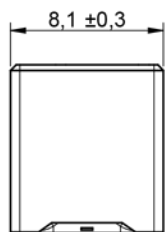
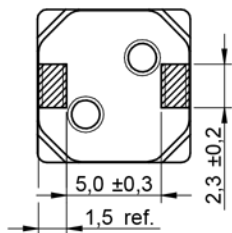


Dimensions: [mm]

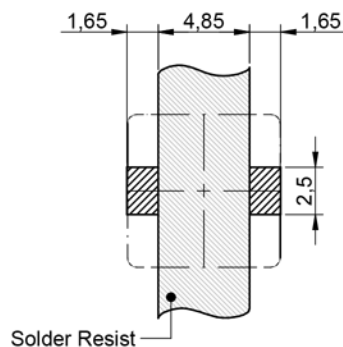


Scale - 2,5:1

Product Marking:

Marking	
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Recommended Land Pattern: [mm]



Scale - 2,5:1

Schematic:



Electrical & Optical Properties:

Properties		Test conditions	Value	Unit	Tol.
Inductance	L	100 kHz/ 10 mA	1	μH	±20%
Rated Current	I _R	ΔT = 50 K	12.8	A	max.
Saturation Current	I _{SAT}	ΔL/L < 30 %	21.3	A	typ.
DC Resistance	R _{DC}	@ 20 °C	4.9	mΩ	typ.
DC Resistance	R _{DC}	@ 20 °C	5.9	mΩ	max.
Self Resonant Frequency	f _{res}		100	MHz	typ.

Certification:

RoHS Approval	Compliant [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 _R)	-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



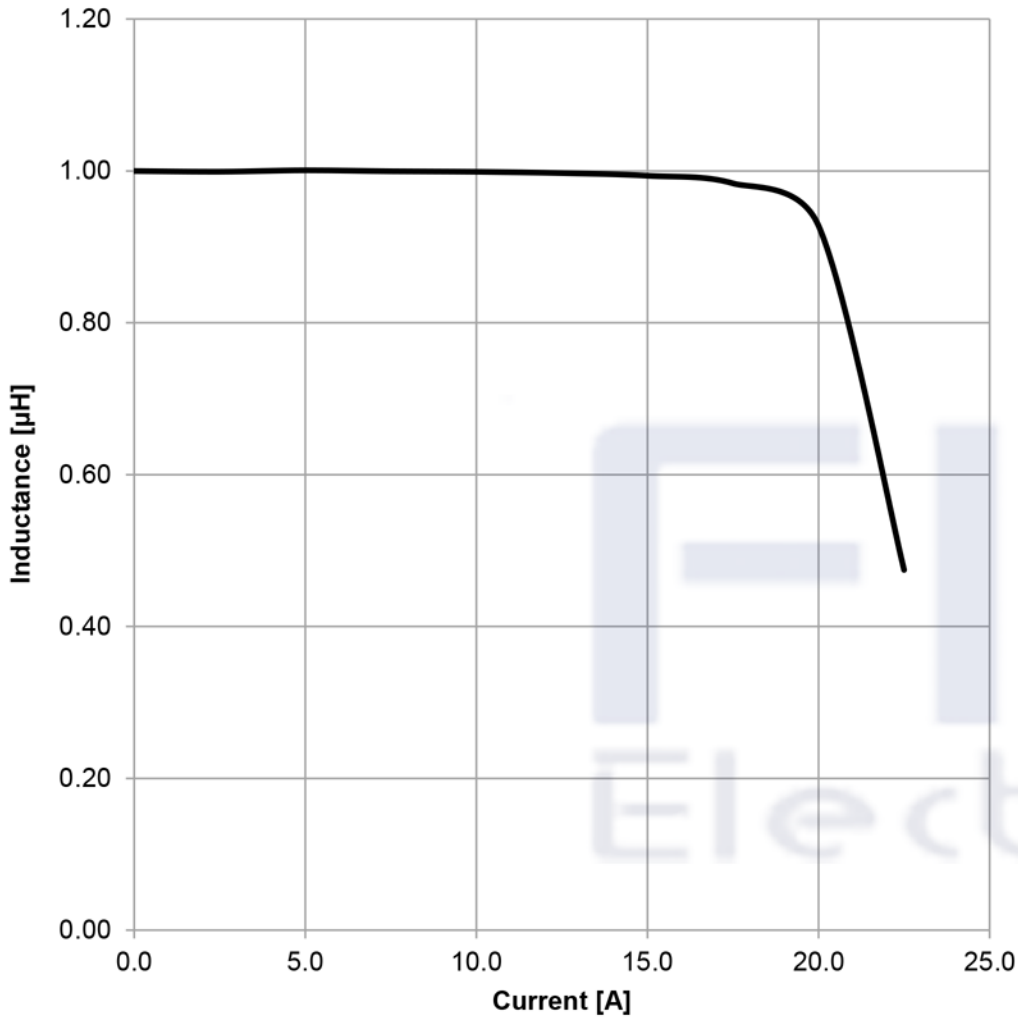
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Electronics



