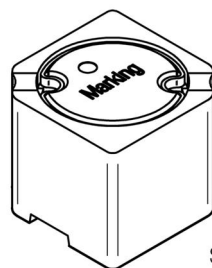
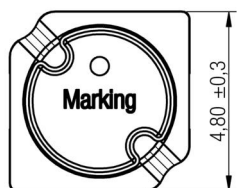
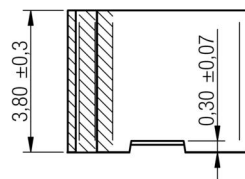
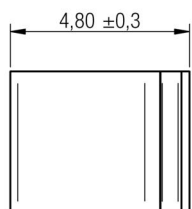
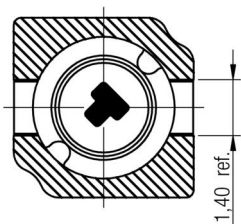
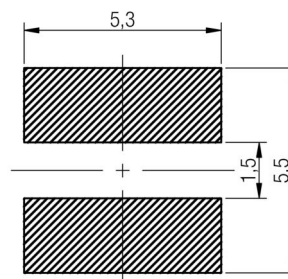


**A Dimensions: [mm]**

Scale - 5:1

**B Recommended land pattern: [mm]**

Scale - 5:1

**C Schematic:****D Electrical Properties:**

Properties	Test conditions		Value	Unit	Tol.
<b>Inductance</b>	100 kHz/ 1 mA	L	1.0	μH	±20%
<b>Rated current</b>	ΔT = 40 K	I <sub>R</sub>	3.30	A	max.
<b>Saturation current</b>	ΔL/L  < 35%	I <sub>sat</sub>	6.50	A	typ.
<b>DC Resistance</b>	@ 20°C	R <sub>DC</sub>	0.022	Ω	max.
<b>DC Resistance</b>	@ 20°C	R <sub>DC</sub>	0.019	Ω	typ.
<b>Self resonant frequency</b>		f <sub>res</sub>	90	MHz	typ.

**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<sub>R</sub>)
- Operating temperature: -40°C to +125°C
- Storage temperature (on tape & reel): -20°C to +40°C; 75% RH max.
- Test conditions of Electrical Properties: 20°C, 33% RH if not specified differently

				Projection 		DESCRIPTION
4.6	2013-04-25	SSt	SSt			<b>WE-SPC SMD Shielded Power Inductor</b>
4.5	2013-01-02	SSt	COt			
4.4	2012-12-05	SSt	SSt			
4.3	2012-10-25	SSt	CZ			
4.2	2012-06-28	SSt	SSt			
4.1	2012-05-22	SSt	CZ			
4.0	2012-05-07	SSt	CZ			
REV	DATE	BY	CHECKED			

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www.we-online.com  
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Order.- No.

