Order.- No. KS784776182
						SIZE A4
	DATE					Size: 1054

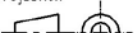


F1 Typical Inductance vs. Current Characteristics:



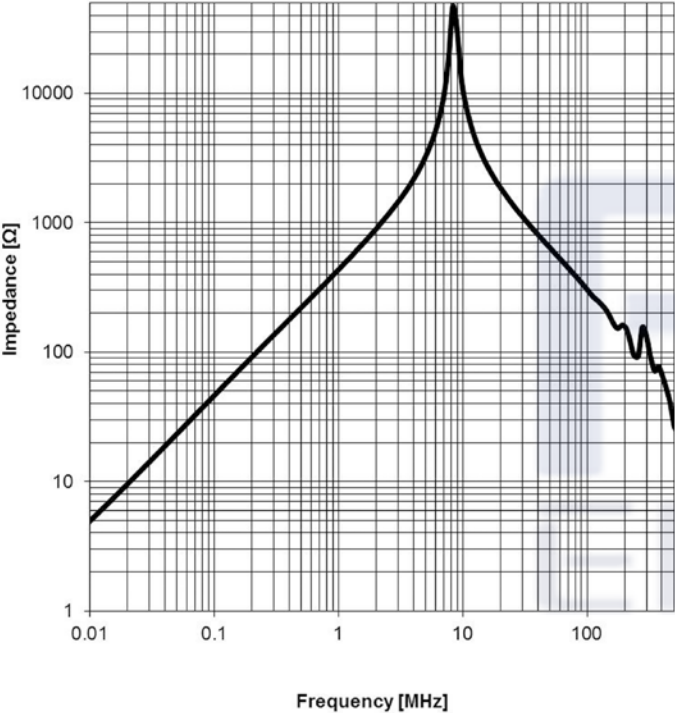
F2 Derating Curve:



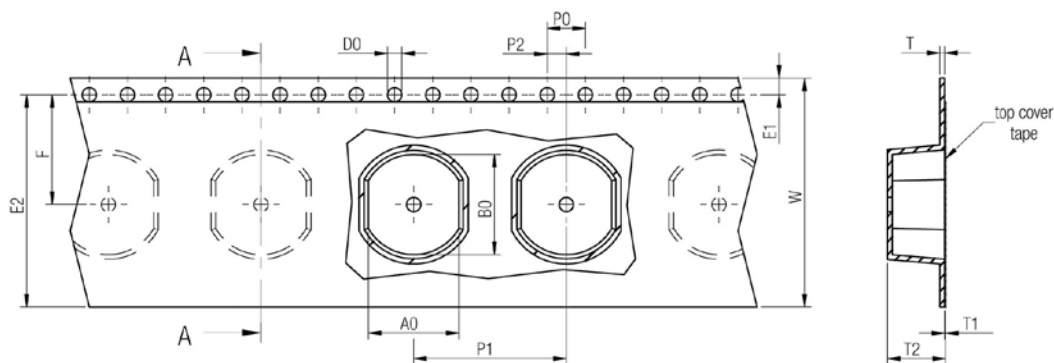
				Projection	DESCRIPTION		
	2015-01-07						
				Shaanxi FKS Electronic Parts Import&Export Co.,Ltd. FKS(Xi'an) Electronic Technology Co.,Ltd. Address: B1 Building,Western Cloud Valley,Fengxi New Town, Xidian New Area,Xi'an City, Shaanxi Province,China. Tel: +86-29-8868 5333 Fax: +86-29-8868 0913	SMD Power Inductor		
				 			
					Order.- No. KS784776182	 COMPLIANT RoHS&REACH HALOGENFREE	SIZE
					Size: 1054		A4
	DATE						



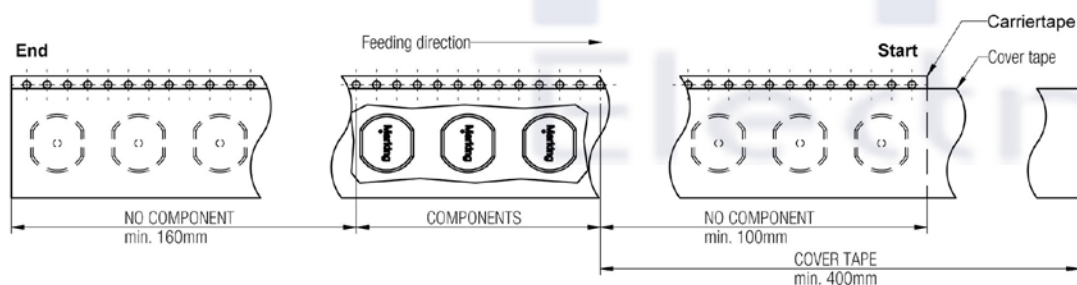
F3 Typical Impedance Characteristics:



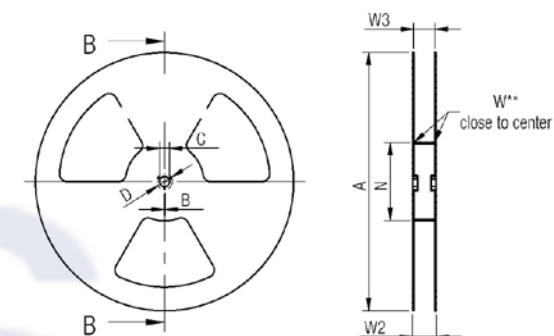
				Projection		DESCRIPTION		
	2015-01-07							
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						Order.- No.	 COMPLIANT RoHS&REACH HALOGENFREE	SIZE
						KS784776182		A4
	DATE					Size: 1054		



