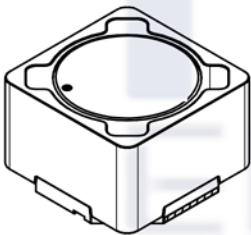
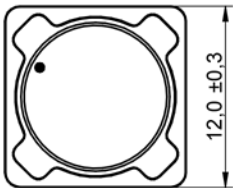
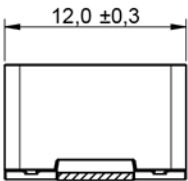
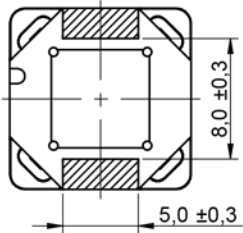


Dimensions: [mm]

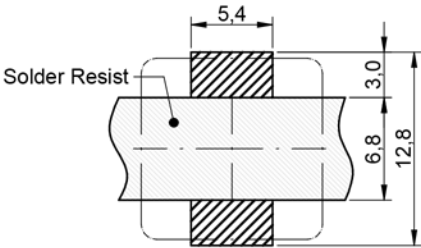


Scale - 2:1

Product Marking:

Start of Winding	•
Marking	*680 (Inductance Code)

Recommended Land Pattern: [mm]



No vias and traces in restricted area

Scale - 2:1

Schematic:



Electrical Properties:

Properties		Test conditions	Value	Unit	Tol.
Inductance	L	100 kHz/ 250 mV	68	μH	±20%
Rated Current	I _R	ΔT = 40 K	2.6	A	max.
Saturation Current	I _{SAT}	IΔL/LI < 10 %	2.8	A	typ.
DC Resistance	R _{DC}	@ 20 °C	82	mΩ	typ.
DC Resistance	R _{DC}	@ 20 °C	98.5	mΩ	max.
Self Resonant Frequency	f _{res}		6.3	MHz	typ.

Certification:

RoHS Approval	Compliant [2011/65/EU&2015/863]
REACH Approval	Conform or declared [(EC)1907/2006]
Halogen Free	Conform [JEDEC JS709B]
Halogen Free	Conform [IEC 61249-2-21]

General Properties:

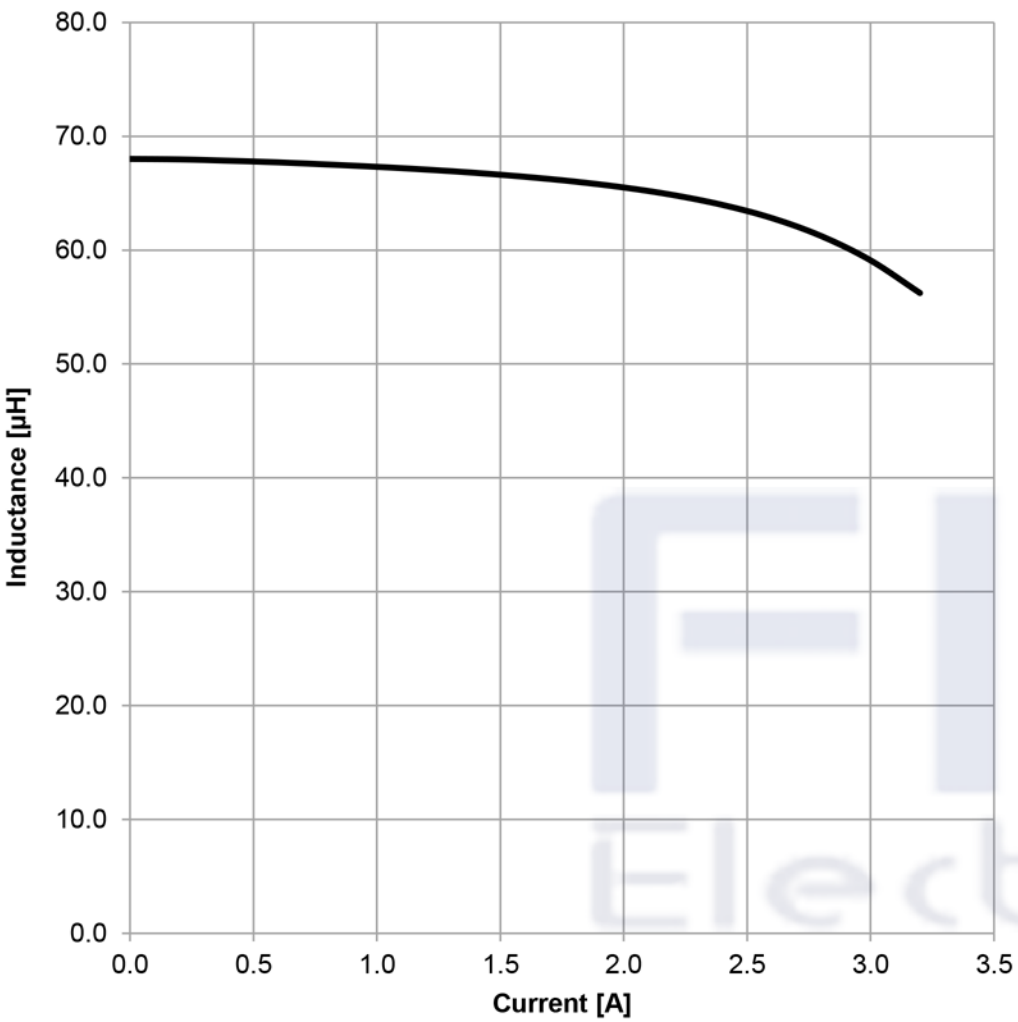
It is recommended that the temperature of the component does not exceed +125 °C under worst case conditions	
Ambient Temperature (referring to I _R)	-40 up to +85 °C
Operating Temperature	-40 up to +125 °C
Storage Conditions (in original packaging)	< 40 °C ; < 75 % RH
Moisture Sensitivity Level (MSL)	1
Test conditions of Electrical Properties: +20 °C, 33 % RH if not specified differently	
Coplanarity of the terminal pads: 120 μm	