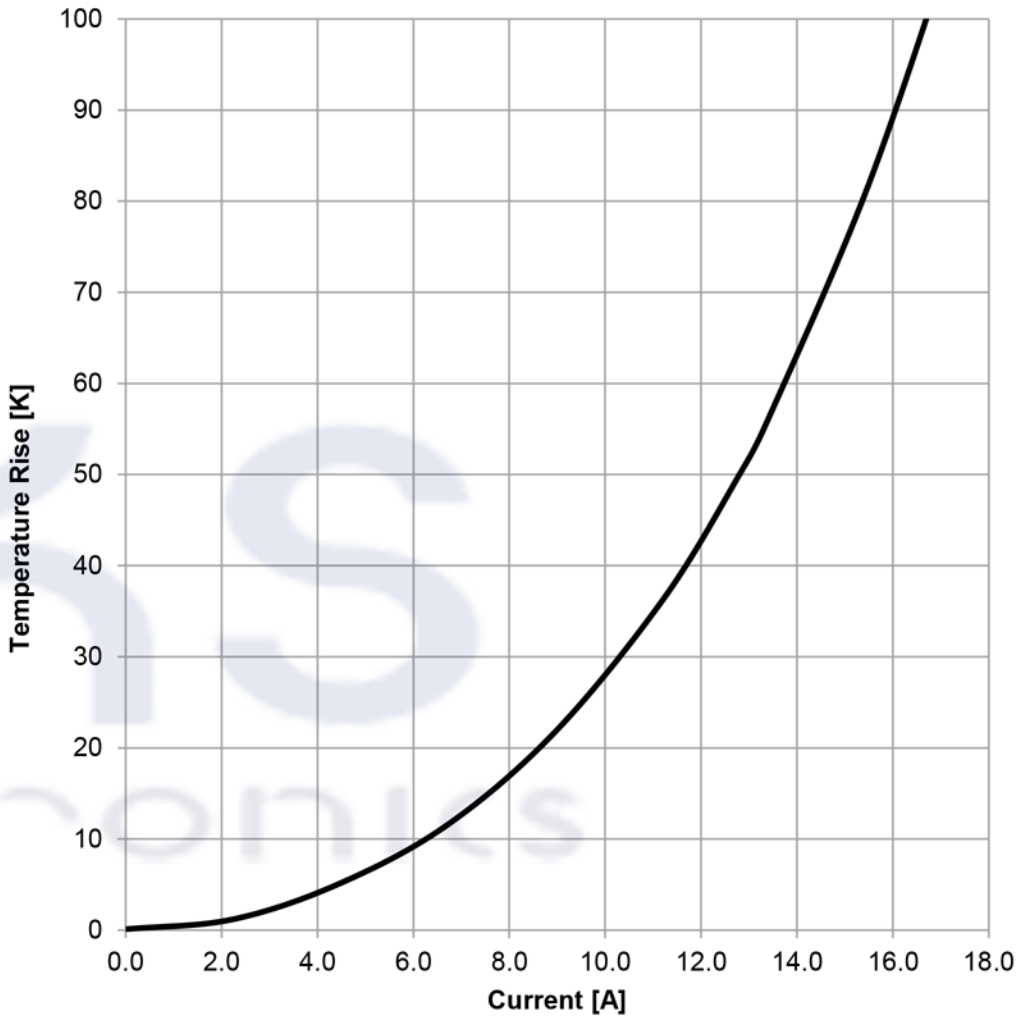
Shaanxi FKS Electronic Parts Import&Export Co.,Ltd.
Address:Building B1,The West Cloud Valley, Fengxi New City,
Xixian New Area,Xianyang City,Shaanxi Province,China.
Tel:0086 29 8868 5333 Fax:0086 29 8868 0913
[Http://www.fks-tech.com](http://www.fks-tech.com)

