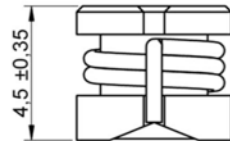
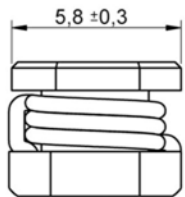
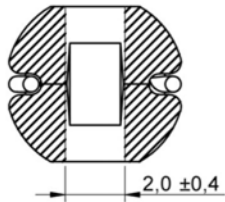


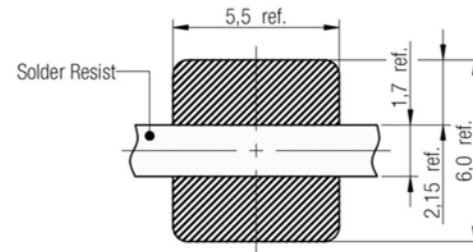
A Dimensions: [mm]



Scale - 4:1

Reference on drawing	Description
•	Start of winding
Marking	3R3 (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	3.3	μH	±20%
Rated Current	ΔT = 40 K	I _R	3.7	A	max.
Saturation Current	IΔL/LI < 10%	I _{sat}	7.5	A	typ.
DC Resistance	@ 20°C	R _{DC}	0.060	Ω	max.
DC Resistance	@ 20°C	R _{DC}	0.042	Ω	typ.
Self Resonant Freq.	@ 20°C	f _{res}	43	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_p)
- 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	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
				FKS Electronics	Order.- No. FKS784774033
					Size: 5848
	DATE				FKS Electronics

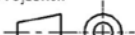


The graph shows the inductance of the 1000 μH inductor as a function of current. The inductance remains constant at approximately 3.3 μH for currents up to about 6.5 A. Beyond this point, the inductance decreases rapidly, reaching 1.0 μH at a current of 9.0 A.

Current (A)	Inductance (μH)
0.0	3.3
2.0	3.3
4.0	3.3
6.0	3.3
6.5	3.3
7.0	3.2
8.0	3.0
9.0	1.0

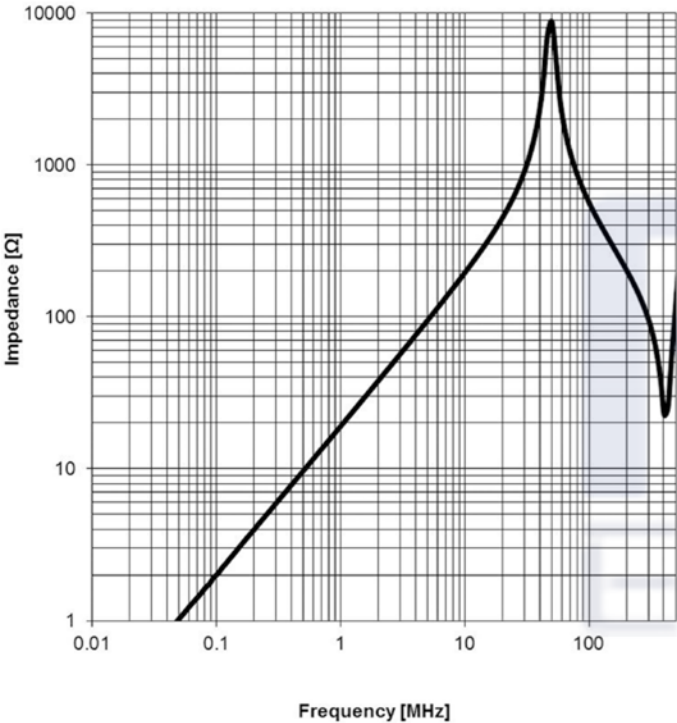
The graph shows the current capability of the 100W LED module as a function of temperature. The current is constant at 100% from 0°C to 85°C. Above 85°C, the current decreases, reaching 0% at 125°C.

