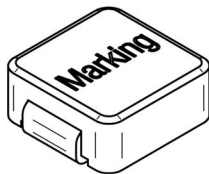
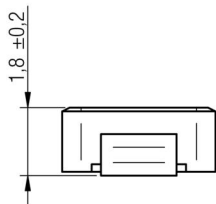
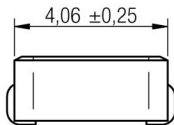
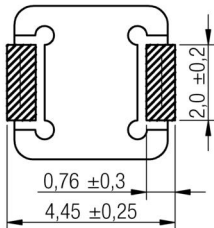
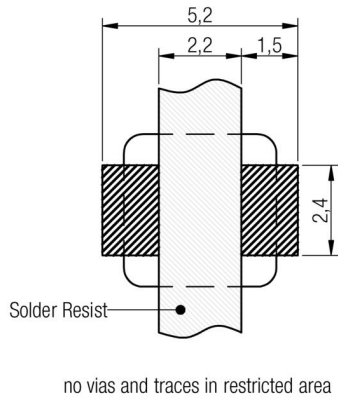


A Dimensions: [mm]



Scale - 5:1

B Land Pattern: [mm]



Scale - 5:1

C Schematic:



D Electrical Properties:

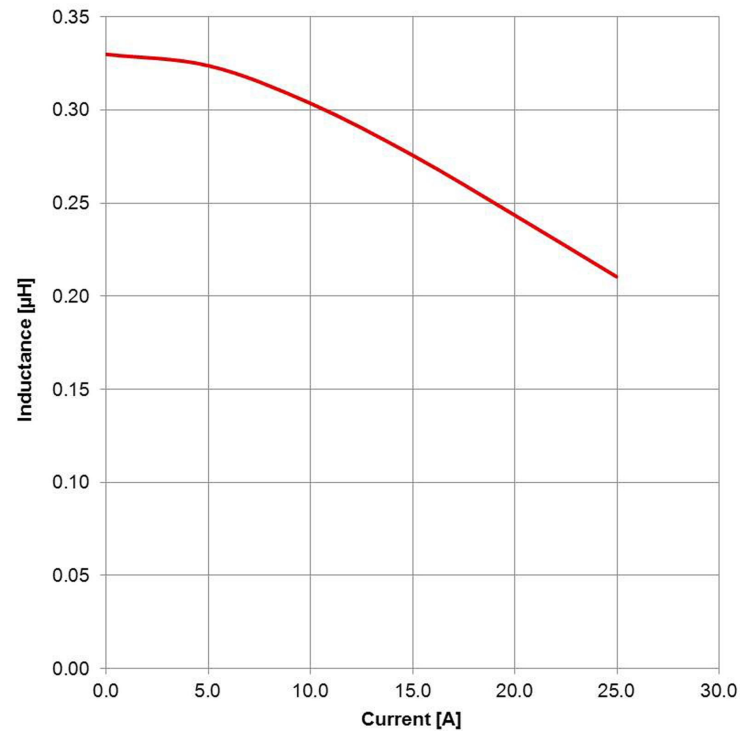
Properties	Test conditions		Value	Unit	Tol.
Inductance	100 kHz/ 10 mA	L	0.33	µH	±20%
Rated Current	ΔT = 40 K	I _R	8.0	A	max.
Saturation Current	IΔL/LI < 20%	I _{sat}	16.5	A	typ.
DC Resistance	@ 20°C	R _{DC}	8.6	mΩ	max.
DC Resistance	@ 20°C	R _{DC}	7.8	mΩ	typ.
Self Resonant Frequency		f _{res}	143	MHz	typ.

E General information:

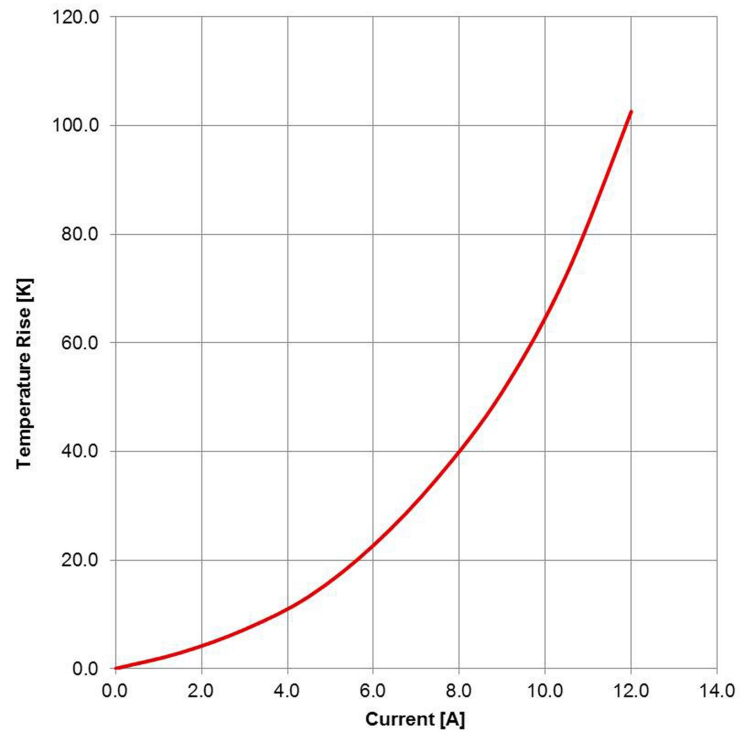
It is recommended that the temperature of the part does not exceed 125°C under worst case operating conditions.
Ambient temperature: -40°C to +85°C (referring to I_R)
Operating temperature: -40°C to +125°C
Storage temperature (on tape & reel): -20°C to +40°C; 75% RH max.
Test conditions of Electrical Properties: 20°C, 33% RH
if not specified differently



F Typical Inductance vs. Current Characteristics:



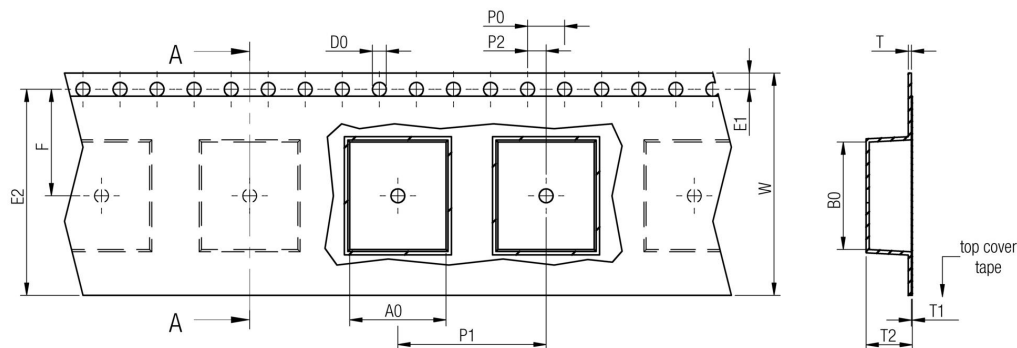
F Typical Temperature rise vs. Current Characteristics:



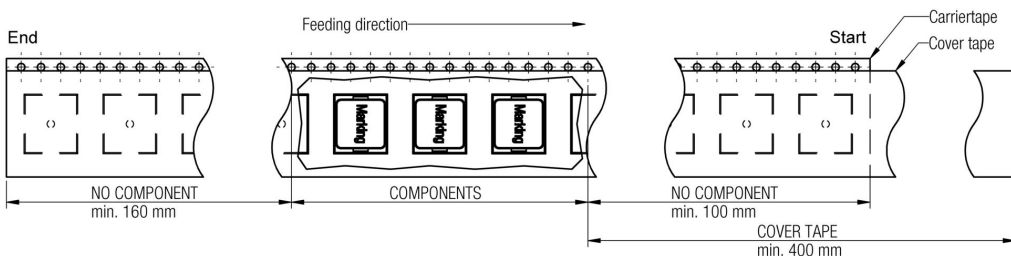
				Projection		DESCRIPTION	
				Würth Elektronik eiSos GmbH & Co. KG EMC & Inductive Solutions Max-Eyth-Str. 1 74638 Waldenburg Germany Tel. +49 (0) 79 42 945 - 0 www.we-online.com eiSos@we-online.com		WE-LHMI SMD Power Inductor	
						Order.- No.	
1.1	2012-02-29	SSt	BD			744373240033	
1.0	2011-10-01	SSt	BD			COMPLIANT RoHS&REACH WÜRTH ELEKTRONIK	
REV	DATE	BY	CHECKED			Size: 4020	
						SIZE	
						A4	