DATE (YYYY-MM-DD) 2019-01-28	GENERAL TOLERANCE DIN ISO 2768-1m	PROJECTION METHOD
DESCRIPTION SMT High Current Inductor		ORDER CODE FKS7843340100
SIZE/TYPE 8090		STATUS Valid

Typical Inductance vs. Current Characteristics:

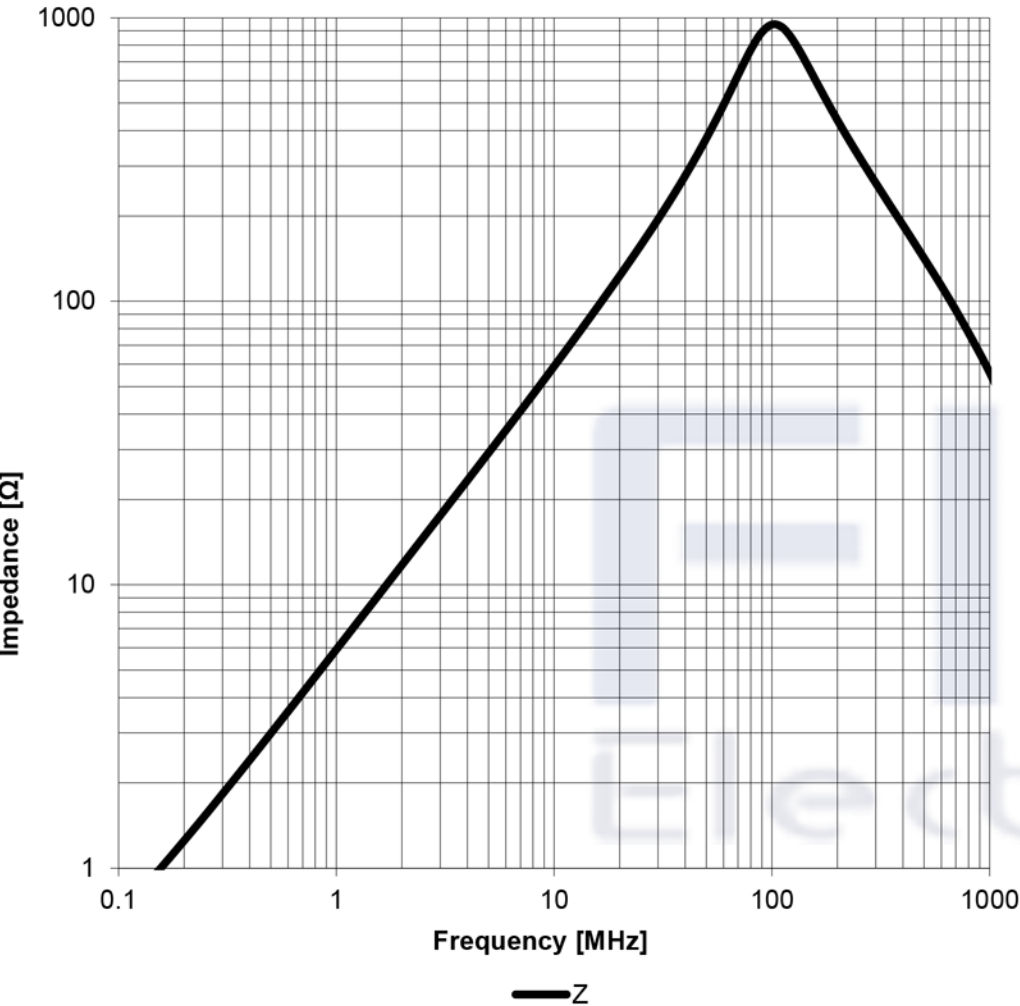


Typical Temperature Rise vs. Current Characteristics:



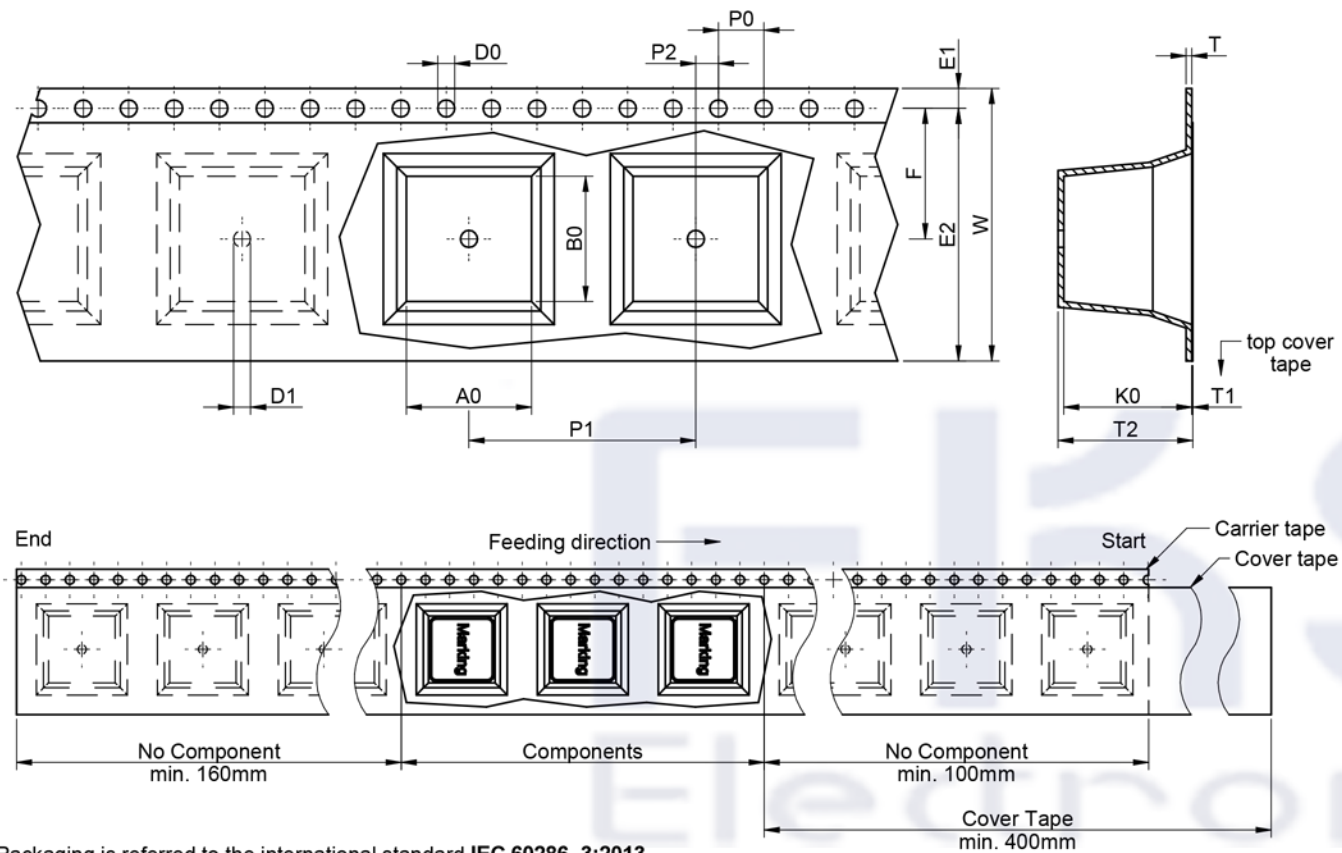
 		Shaanxi FKS Electronic Parts Import&Export Co.,Ltd. Address:Building B1,The West Cloud Valley, Fengxi New City, Xixian New Area,Xianyang City,Shaanxi Province,China. Tel:0086 29 8868 5333 Fax:0086 29 8868 0913 Http://www.fks-tech.com		DATE (YYYY-MM-DD) 2019-01-28	GENERAL TOLERANCE DIN ISO 2768-1m	PROJECTION METHOD 
DESCRIPTION SMT High Current Inductor		ORDER CODE FKS7843340100				
SIZE/TYPE 8090				STATUS Valid		

