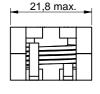
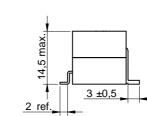
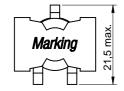
#### **Dimensions:** [mm]

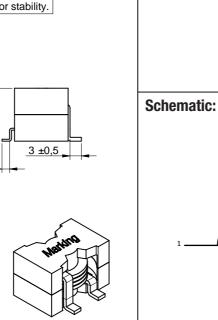
#### **Recommended Land Pattern: [mm]**

#### 9 ±0,5 2,5 ±0,2 ,5 ±1,0 e n 3 🗭 Pin 3 is only used for stability. 2,5 ±0,2





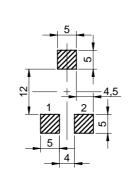




Scale - 1:1

RoHS

REACh



## Scale - 1:1

# 2

#### **Electrical Properties:**

Properties		Test conditions	Value	Unit	Tol.
Inductance	L	100 kHz/ 10 mA	3.1	μH	±15%
Rated Current	I <sub>R,50K</sub>	$\Delta T = 50 \text{ K}$	26	А	max.
Performance Rated Current <sup>1)</sup>	I <sub>RP,40K</sub>	$\Delta T = 40 \text{ K}$	33.15	А	max.
Saturation Current @ 10%	I <sub>SAT,10%</sub>	IΔL/LI < 10 %	41	А	typ.
Saturation Current @ 30%	I <sub>SAT,30%</sub>	ΙΔL/LI < 30 %	45	А	typ.
DC Resistance	R <sub>DC</sub>	@ 20 °C	2.3	mΩ	max.
Self Resonant Frequency	f <sub>res</sub>		29	MHz	typ.

1) refer to IEC 62024-2-2020

Ambient Te to I <sub>R</sub> )	mperature (	referring	-40 up to +75 °C				
Operating 1	<b>Cemperature</b>			-40 up to	+125 °C		
	Storage Conditions (in original packaging) Moisture Sensitivity Level (MSL)			< 40 °C; < 75 % RH			
Moisture S				1			
Test	Test conditions of Electrical Properties: +20 °C, 33 % RH if not specified differently						
Test condit	Test conditions of Performance Rated Current: refer to IEC 62024-2, Class D (PCB Copper Width: 40 mm; PCB Copper Thickness: 1000 μm)						
Temperatu proximit	Temperature rise is highly dependent on many factors including PCB land pattern, trace size, ar proximity to other components. Therefore, temperature rise should be verified in application conditions.						
 CHECKED	REVISION	DATE (YYYY-MM-DD)	GENERAL TOLERANCE		PROJECTION METHOD		
EIGa	003.000	2021-07-05	DIN ISO 2768-1m				
WE-H	ICF SMT	High Cu	rrent				
Induc		5		ORDER COE 744	⊧ 3630310		
SZE/TYPE BLSINESS LINIT STATUS							

eiSos

Valid

1/9

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 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 Wirth Elektronik elSos 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 therefore 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, before the design-in stage, in addition, sufficient reliability transportation isgnal, disaster prevention, medical, public information network etc.. Wirth Elektronik elSos 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 the require high safety and reliability functions or performance.