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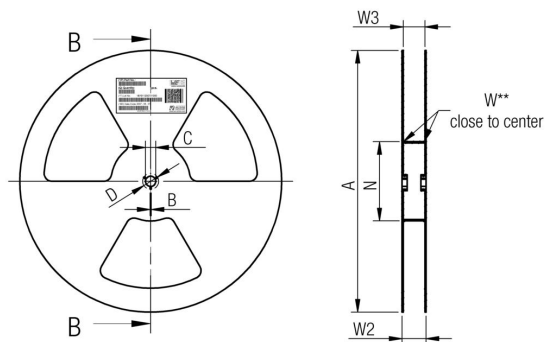
G Packaging Specification: [mm]



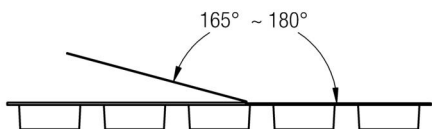
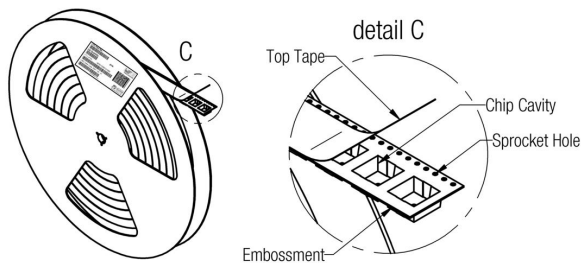
	A0	B0	W	P1	T	T1	T2	D0	E1	E2	F	P0	P2	Tape	VPE / packaging unit
tolerance	typ.	typ.	+0,3 -0,1	± 0,1	± 0,1	max.	typ.	+0,1 -0,0	± 0,1	min.	± 0,05	± 0,1	± 0,05		
size	4020	4,41	5,00	12,00	8,00	0,35	0,10	2,70	1,50	1,75	6,25	3,50	4,00	2,00	Polystyrene 3000
	7030	7,00	7,70	16,00	12,00	0,35	0,10	3,70	1,50	1,75	14,25	7,50	4,00	2,00	Polystyrene 1000
	7050	7,00	7,70	16,00	12,00	0,35	0,10	5,70	1,50	1,75	14,25	7,50	4,00	2,00	Polystyrene 800
	1040	10,40	11,60	24,00	16,00	0,35	0,10	4,90	1,50	1,75	22,25	11,50	4,00	2,00	Polystyrene 500
	1335	13,00	14,10	24,00	16,00	0,35	0,10	4,40	1,50	1,75	22,25	11,50	4,00	2,00	Polystyrene 500



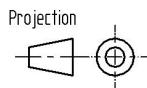
Packaging is referred to the international standard IEC 60286 -3:2007



	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	330,00	1,50	13,00	20,20	100,00	12,40	18,40	11,90
	16 mm	330,00	1,50	13,00	20,20	100,00	16,40	22,40	15,90
	24 mm	330,00	1,50	13,00	20,20	100,00	24,40	30,40	23,90



	Pull-of force
Tape width 12 mm	0,1 N - 1,3 N
16 mm	0,1 N - 1,3 N
24 mm	0,1 N - 1,3 N



Würth Elektronik eiSos GmbH & Co. KG
EMC & Inductive Solutions
Max-Eyth-Str. 1
74638 Waldenburg
Germany
Tel. +49 (0) 79 42 945 - 0
www.we-online.com
eiSos@we-online.com

DESCRIPTION

WE-LHMI SMD Power Inductor

Order.- No.

