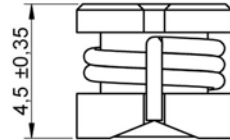
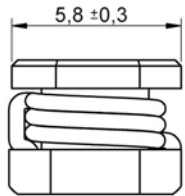
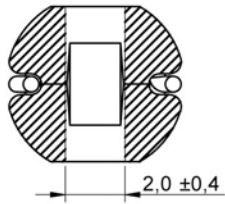




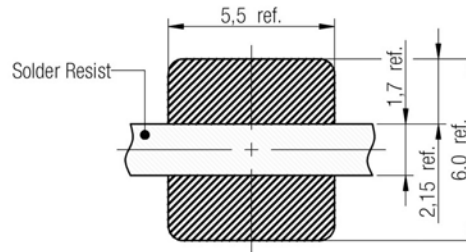
A Dimensions: [mm]



Scale - 4:1

Reference on drawing	Description
•	Start of winding
Marking	181 (Inductance Code)

B Recommended land pattern: [mm]



no vias and traces in restricted area

Scale - 4:1

C Schematic:



D Electrical Properties:

Properties	Test conditions		Value	Unit	Tol.
Inductance	10 KHz/ 100 mV	L	180	μH	±10%
Rated Current	ΔT = 40 K	I _R	0.42	A	max.
Saturation Current	IΔL/L < 10%	I _{sat}	0.50	A	typ.
DC Resistance	@ 20°C	R _{DC}	1.38	Ω	max.
DC Resistance	@ 20°C	R _{DC}	0.850	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:

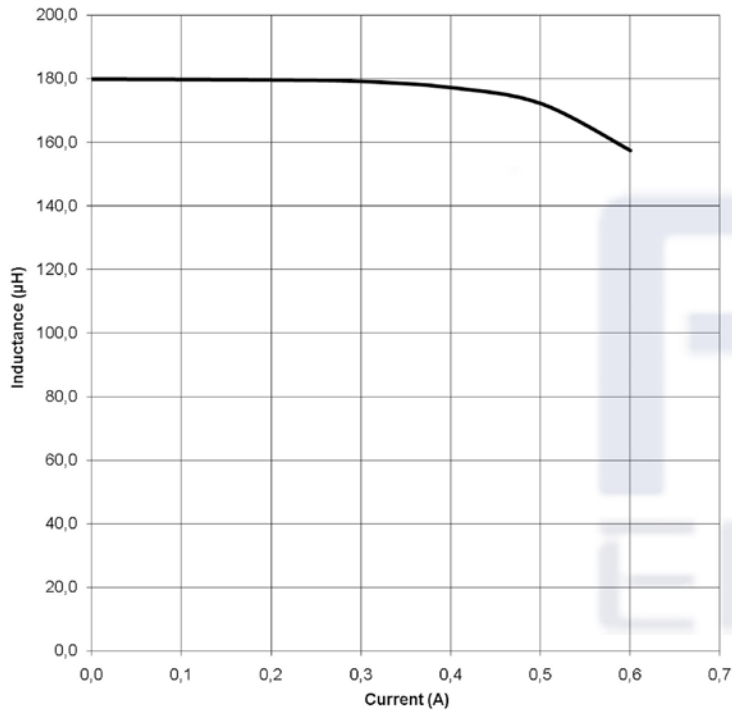
It is recommended that the temperature of the part does not exceed 125°C under worst case operating conditions.

- 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

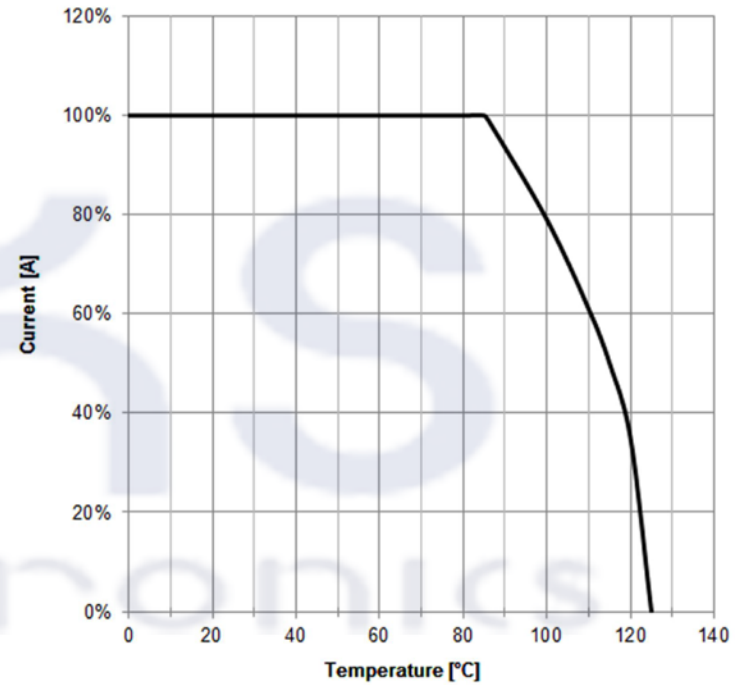
2015-01-07	Projection	DESCRIPTION
		SMD Power Inductor
	Shaanxi FKS Electronic Parts Import&Export Co.,Ltd. FKS(Xi'an) Electronic Technology Co., Ltd. Address: B1 Building,Western Cloud Valley,Fengxi New Town, Xixian New Area,Xi'an City, Shaanxi Province,China. Tel: +86-29-8868 5333 Fax: +86-29-8868 0913	Order.- No. FKS784774218
DATE		SIZE A4
		Size: 5848