Germany Tel. +49 (0) 79 42 945 - 0 www.we-online.com eiSos@we-online.com

2013

125 °C

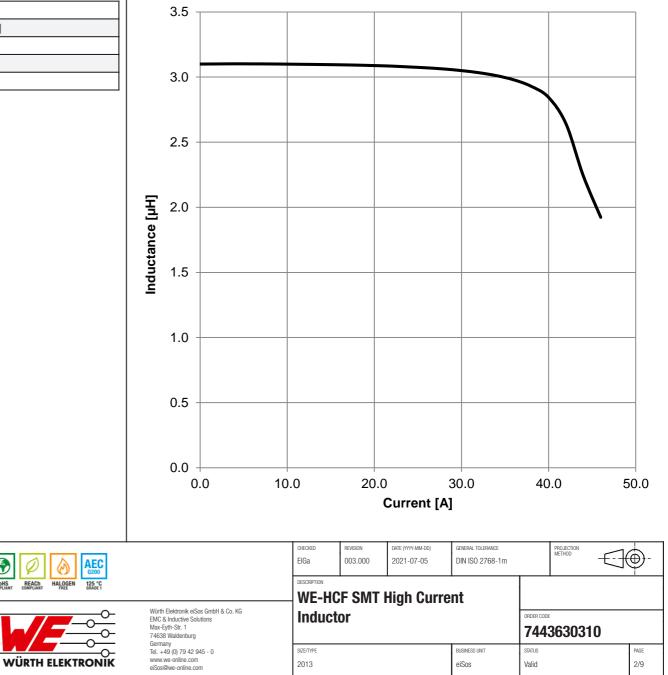
HALOGEN

WÜRTH ELEKTRONIK

#### **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]
Component Qualification	AEC-Q200 Grade 1

**Typical Inductance vs. Current Characteristics:** 



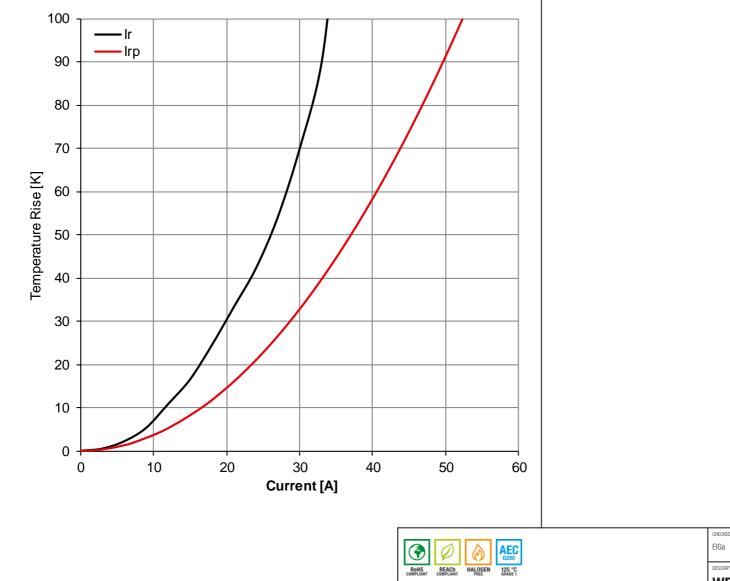
This electronic component has been designed and developed for usage in general electronic equipment only. This product is not authorized for use in equipment where a higher safety standard and reliability standard is especially required or where a failure of the product is not authorized for use in equipment 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 Wirth Elektronik elSos 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 therefore 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, before the design-in stage, in addition, sufficient reliability transportation isgnal, disaster prevention, medical, public information network etc.. Wirth Elektronik elSos 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 the require high safety and reliability functions or performance.

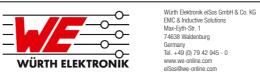
3

RoHS

REACh

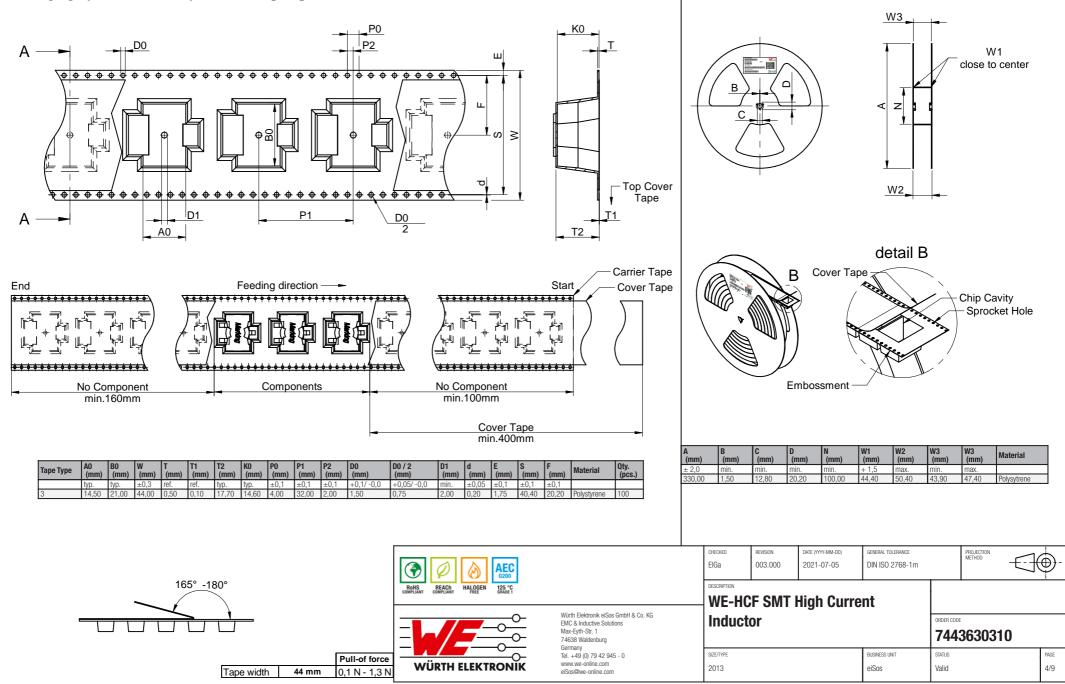
#### **Typical Temperature Rise vs. Current Characteristics:**