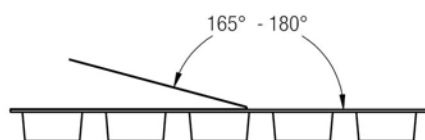
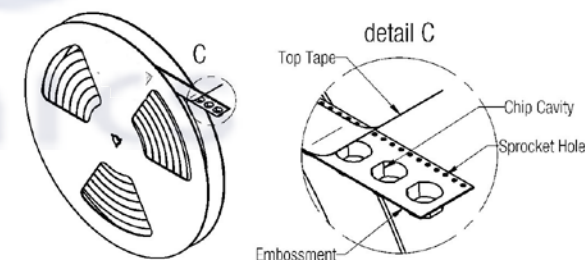
		A0	B0	W	P1	T	T1	T2	D0	E1	E2	F	P0	P2	VPE / packaging unit
tolerance		typ.	typ.	+0,3 -0,1	± 0,1	± 0,1	max.	typ.	+0,3 -0,1	± 0,1	min.	± 0,05	± 0,1	± 0,05	
size	4532	4,50	5,50	16,00	8,00	0,25	0,10	4,00	1,50	1,75	14,25	7,50	4,00	2,00	1500
	5848	5,50	6,50	16,00	8,00	0,25	0,10	5,50	1,50	1,75	14,25	7,50	4,00	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



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

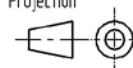


		A	B	C	D	N	W1	W2	W3	W3
tolerance			min.	± 0,8	min.	min.	+ 1,5	max.	min.	max.
Tape width	16 mm	330,00	1.50	13,00	20,20	100,00	16,40	22,40	15,90	19,40
	24 mm	330,00	1.50	13,00	20,20	100,00	24,40	30,40	23,90	27,40



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

Projection



Shaanki FKS Electronic Parts Import&Export Co.,Ltd.
FKS(Xi'an) Electronic Technology Co.,Ltd.
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Tel: +86-29-8888 5333
Fax: +86-29-8888 0913

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DESCRIPTION

SMD Power Inductor

Order.- No.

FKS784776182

Size: 1054



SIZE

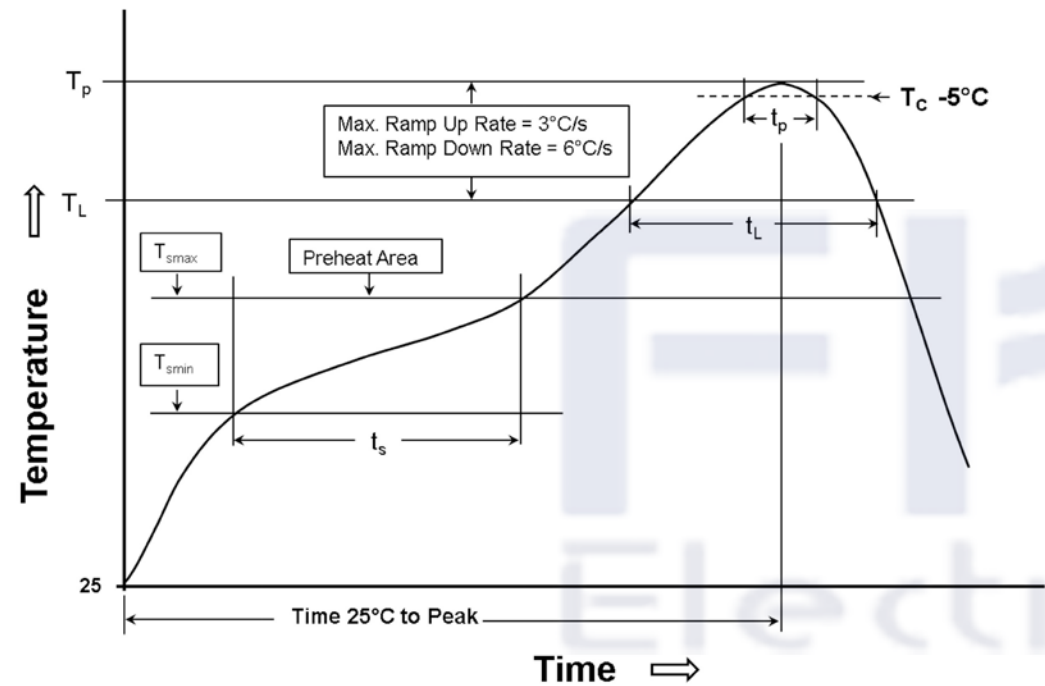
A4

DATE

H Soldering Specifications:



H1: Classification Reflow Profile for SMT components:



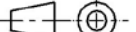
H2: Classification Reflow Profiles

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		

				Projection 	DESCRIPTION SMD Power Inductor		
	2015-01-07						
				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. KS784776182	 COMPLIANT RoHS&REACH HALOGENFREE	SIZE A4
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