F1 Typical Inductance vs. Current Characteristics:



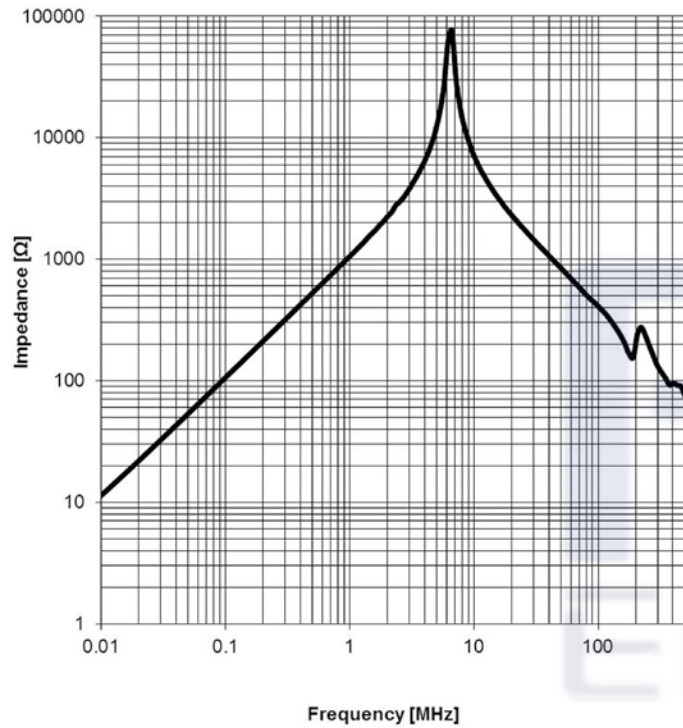
F2 Derating Curve:



				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: +86-29-8888 5333 Fax: +86-29-8888 0913	Order.- No. FKS784774218
					COMPLIANT RoHS&REACH HALOGEN FREE
	DATE				SIZE A4
					Size: 5848



F3 Typical Impedance Characteristics:

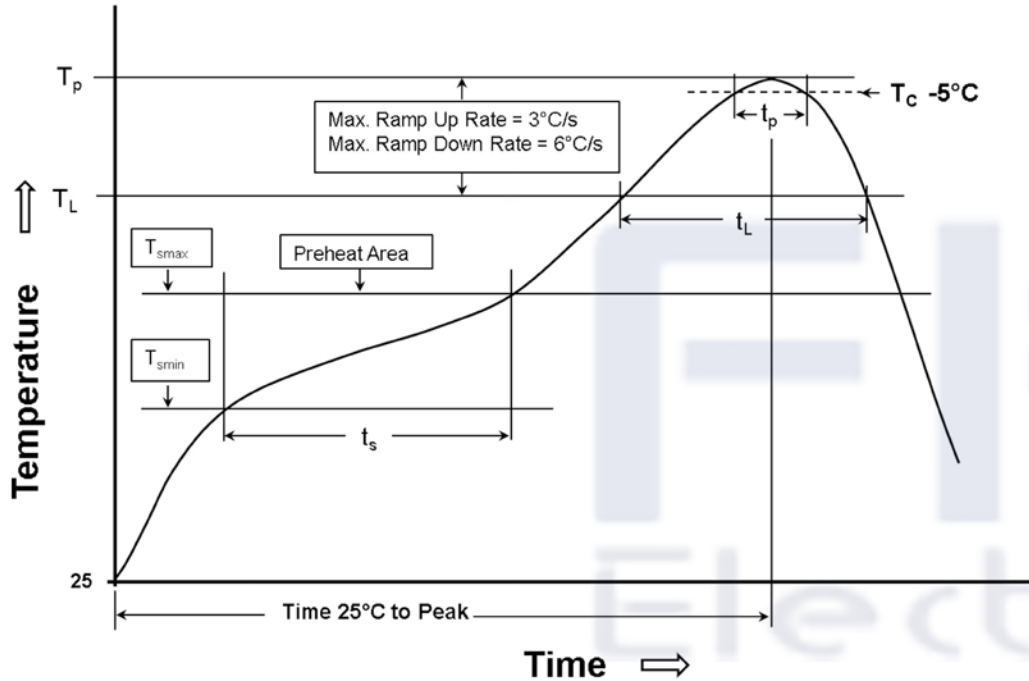


				Projection 	DESCRIPTION
	2015-01-07				SMD Power Inductor
				Shaanxi FKS Electronic Parts Import&Export Co.,Ltd. FKS(Xi'an) Electronic Technology Co.,Ltd. Address: B1 Building,Western Cloud Valley,Fengxi New Town, Xixian New Area,Xi'an City, Shaanxi Province,China. Tel: +86-29-8868 5333 Fax: +86-29-8868 0913	Order.- No. FKS784774218
					COMPLIANT RoHS&REACH HALOGEN FREE
	DATE				SIZE A4
					Size: 5848

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		

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: +86-29-8888 5333 Fax: +86-29-8888 0913	<p style="text-align: center;">SMD Power Inductor</p> <p>Order.- No. FKS784774218</p> <p style="text-align: right;">COMPLIANT RoHS&REACH HALOGENFREE</p>
DATE		<p>Size: 5848</p> <p style="text-align: right;">SIZE A4</p>