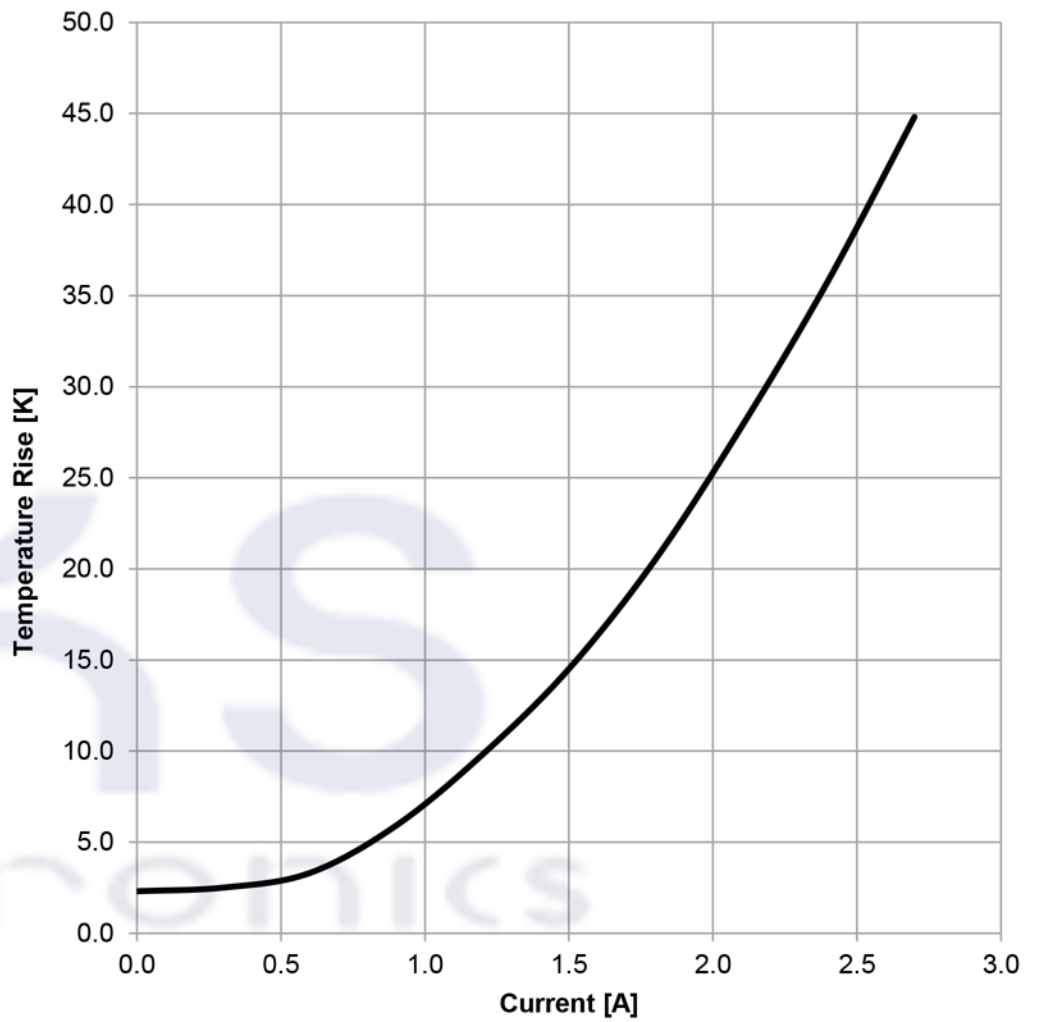
Shaanxi FKS Electronic Parts Import&Export Co.,Ltd.
Address:Building B1,The West Cloud Valley, Fengxi New City
Xixian New Area,Xianyang City,Shaanxi Province,China.
Tel:0086 29 8868 5333 Fax:0086 29 8868 0913
[Http://www.fks-tech.com](http://www.fks-tech.com)