Typical Impedance Characteristics:



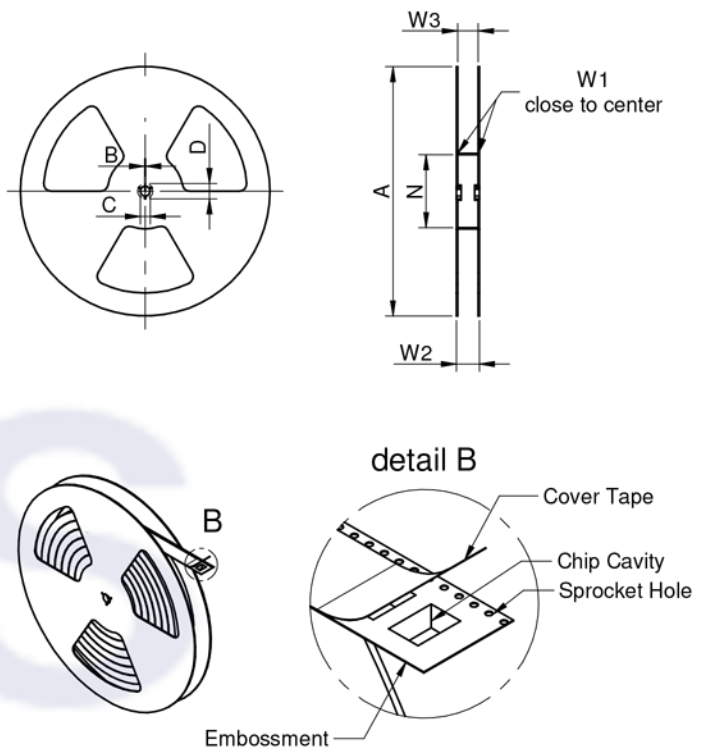
 RoHS COMPLIANT  REACH COMPLIANT  HALOGEN FREE  AEC Q200  150 °C GRADE 6				DATE (YYYY-MM-DD) 2019-01-28		GENERAL TOLERANCE DIN ISO 2768-1m		PROJECTION METHOD 			
  Shaanxi FKS Electronic Parts Import&Export Co.,Ltd. Address:Building B1,The West Cloud Valley, Fengxi New City, Xixian New Area,Xianyang City,Shaanxi Province,China. Tel:0086 29 8868 5333 Fax:0086 29 8868 0913 Http://www.fks-tech.com						DESCRIPTION SMT High Current Inductor			ORDER CODE FKS7843340100		
						SIZE/TYPE 8090			STATUS Valid		

