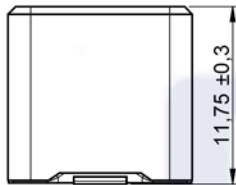
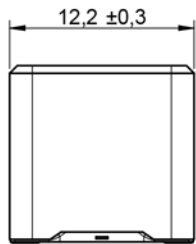
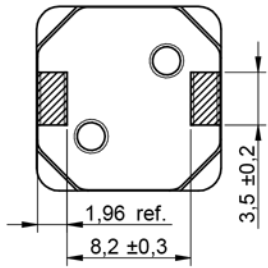
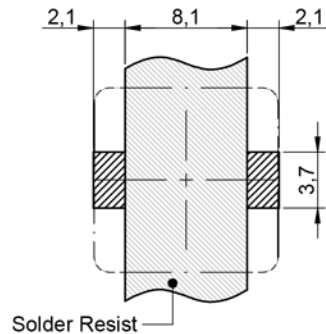


**Dimensions: [mm]**



Scale - 2:1

**Recommended Land Pattern: [mm]**



Solder Resist  
no vias and traces in restricted area

Scale - 2:1

**Schematic:**



**Electrical & Optical Properties:**

Properties		Test conditions	Value	Unit	Tol.
Inductance	L	100 kHz/ 10 mA	6.8	μH	±20%
Rated Current	I <sub>R</sub>	ΔT = 50 K	9.8	A	max.
Saturation Current	I <sub>SAT</sub>	ΔL/L < 30 %	13	A	typ.
DC Resistance	R <sub>DC</sub>	@ 20 °C	9.9	mΩ	typ.
DC Resistance	R <sub>DC</sub>	@ 20 °C	11.9	mΩ	max.

**Certification:**

RoHS Approval	Complaint [ 2011/65/EU&2015/863 ]
REACH Approval	Conform or declared [ (EC)1907/2006 ]
Halogen Free	Conform [ JEDEC JS709B ]

**General Information:**

It is recommended that the temperature of the component does not exceed +150°C under worst case conditions

Ambient Temperature (referring to I <sub>R</sub> )	-55 up to +100 °C
Operating Temperature	-55 up to +150 °C
Storage Conditions (in original packaging)	< 40 °C ; < 75 % RH
Moisture Sensitivity Level (MSL)	1

Test conditions of Electrical Properties: +20 °C, 33 % RH if not specified differently

