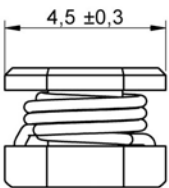
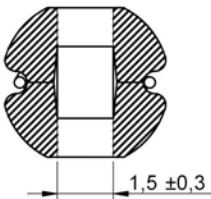


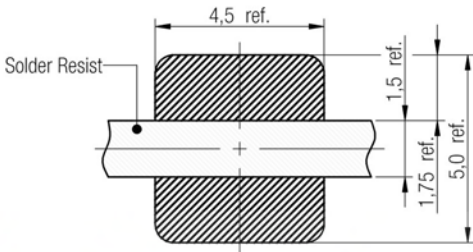
A Dimensions: [mm]



Scale - 5:1

Reference on drawing	Description
•	Start of winding
Marking	120 (Inductance Code)

B Recommended land pattern: [mm]



Scale - 5:1

C Schematic:



FKS
Electronics



D Electrical Properties:

Properties	Test conditions		Value	Unit	Tol.
Inductance	10 KHz/ 100 mV	L	12	μH	±20%
Rated Current	ΔT = 40 K	I _R	1.28	A	max.
Saturation Current	ΔL/L < 10%	I _{sat}	1.62	A	typ.
DC Resistance	@ 20°C	R _{DC}	0.210	Ω	max.
DC Resistance	@ 20°C	R _{DC}	0.156	Ω	typ.
Self Resonant Freq.	@ 20°C	f _{res}	30	MHz	typ.
Rated Voltage	@ 20°C	U _R	80	V _{DC}	max.

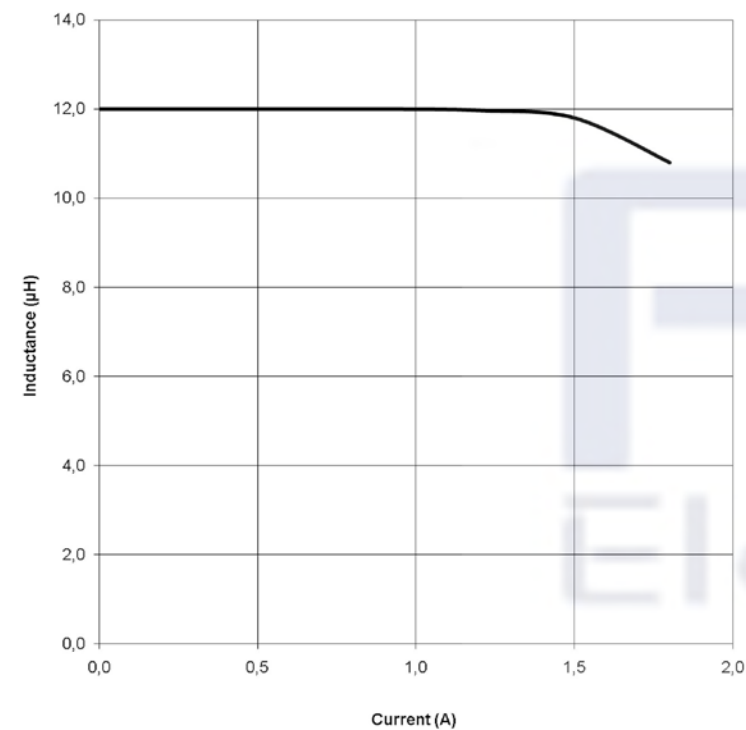
E General information:

- 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

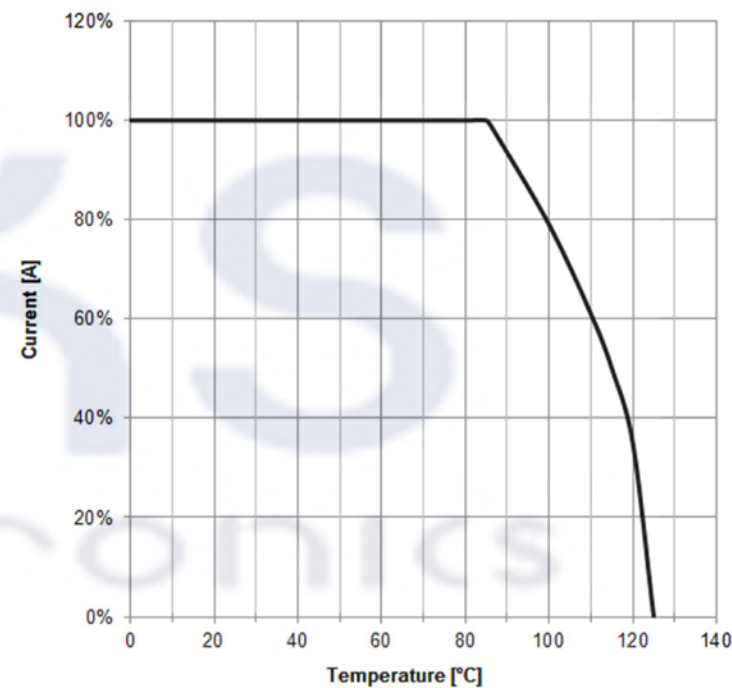
				Projection		DESCRIPTION
	2015-01-07		...			SMD Power Inductor
				Shaanxi FKS Electronic Parts Import&Export Co.,Ltd. FKS(Xi'an) Electronic Technology Co.,Ltd. Address: B1 Building,Western Cloud Valley,Fengxi New Town, Xixian New Area,Xi'an City, Shaanxi Province,China. Tel: +86-29-8868 5333 Fax: +86-29-8868 0913		Order.- No.
						FKS784773112
						SIZE
						A4
	DATE					Size: 4532

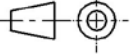


F1 Typical Inductance vs. Current Characteristics:



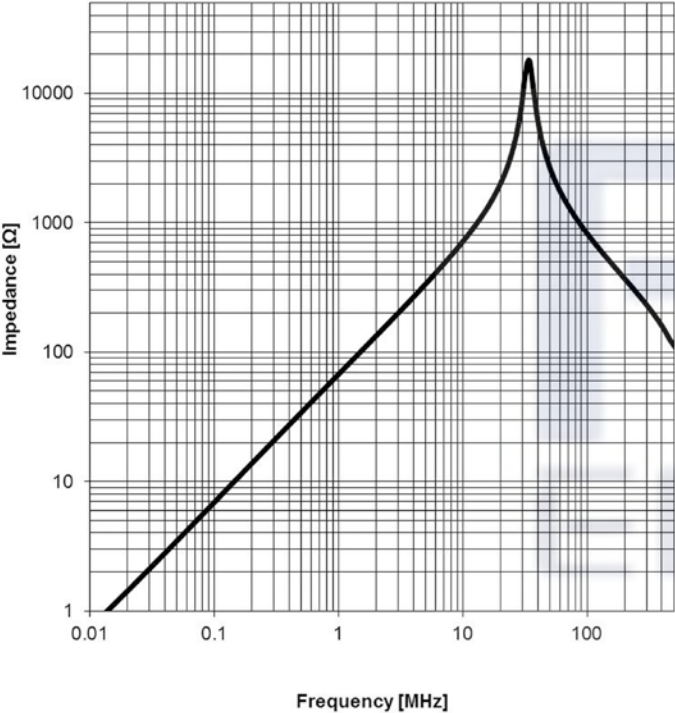
F2 Derating Curve:

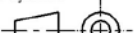


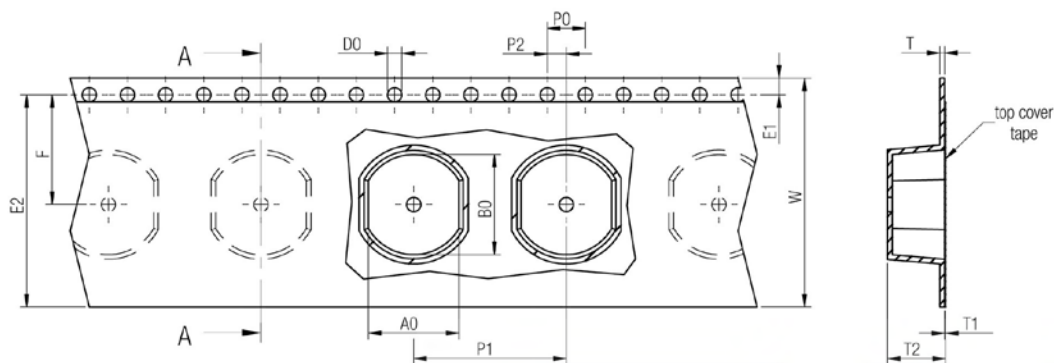
				Projection		DESCRIPTION		
	2015-01-07							
				Shaanxi FKS Electronic Parts Import&Export Co.,Ltd. FKS(Xi'an) Electronic Technology Co.,Ltd. Address: B1 Building,Western Cloud Valley,Fengxi New Town, Xixian New Area,Xi'an City, Shaanxi Province,China. Tel: +86-29-8868 5333 Fax: +86-29-8868 0913 				SMD Power Inductor
				Order.- No.		 COMPLIANT RoHS&REACH		SIZE
				FKS784773112				A4
	DATE	--				Size: 4532		



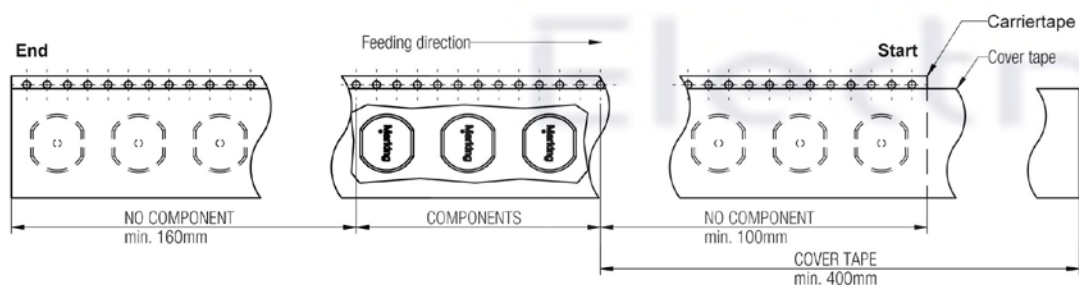
F3 Typical Impedance Characteristics:



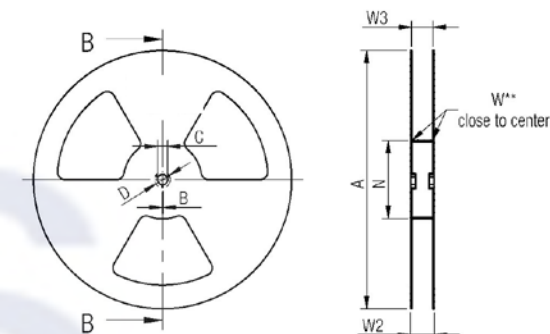
				Projection		DESCRIPTION	
	2015-01-07		£				
				Shaanxi FKS Electronic Parts Import&Export Co.,Ltd. FKS(Xi'an) Electronic Technology Co.,Ltd. Address: B1 Building,Western Cloud Valley,Fengxi New Town, Xixian New Area,Xi'an City, Shaanxi Province,China. Tel: +86-29-8868 5333 Fax: +86-29-8868 0913 			
				Order.- No.	 COMPLIANT RoHS&REACH	SIZE	
				FKS784773112		A4	
	DATE					Size: 4532	