	DATE (YYYY-MM-DD) 2019-02-15	GENERAL TOLERANCE DIN ISO 2768-1m	PROJECTION METHOD
DESCRIPTION SMT Shielded Power Inductor		ORDER CODE FKS784770680	
SIZE/TYPE 1280		STATUS Valid	

Typical Inductance vs. Current Characteristics:

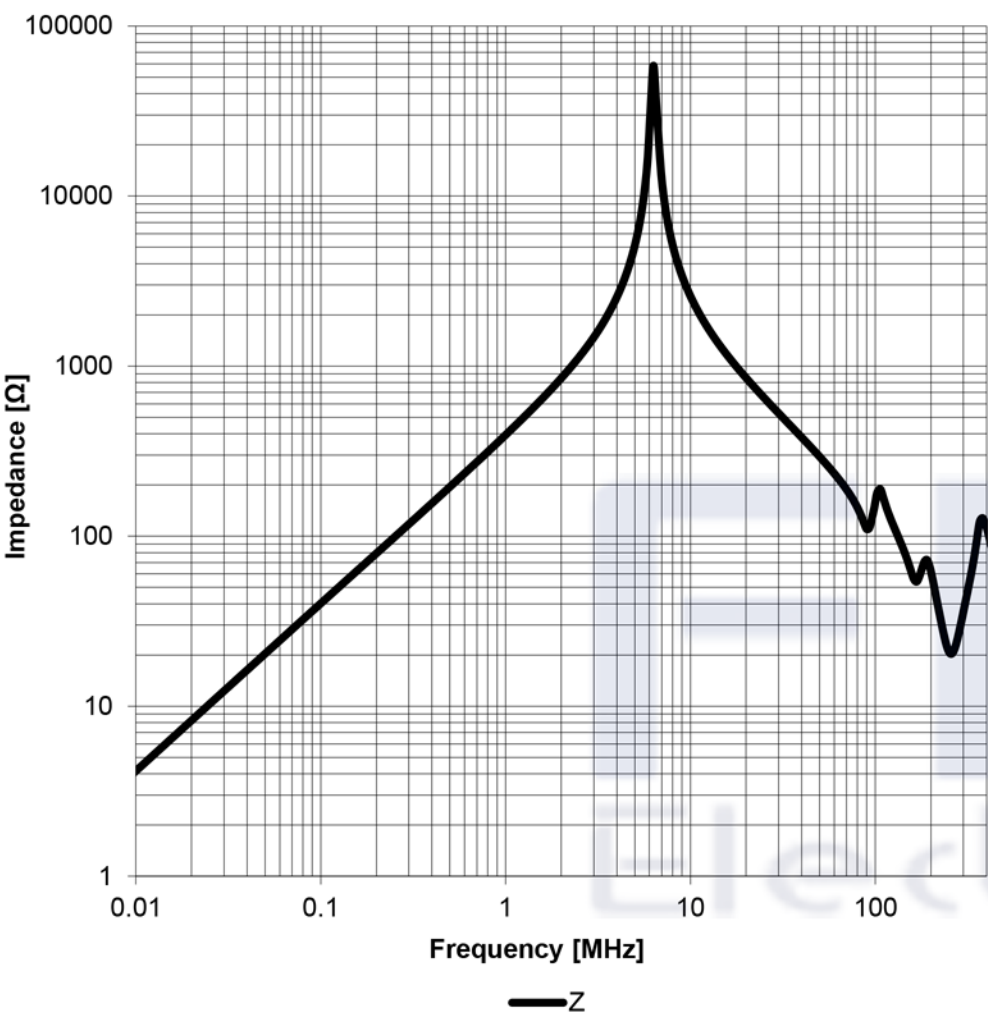


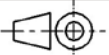
Typical Temperature Rise vs. Current Characteristics:



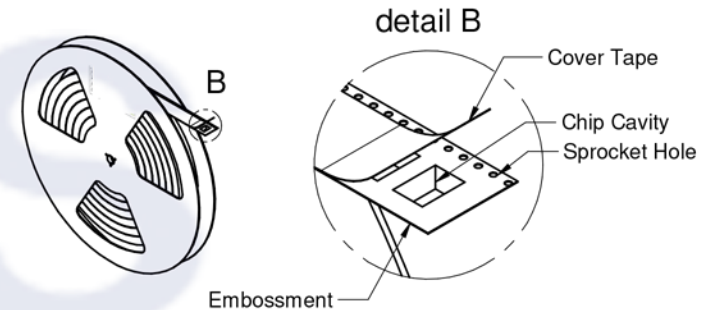
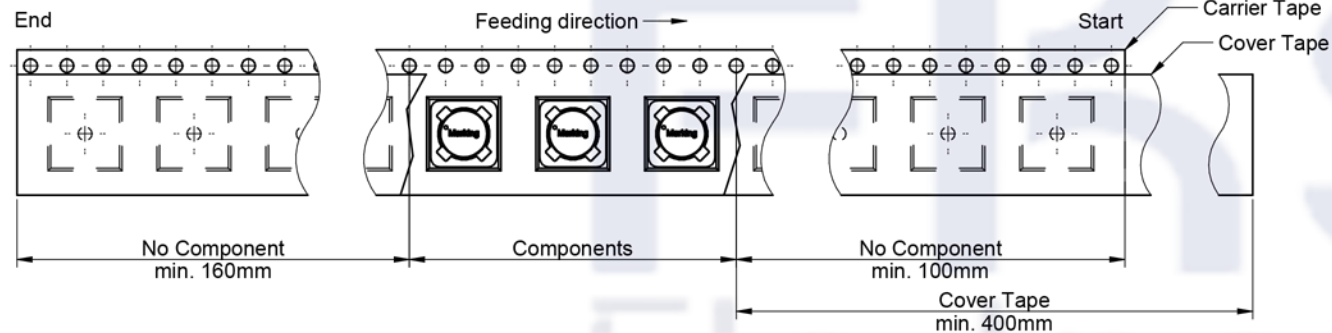
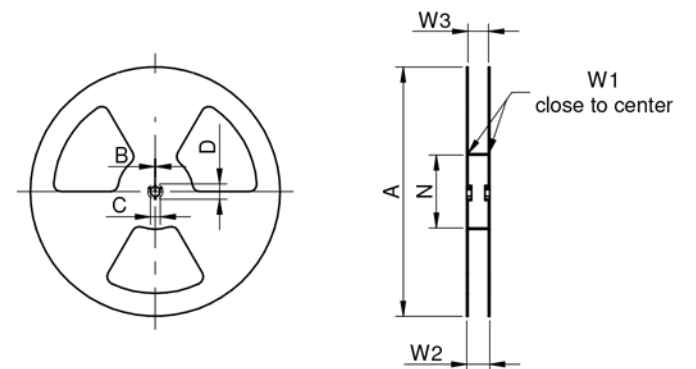
 RoHS COMPLIANT  REACH COMPLIANT  HALOGEN FREE  AEC Q200 125 °C GRADE 1				DATE (YYYY-MM-DD) 2019-02-15	GENERAL TOLERANCE DIN ISO 2768-1m	PROJECTION METHOD 
 FKS Electronics  Shaanxi FKS Electronic Parts Import&Export Co.,Ltd. Address:Building B1,The West Cloud Valley, Fengxi New City Xixian New Area,Xianyang City,Shaanxi Province,China. Tel:0086 29 8868 5333 Fax:0086 29 8868 0913 Http://www.fks-tech.com		DESCRIPTION SMT Shielded Power Inductor			ORDER CODE FKS784770680	
		SIZE/TYPE 1280			STATUS Valid	

Typical Impedance Characteristics:



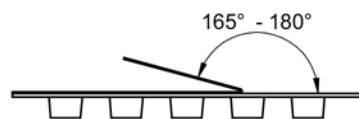
 RoHS COMPLIANT  REACH COMPLIANT  HALOGEN FREE  AEC Q200 125 °C GRADE 1				DATE (YYYY-MM-DD) 2019-02-15	GENERAL TOLERANCE DIN ISO 2768-1m	PROJECTION METHOD 
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			SIZE/TYPE 1280	STATUS Valid		

The drawing illustrates the geometry of a composite material structure. The top view (left) shows a rectangular plate with a central section containing two square openings. Dimensions include overall width W , overall length A , and various internal dimensions like $D0$, $P0$, $P2$, $E1$, F , $E2$, $B0$, $A0$, $P1$, $D1$, and $K0$. The side view (right) shows the profile of the structure, highlighting the top cover tape and the thickness T . The side view also shows dimensions $T1$ and $T2$.