Packaging Specification - Tape and Reel: [mm]

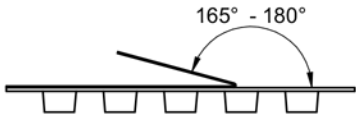


Packaging is referred to the international standard IEC 60286 -3:2013

	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	8090	8,55	8,55	24,00	0,50	0,05	9,85	9,30	4,00	16,00	2,00	1,50	1,75	22,25	11,50	Polystyrene	350



	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	100	24.4 29.4



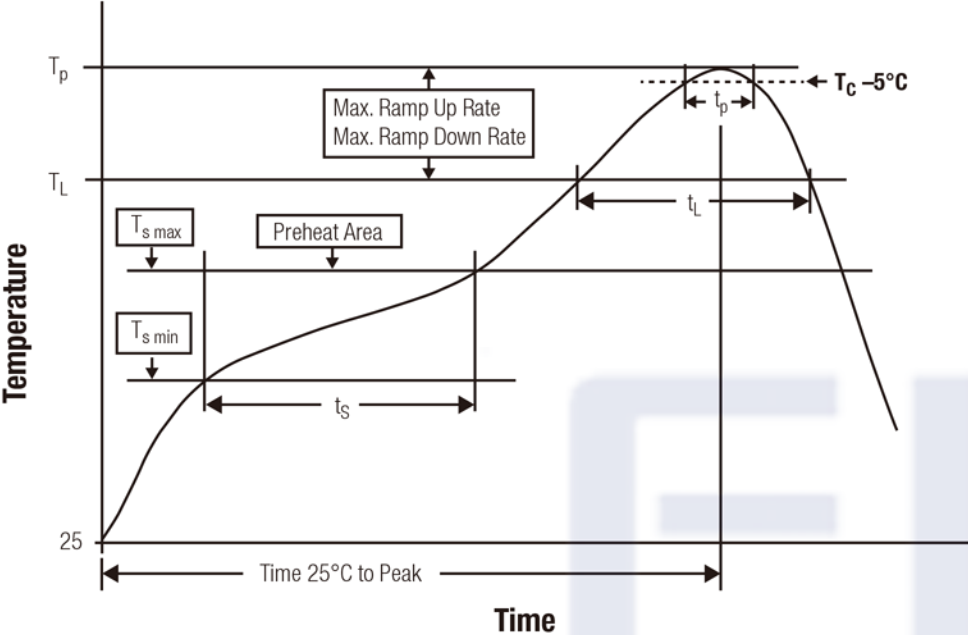
	Pull-of force
Tape width 24 mm	0,1 N - 1,3 N

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DATE (YYYY-MM-DD) 2019-01-28	GENERAL TOLERANCE DIN ISO 2768-1m	PROJECTION METHOD
DESCRIPTION SMT High Current Inductor		ORDER CODE FKS7843340100
SIZE/TYPE 8090		STATUS Valid

Classification Reflow Profile for SMT components:



Classification Reflow Soldering Profile:

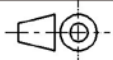
Profile Feature		Value
Preheat Temperature Min	$T_{s\ min}$	150 °C
Preheat Temperature Max	$T_{s\ max}$	200 °C
Preheat Time t_s from $T_{s\ min}$ to $T_{s\ max}$	t_s	60 - 120 seconds
Ramp-up Rate (T_L to T_P)		3 °C/ second max.
Liquidous Temperature	T_L	217 °C
Time t_L maintained above T_L	t_L	60 - 150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

refer to IPC/ JEDEC J-STD-020E

RoHS COMPLIANT REACH COMPLIANT HALOGEN FREE AEC Q200 150 °C GRADE 6		DATE (YYYY-MM-DD) 2019-01-28	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 High Current Inductor		ORDER CODE FKS7843340100
SIZE/TYPE 8090				STATUS Valid