**74408943010**

Size: 4838

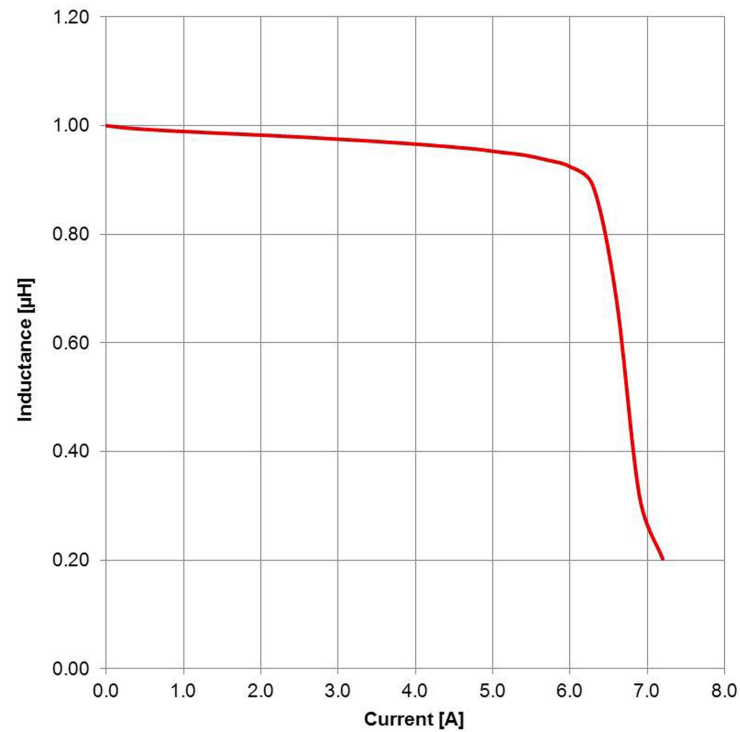


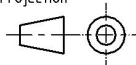

SIZE

A4



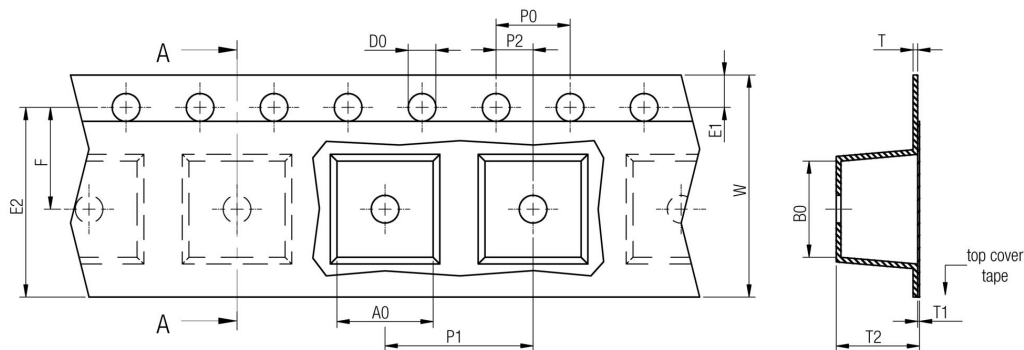
F Typical Inductance vs. Current Characteristics:



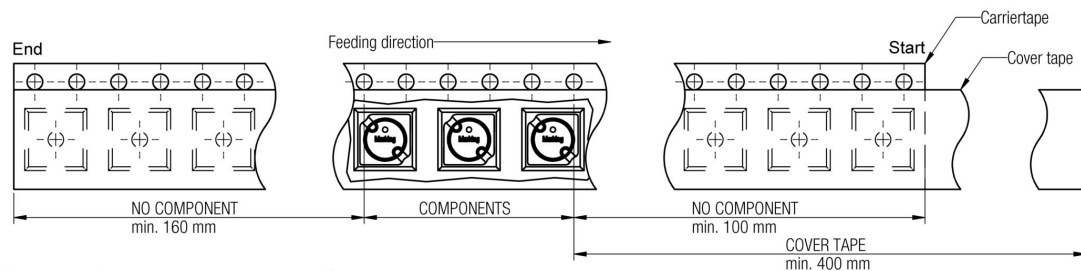
				<div>Projection</div> 		DESCRIPTION			
4.6	2013-04-25	SSt	SSt			<b>WE-SPC SMD Shielded Power Inductor</b>			
4.5	2013-01-02	SSt	COt						
4.4	2012-12-05	SSt	SSt	<div>Würth Elektronik eiSos GmbH &amp; Co. KG EMC &amp; Inductive Solutions Max-Eyth-Str. 1 74638 Waldenburg Germany Tel. +49 (0) 79 42 945 - 0 www.we-online.com eiSos@we-online.com</div>			Order.- No.		SIZE
4.3	2012-10-25	SSt	CZ				<b>74408943010</b>		A4
4.2	2012-06-28	SSt	SSt					Size: 4838	
4.1	2012-05-22	SSt	CZ						
4.0	2012-05-07	SSt	CZ						
REV	DATE	BY	CHECKED						

This electronic component has been designed and developed for usage in general electronic equipment only. This product is not authorized for use in equipment where a higher safety standard and reliability standard is especially required or where a failure of the product is reasonably expected to cause severe personal injury or death, unless the parties have executed an agreement specifically governing such use. Moreover Würth Elektronik eiSos GmbH & Co KG products are neither designed nor intended for use in areas such as military, aerospace, aviation, nuclear control, submarine, transportation (automotive control, train control, ship control), transportation signal, disaster prevention, medical, public information network etc.. Würth Elektronik eiSos GmbH & Co KG must be informed about the intent of such usage before the design-in stage. In addition, sufficient reliability evaluation checks for safety must be performed on every electronic component which is used in electrical circuits that require high safety and reliability functions or performance.