**Product Marking:**

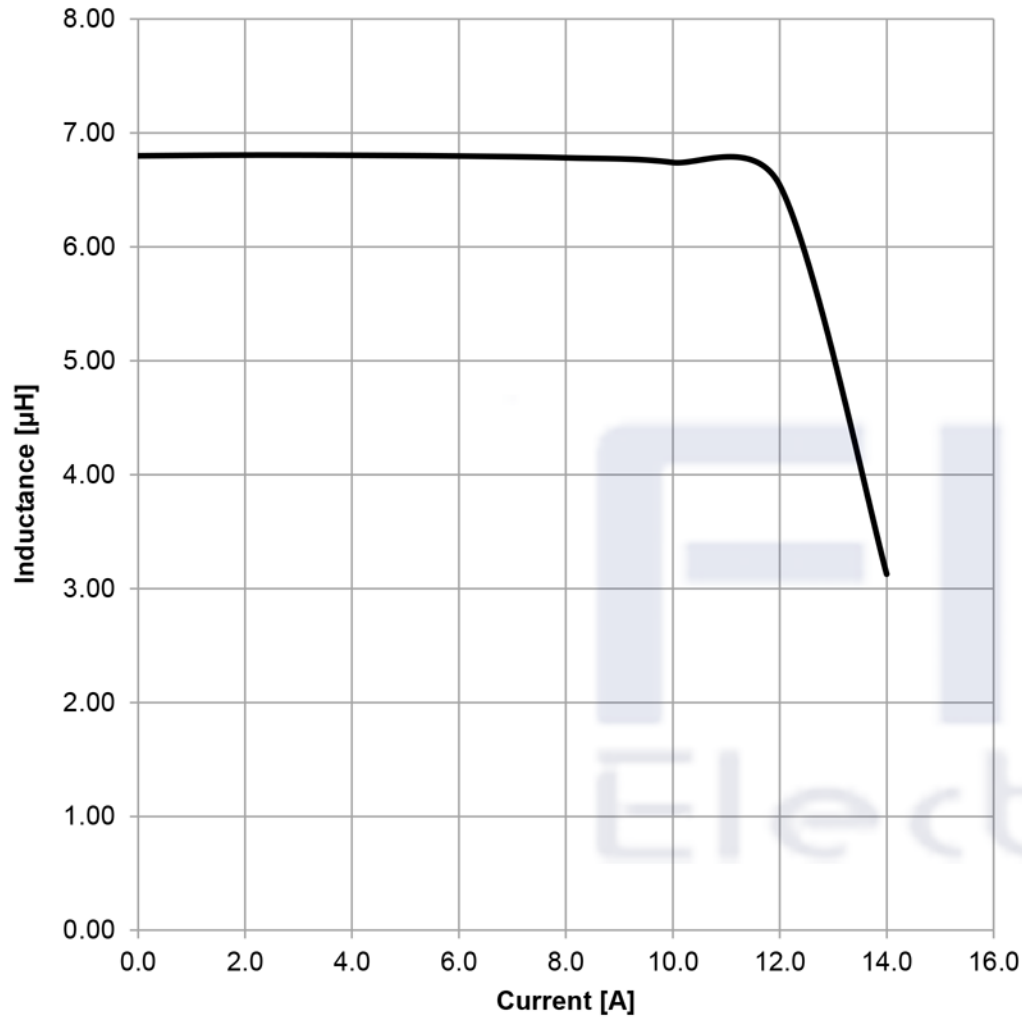
Marking	
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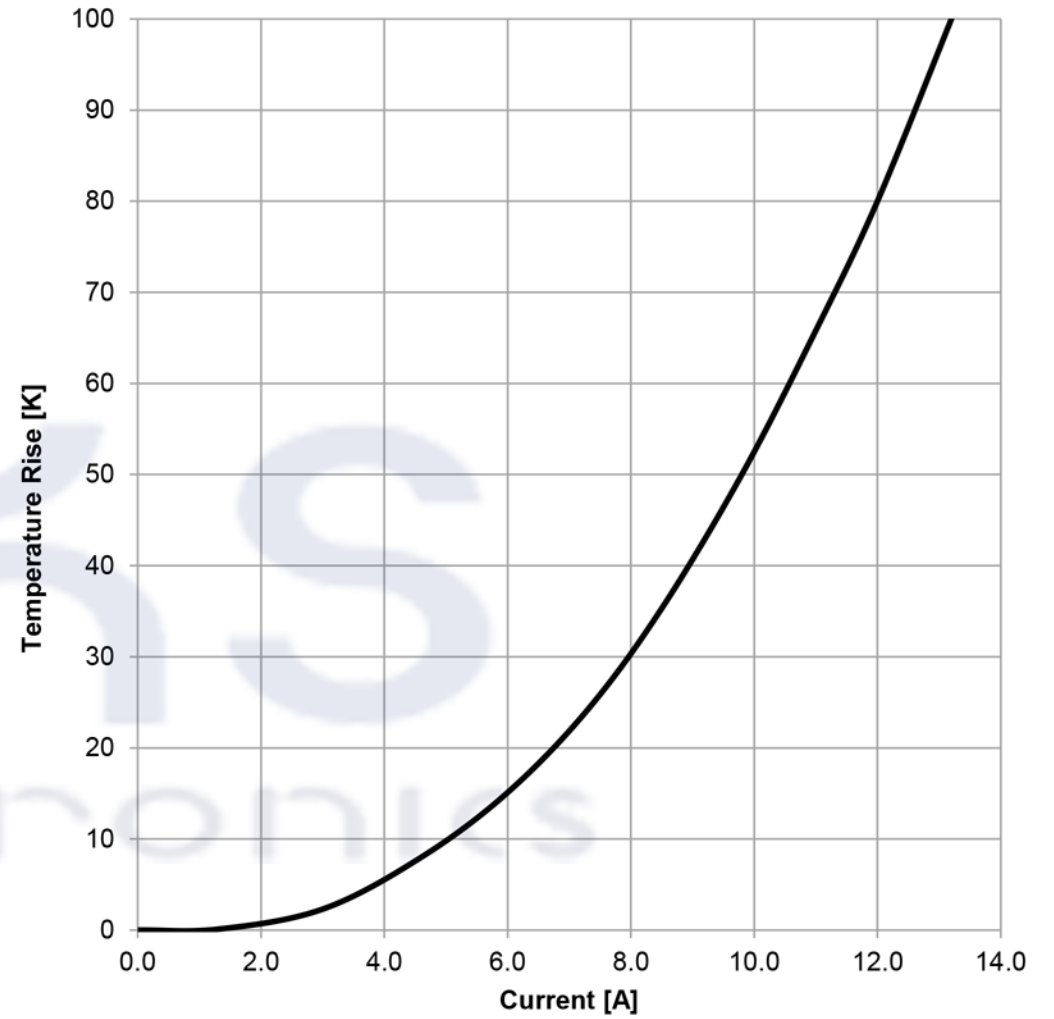
Shaanxi FKS Electronic Parts Import&Export Co.,Ltd.  
Address: Building B1, The West Cloud Valley, Fengxi New City,  
Xixian New Area, Xianyang City, Shaanxi Province, China.  
Tel: 0086 29 8868 5333 Fax: 0086 29 8868 0913  
[Http://www.fks-tech.com](http://www.fks-tech.com)