744373240033

Size: 4020



SIZE

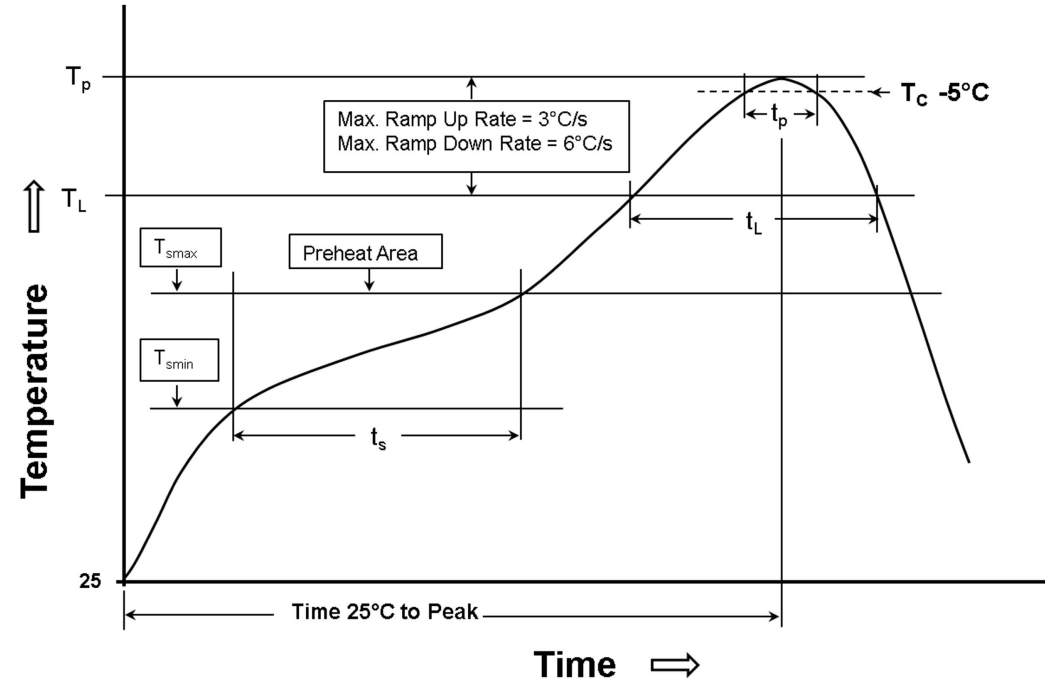
A4

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H Soldering Specifications:



H1: Classification Reflow Profile for SMT components:



H2: Classification Reflow Profiles

Profile Feature	Pb-Free Assembly
Preheat - Temperature Min (T_{smin}) - Temperature Max (T_{smax}) - Time (t_s) from (T_{smin} to T_{smax})	150°C 200°C 60-180 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

				Projection 		DESCRIPTION
						WE-LHMI SMD Power Inductor
						Order.- No.
						744373240033
						Size: 4020
						SIZE
						A4
1.1	2012-02-29	SSt	BD	Würth Elektronik eiSos GmbH & Co. KG EMC & Inductive Solutions Max-Eyth-Str. 1 74638 Waldenburg Germany Tel. +49 (0) 79 42 945 - 0 www.we-online.com eiSos@we-online.com		
1.0	2011-10-01	SSt	BD			
REV	DATE	BY	CHECKED			

I Cautions and Warnings:

The following conditions apply to all goods within the product series of WE-LHMI of Würth Elektronik eiSos GmbH & Co. KG:

General:
All recommendations according to the general technical specifications of the data-sheet have to be complied with.

The disposal and operation of the product within ambient conditions which probably alloy or harm the wire isolation has to be avoided.

If the product is potted in customer applications, the potting material might shrink during and after hardening. Accordingly to this the product is exposed to the pressure of the potting material with the effect that the core, wire and termination is possibly damaged by this pressure and so the electrical as well as the mechanical characteristics are endanger to be affected. After the potting material is cured, the core, wire and termination of the product have to be checked if any reduced electrical or mechanical functions or destructions have occurred.

The responsibility for the applicability of customer specific products and use in a particular customer design is always within the authority of the customer. All technical specifications for standard products do also apply for customer specific products.

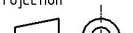
Washing varnish agent that is used during the production to clean the application might damage or change the characteristics of the wire insulation, the marking or the plating. The washing varnish agent could have a negative effect on the long turn function of the product.

Direct mechanical impact to the product shall be prevented as the iron powder material of the core could flake or in the worst case it could break.

Product specific:
Follow all instructions mentioned in the datasheet, especially:

- The solder profile has to be complied with according to the technical reflow soldering specification, otherwise no warranty will be sustained.
- All products are supposed to be used before the end of the period of 12 months based on the product date-code, if not a 100% solderability can't be warranted.
- Violation of the technical product specifications such as exceeding the nominal rated current will result in the loss of warranty.



					Projection 		DESCRIPTION WE-LHMI SMD Power Inductor		
					Würth Elektronik eiSos GmbH & Co. KG EMC & Inductive Solutions Max-Eyth-Str. 1 74638 Waldenburg Germany Tel. +49 (0) 79 42 945 - 0 www.we-online.com eiSos@we-online.com		Order.- No. 744373240033 Size: 4020	 COMPLIANT RoHS&REACH WÜRTH ELEKTRONIK	SIZE A4
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