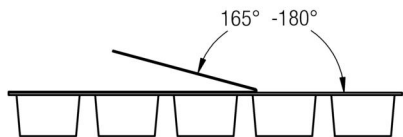
## G Packaging Specification - Tape and Reel [mm]:



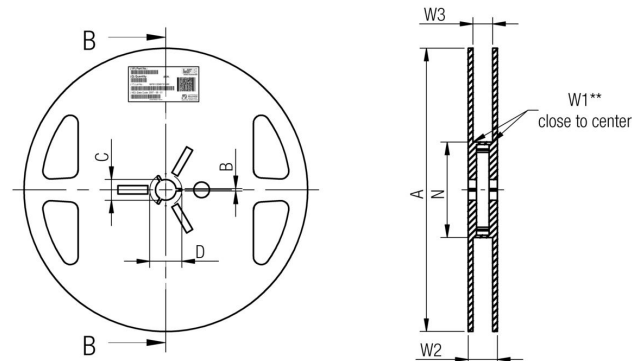
		A0	B0	W	P1	T	T1	T2	D0	E1	E2	F	P0	P2	Tape	VPE / packaging unit
	tolerance	typ.	typ.	+0,3 -0,1	± 0,1	± 0,1	max.	typ.	+0,1 -0,0	± 0,1	min.	± 0,05	± 0,1	± 0,05		
size	4818	5,20	5,20	12,00	8,00	0,50	0,10	2,40	1,50	1,75	10,25	5,50	4,00	2,00	Polystyrene	500
	4828	5,20	5,20	12,00	8,00	0,50	0,10	3,40	1,50	1,75	10,25	5,50	4,00	2,00	Polystyrene	500
	4838	5,20	5,20	12,00	8,00	0,50	0,10	4,40	1,50	1,75	10,25	5,50	4,00	2,00	Polystyrene	500



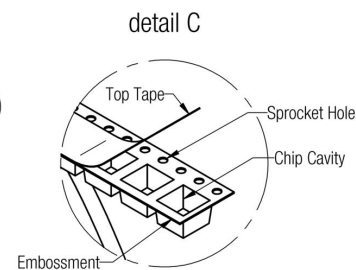
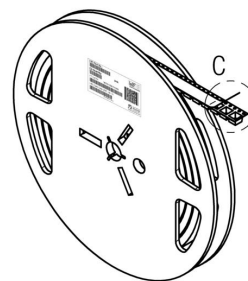
Packaging is referred to the international standard IEC 60286 -3:2007



		Pull-of force
Tape width	12 mm	0,1 N - 1,0 N



		A	B	C	D	N	W1	W2	W3	W3
	tolerance	± 2,0	min.	± 0,8	min.	min.	+ 1,5	max.	min.	max.
Tape width	12 mm	178,00	1,50	13,00	20,20	50,00	12,40	18,40	11,90	15,40



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eiSos@we-online.com

DESCRIPTION

**WE-SPC SMD Shielded Power Inductor**

Order.- No.

**74408943010**

Size: 4838



SIZE

A4

H Soldering Specifications:



H1: Classification Reflow Profile for SMT components:



H2: Classification Reflow Profiles

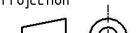

Profile Feature	Pb-Free Assembly
Preheat <ul style="list-style-type: none"><li>- Temperature Min (<math>T_{smin}</math>)</li><li>- Temperature Max (<math>T_{smax}</math>)</li><li>- Time (<math>t_s</math>) from (<math>T_{smin}</math> to <math>T_{smax}</math>)</li></ul>	150°C 200°C 60-120 seconds
Ramp-up rate ( $T_L$ to $T_p$ )	3°C/ second max.
Liquidous temperature ( $T_L$ ) Time ( $t_L$ ) maintained above $T_L$	217°C 60-150 seconds
Peak package body temperature ( $T_p$ )	See Table H3
Time within 5°C of actual peak temperature ( $t_p$ )	20-30 seconds
Ramp-down rate ( $T_p$ to $T_L$ )	6°C/ second max.
Time 25°C to peak temperature	8 minutes max.

refer to IPC/JEDEC J-STD-020D

H3: Package Classification Reflow Temperature

	Package Thickness	Volume mm³ <350	Volume mm³ 350 - 2000	Volume mm³ >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

refer to IPC/JEDEC J-STD-020D

				<div>Projection</div> 		DESCRIPTION					
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4.4	2012-12-05	SSt	SSt	<div>Würth Elektronik eiSos GmbH &amp; Co. KG</div> <div>EMC &amp; Inductive Solutions</div> <div>Max-Eyth-Str. 1</div> <div>74638 Waldenburg</div> <div>Germany</div> <div>Tel. +49 (0) 79 42 945 - 0</div> <div>www.we-online.com</div> <div>eiSos@we-online.com</div>		Order.- No.			SIZE		
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4.0	2012-05-07	SSt	CZ								
REV	DATE	BY	CHECKED								