DATE (YYYY-MM-DD)	2019-01-28	GENERAL TOLERANCE	DIN ISO 2768-1m	PROJECTION METHOD	
DESCRIPTION	<b>WE-CHSA SMT High Current Inductor</b>		ORDER CODE	FKS7843320680	
SIZE/TYPE	1212	STATUS	Valid		

**Typical Inductance vs. Current Characteristics:**

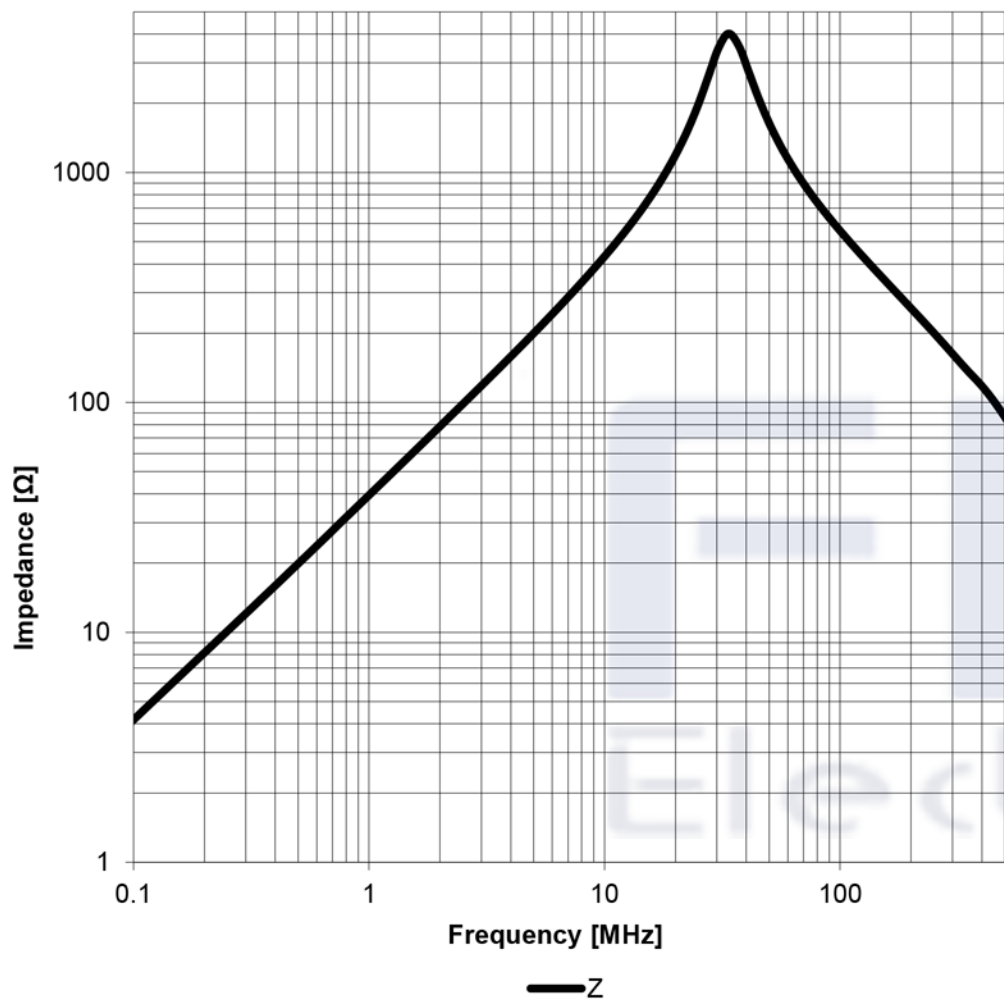









**Typical Temperature Rise vs. Current Characteristics:**



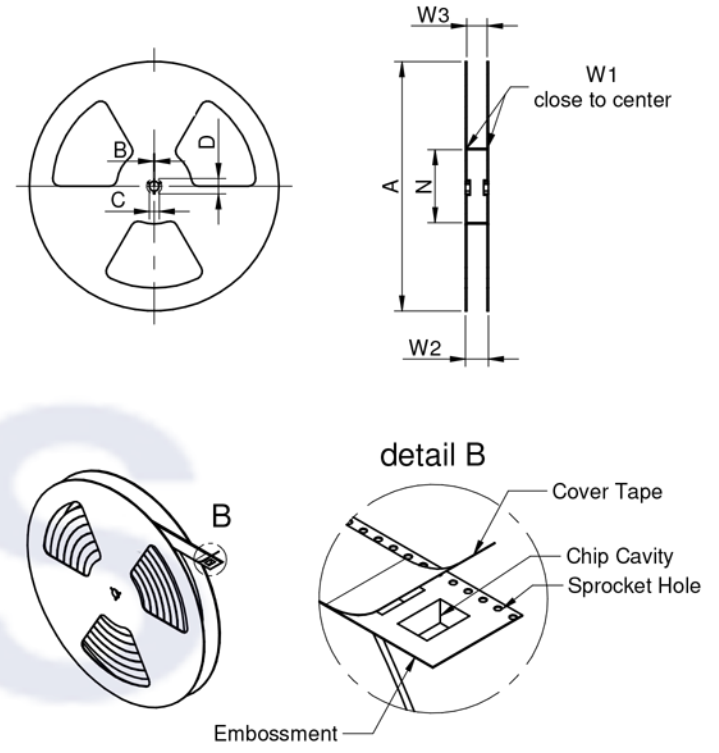
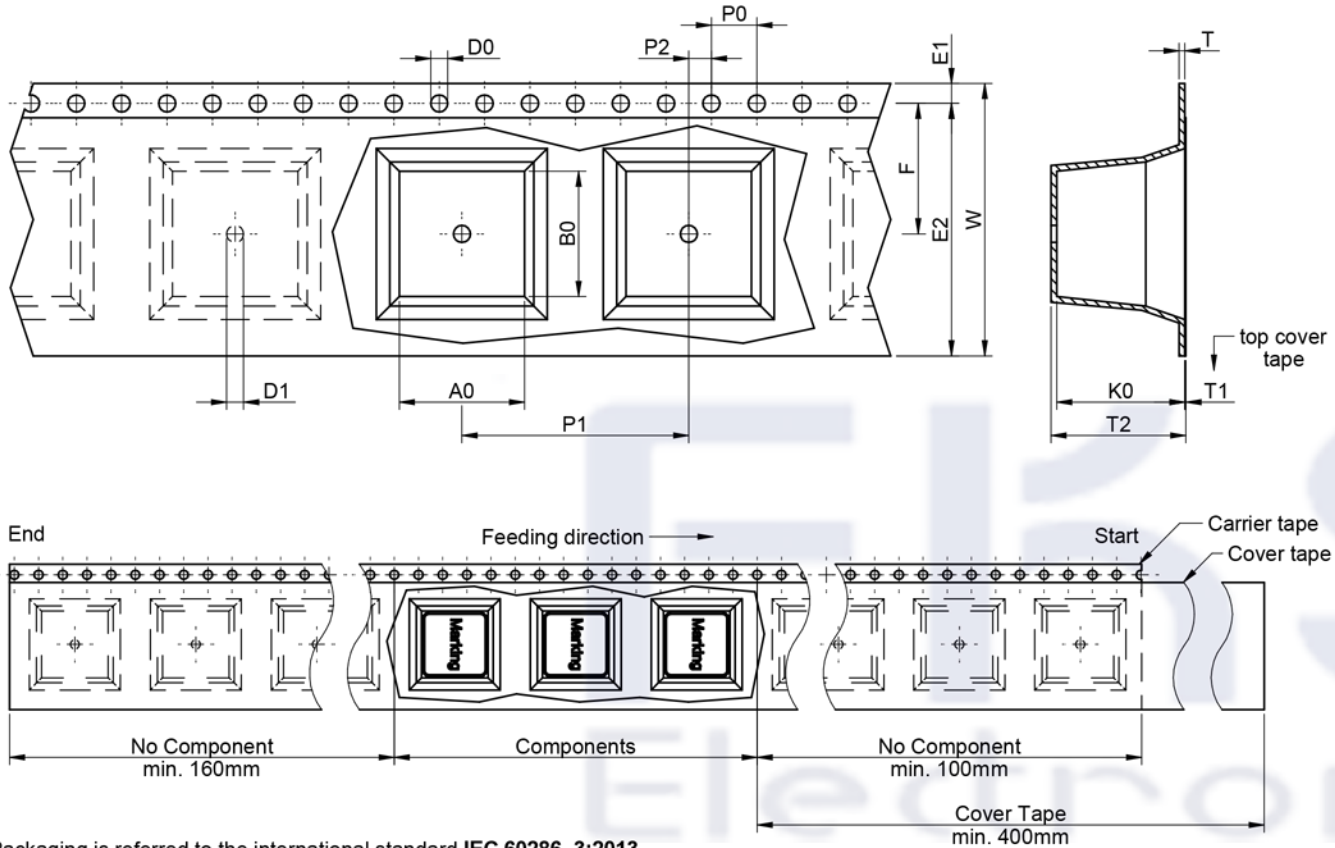
	DATE (YYYY-MM-DD) 2019-01-28	GENERAL TOLERANCE DIN ISO 2768-1m	PROJECTION METHOD 
	DESCRIPTION <b>SMT High Current Inductor</b>		ORDER CODE FKS7843320680
	SIZE/TYPE 1212	STATUS Valid	
FKS Electronics Shaanxi FKS Electronic Parts Import&Export Co.,Ltd. Address: Building B1, The West Cloud Valley, Fengxi New City, Xixian New Area, Xianyang City, Shaanxi Province, China. Tel: 0086 29 8868 5333 Fax: 0086 29 8868 0913 <a href="http://www.fks-tech.com">Http://www.fks-tech.com</a>			