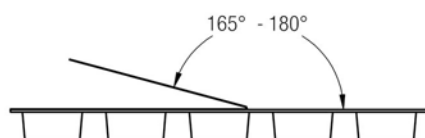
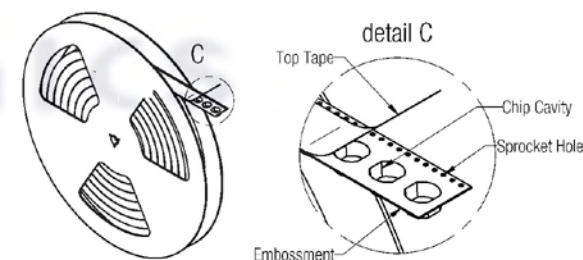
		A0	B0	W	P1	T	T1	T2	D0	E1	E2	F	P0	P2	VPE / packaging unit
tolerance		typ.	typ.	+0,3 -0,1	± 0,1	± 0,1	max.	typ.	+0,3 -0,1	± 0,1	min.	± 0,05	± 0,1	± 0,05	
size	4532	4,50	5,50	16,00	8,00	0,25	0,10	4,00	1,50	1,75	14,25	7,50	4,00	2,00	1500
	5848	5,50	6,50	16,00	8,00	0,25	0,10	5,50	1,50	1,75	14,25	7,50	4,00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

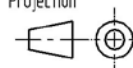


		A	B	C	D	N	W1	W2	W3	W3
tolerance			min.	± 0,8	min.	min.	+ 1,5	max.	min.	max.
Tape width	16 mm	330,00	1.50	13,00	20,20	100,00	16,40	22,40	15,90	19,40
	24 mm	330,00	1.50	13,00	20,20	100,00	24,40	30,40	23,90	27,40



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

Projection



Shaanxi FKS Electronic Parts Import&Export Co.,Ltd.
FKS(X'an) Electronic Technology Co.,Ltd.
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Tel: +86-29-8868 5333
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DESCRIPTION

SMD Power Inductor

Order.- No.

FKS784773112

Size: 4532



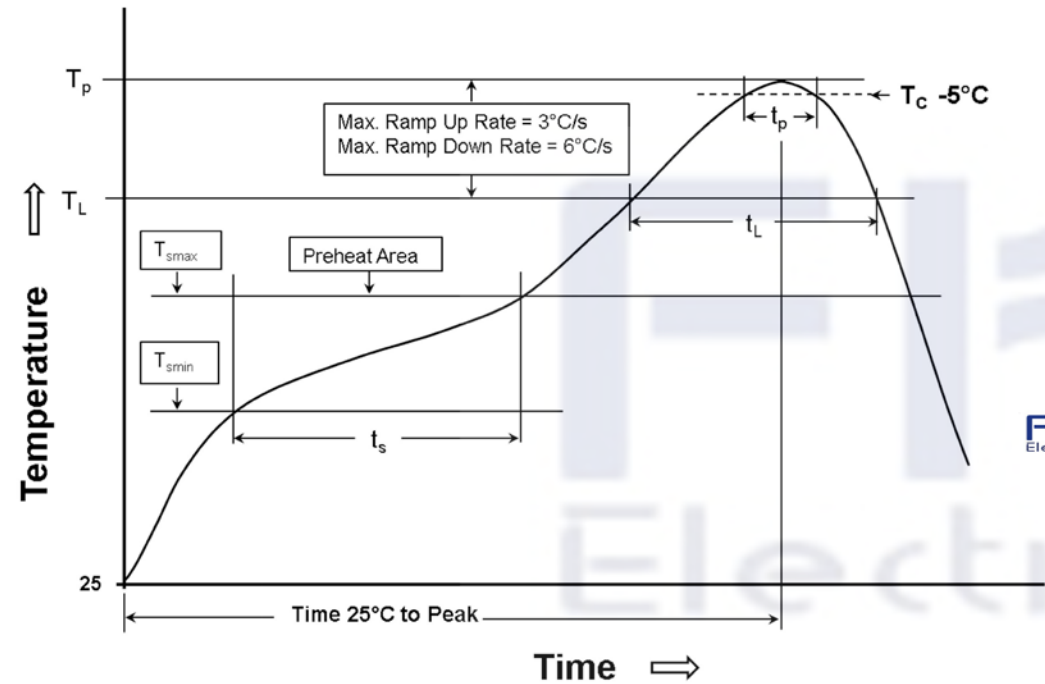
SIZE

A4

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.

FKS Electronics
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		

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