Temperature [°C]	Current [A]
0	100%
85	100%
100	80%
110	60%
120	40%
125	0%

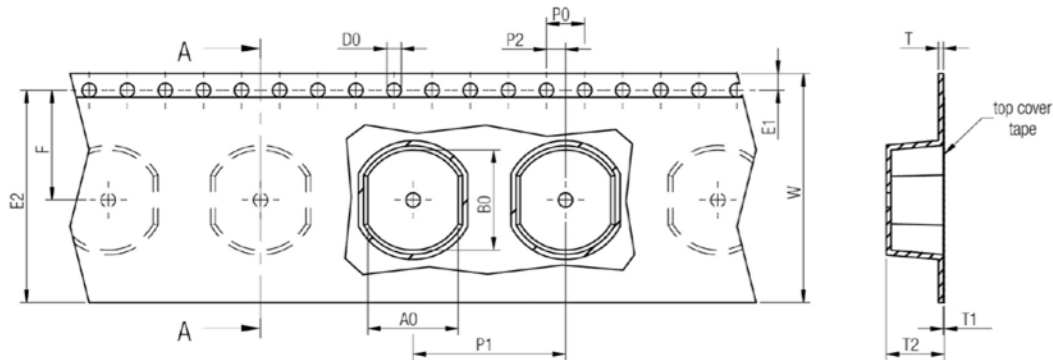
				Projection		DESCRIPTION	SMD Power Inductor	
	2015-01-07							
				Shaanxi FKS Electronic Parts Import&Export Co.,Ltd. FKS(Xi'an) Electronic Technology Co.,Ltd. Address: B1 Building,Western Cloud Valley,Fengxi New Town, Xixian New Area,Xi'an City, Shaanxi Province,China. Tel: +86-29-8868 5333 Fax: +86-29-8868 0913		Order.- No.		SIZE
				 		FKS784774033		A4
	DATE					Size: 5848		



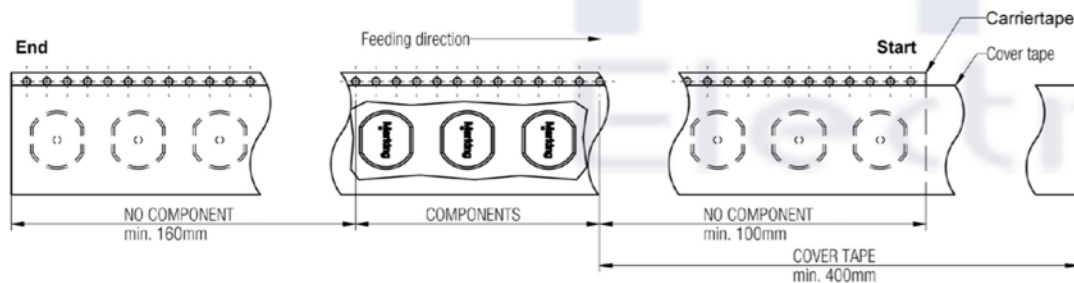
F3 Typical Impedance Characteristics:



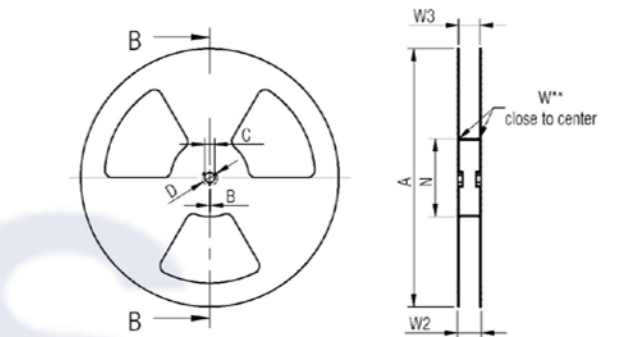
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	2015-01-07						
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						Order.- No.	SIZE
						FKS784774033	A4
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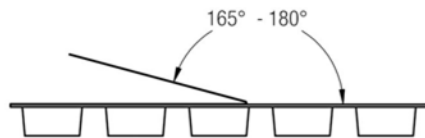
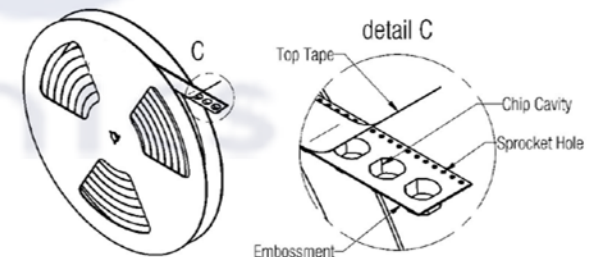
		A0	B0	W	P1	T	T1	T2	D0	E1	E2	F	P0	P2	VPE / packaging unit
tolerance		typ.	typ.	+0,3 -0,1	± 0,1	± 0,1	max.	typ.	+0,3 -0,1	± 0,1	min.	± 0,05	± 0,1	± 0,05	
size	4532	4,50	5,50	16,00	8,00	0,25	0,10	4,00	1,50	1,75	14,25	7,50	4,00	2,00	1500
	5848	5,50	6,50	16,00	8,00	0,25	0,10	5,50	1,50	1,75	14,25	7,50	4,00	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	0,1 N - 1,3 N
	0,1 N - 1,3 N

Projection



2015-01-07

 Shaanxi FKS Electronic Parts Import&Export Co.,Ltd.
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DESCRIPTION

SMD Power Inductor

Order.- No.

FKS784774033



SIZE

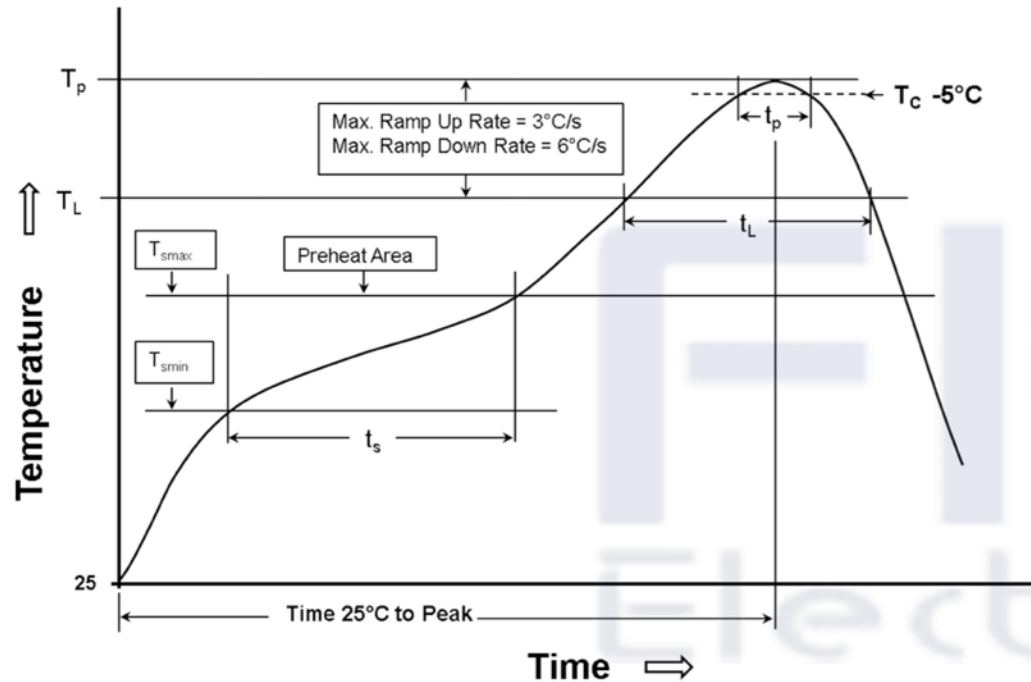
A4

Size: 5848

H Soldering Specifications:

FKS
Electronics

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		

				Projection 		DESCRIPTION
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