Typical Impedance Characteristics:



   		DATE (YYYY-MM-DD) 2019-01-28	GENERAL TOLERANCE DIN ISO 2768-1m	PROJECTION METHOD 
  Shaanxi FKS Electronic Parts Import&Export Co.,Ltd. Address:Building B1,The West Cloud Valley, Fengxi New City, Xixian New Area,Xianyang City,Shaanxi Province,China. Tel:0086 29 8868 5333 Fax:0086 29 8868 0913 <a href="http://www.fks-tech.com">Http://www.fks-tech.com</a>		DESCRIPTION <b>SMT High Current Inductor</b>		ORDER CODE <b>FKS7843320680</b>
SIZE/TYPE 1212		STATUS Valid		

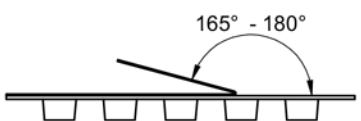
# Packaging Specification - Tape and Reel: [mm]



Packaging is referred to the international standard IEC 60286 -3:2013

	A0	B0	W	T	T1	T2	K0	P0	P1	P2	D0	D1	E1	E2	F	Tape Type 2a	VPE / packaging unit	
tolerance	typ.	typ.	±0.3	typ.	typ.	typ.	typ.	±0.1	±0.1	±0.1	+0.1 -0.0	typ.	±0.1	min.	±0.1		pcs.	
size	1212	12.65	12.65	24	0.5	0.05	12.7	12.15	4	20	2	1.5	1.5	1.75	22.25	11.5	Polystyrene	200