		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/-0.1	max.	max.	typ.	typ.	+0.1	±0.1	±0.1		min.	+0.1	min.	±0.1		pcs.
size	1280	12.4	12.4	24.0	0.6	0.1	8.8	8.3	4.0	16.0	2.0	1.5	1.5	1.75	22.25	11.5	Polystyrene	500

		A	B	C	D	N	W1	W2	W3	W3
Tolerance		± 2,0	min.	min.	min.	± 2,0	+ 2	max.	min.	max.
Tape width	24mm	330,00	1,50	12,80	20,20	60,00	24,40	30,40	23,90	27,40



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



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DATE (YYYY-MM-DD)	2019-02-15
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GENERAL TOLERANCE
DIN ISO 2768-1m

PROJECTION
METHOD

DESCRIPTION

SMT Shielded Power Inductor

ORDER CODE

FKS784770680

SIZE/TYPE

1280

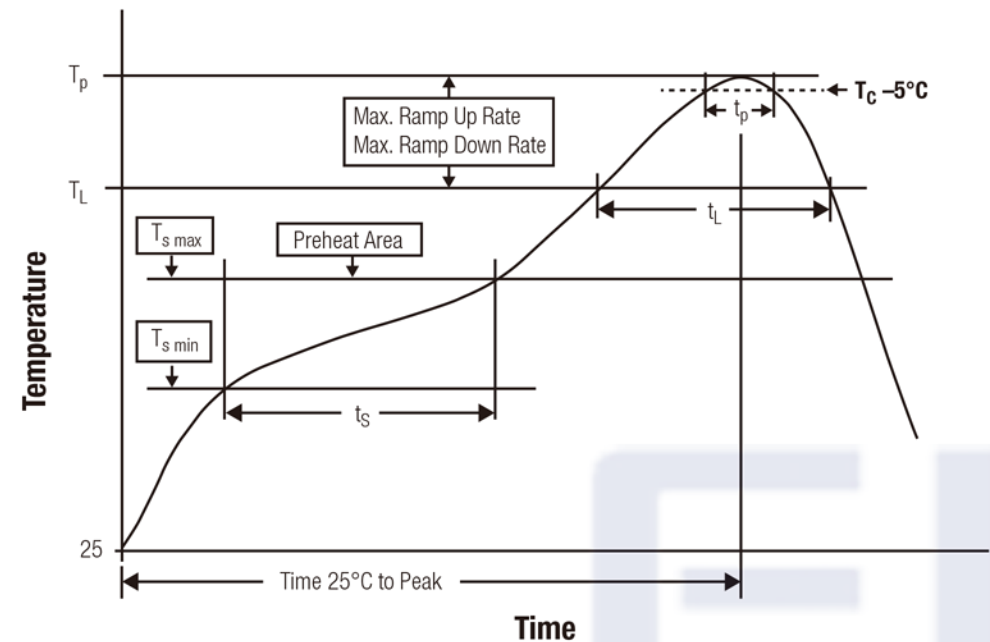
STATUS

Valid

PAGE

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Classification Reflow Profile for SMT components:



Classification Reflow Soldering Profile:

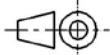
Profile Feature		Value
Preheat Temperature Min	$T_{s\ min}$	150 °C
Preheat Temperature Max	$T_{s\ max}$	200 °C
Preheat Time t_s from $T_{s\ min}$ to $T_{s\ max}$	t_s	60 - 120 seconds
Ramp-up Rate (T_L to T_p)		3 °C/ second max.
Liquidous Temperature	T_L	217 °C
Time t_L maintained above T_L	t_L	60 - 150 seconds
Peak package body temperature	T_p	see table below
Time within 5°C of actual peak temperaure	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 ³ <350	Volume mm ³ 350-2000	Volume mm ³ >2000
PB-Free Assembly I Package Thickness < 1.6 mm	260 °C	260 °C	260 °C
PB-Free Assembly I Package Thickness 1.6 mm - 2.5 mm	260 °C	250 °C	245 °C
PB-Free Assembly I Package Thickness ≥ 2.5 mm	250 °C	245 °C	245 °C
Sn-PB Assembly I Package Thickness < 2.5 mm	235 °C	220 °C	
Sn-PB Assembly I Package Thickness ≥ 2.5 mm	220 °C	220 °C	

refer to IPC/ JEDEC J-STD-020E

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