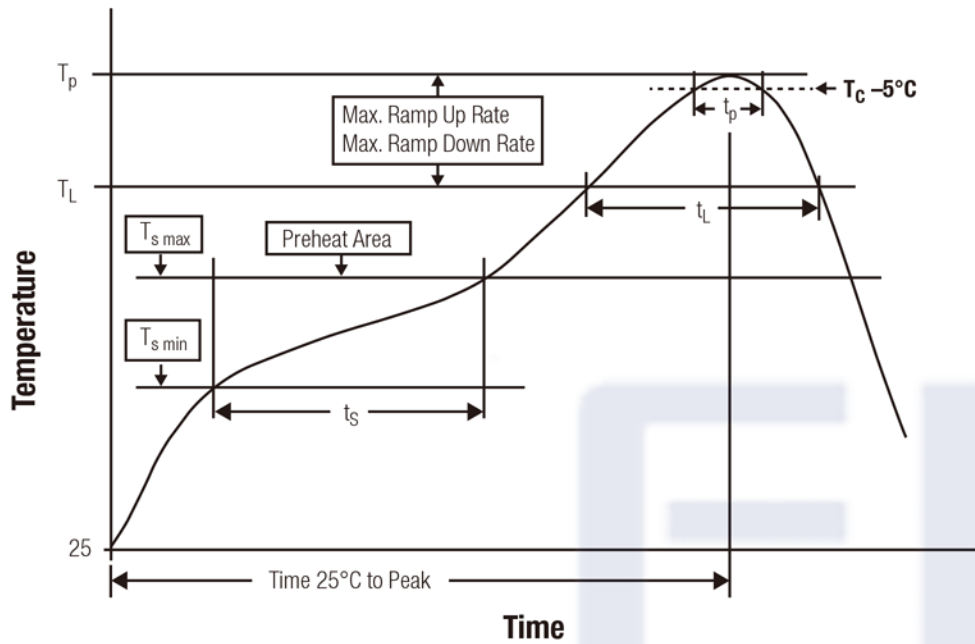
	A	B	C	D	N	W1	W2/W3
tolerance	±2.0	±0.5	±0.5	±0.5	±0.5	+0.4	±0.5
tape width	24mm	330	2	13	21	24.4	29.4



		<b>Pull-of force</b>
Tape width	24 mm	0,1 N - 1,3 N

		DATE (YYYY-MM-DD) 2019-01-28	GENERAL TOLERANCE DIN ISO 2768-1m	PROJECTION METHOD 
		DESCRIPTION <b>SMT High Current Inductor</b>		
Shaanxi FKS Electronic Parts Import&Export Co.,Ltd. Address:Building B1,The West Cloud Valley, Fengxi New City, Xixian New Area,Xiayang City,Shaanxi Province,China. Tel:0086 29 8868 5333 Fax:0086 29 8868 0913 <a href="http://www.fks-tech.com">Http://www.fks-tech.com</a>		ORDER CODE <b>FKS7843320680</b>		
SIZE/TYPE 1212		STATUS Valid		

### Classification Reflow Profile for SMT components:



### Classification Reflow Soldering Profile:

Profile Feature		Value
Preheat Temperature Min	$T_{s \text{ min}}$	150 °C
Preheat Temperature Max	$T_{s \text{ max}}$	200 °C
Preheat Time $t_s$ from $T_{s \text{ min}}$ to $T_{s \text{ max}}$	$t_s$	60 - 120 seconds
Ramp-up Rate ( $T_L$ to $T_p$ )		3 °C/ second max.
Liquidous Temperature	$T_L$	217 °C
Time $t_L$ maintained above $T_L$	$t_L$	60 - 150 seconds
Peak package body temperature	$T_p$	see table below
Time within 5°C of actual peak temperature	$t_p$	20 - 30 seconds
Ramp-down Rate ( $T_L$ to $T_p$ )		6 °C/ second max.
Time 25°C to peak temperature		8 minutes max.

refer to IPC/ JEDEC J-STD-020E

### Package Classification Reflow Temperature:

Properties	Volume mm <sup>3</sup> <350	Volume mm <sup>3</sup> 350-2000	Volume mm <sup>3</sup> >2000
PB-Free Assembly   Package Thickness < 1.6 mm	260 °C	260 °C	260 °C
PB-Free Assembly   Package Thickness 1.6 mm - 2.5 mm	260 °C	250 °C	245 °C
PB-Free Assembly   Package Thickness ≥ 2.5 mm	250 °C	245 °C	245 °C

refer to IPC/ JEDEC J-STD-020E

		DATE (YYYY-MM-DD) 2019-01-28	GENERAL TOLERANCE DIN ISO 2768-1m	PROJECTION METHOD 
		DESCRIPTION <b>SMT High Current Inductor</b>		ORDER CODE FKS7843320680
Shaanxi FKS Electronic Parts Import&Export Co.,Ltd. Address: Building B1, The West Cloud Valley, Fengxi New City, Xixian New Area, Xianyang City, Shaanxi Province, China. Tel: 0086 29 8868 5333 Fax: 0086 29 8868 0913 <a href="http://www.fks-tech.com">Http://www.fks-tech.com</a>		SIZE/TYPE 1212	STATUS Valid	