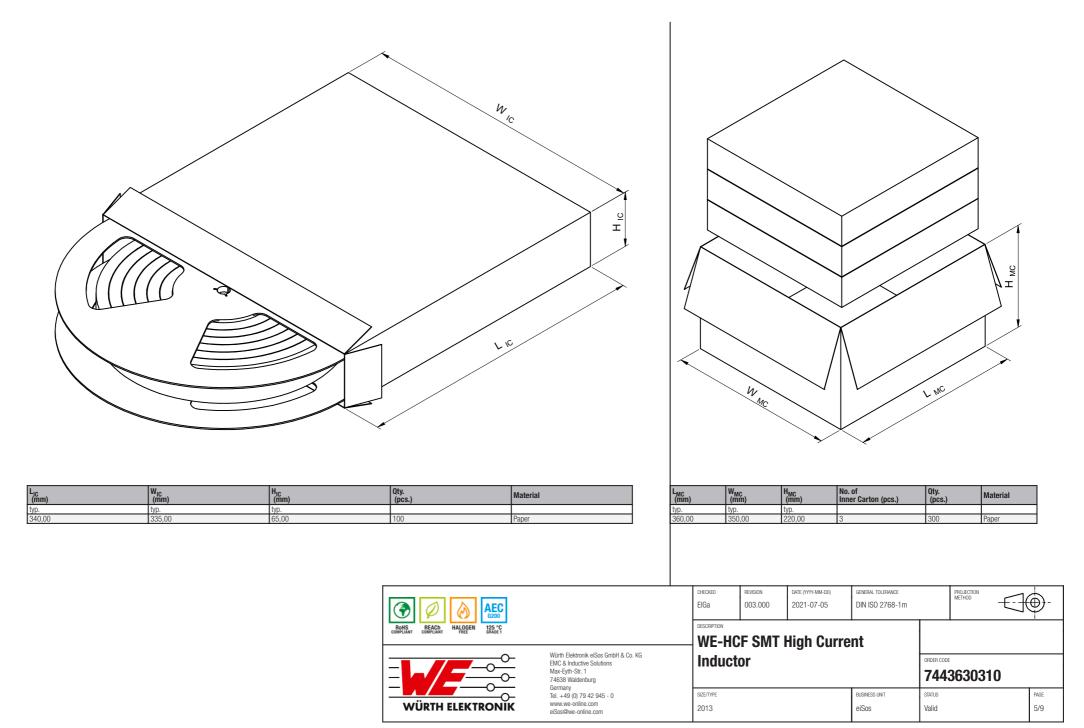


Inductor 7443630310		
SIZE/TYPE BUSINESS UNIT STATUS	PAGE	
2013 eiSos Valid	3/9	

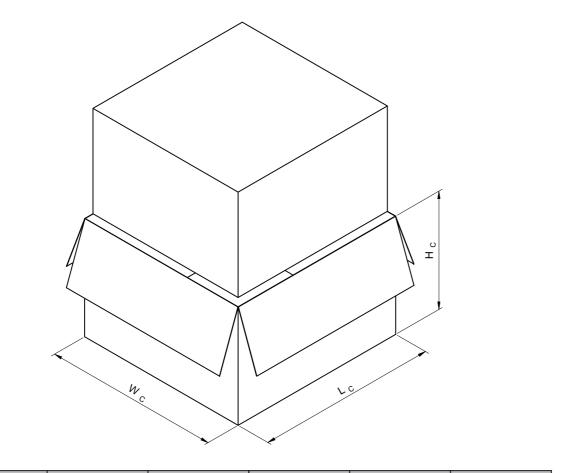
This electronic component has been designed and developed for usage in general electronic equipment only. This product is not authorized for use in equipment where a higher safety standard and reliability standard is especially required or where a failure of the product is not authorized tor use in equipment 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 elSos GmbH & Co KG must be informed about the intent of such usage before the design-in stage. In addition, sufficient reliability valuation checks for safety must be performed on every electronic component which is used in electrical incurbic for soft mance.



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 Warth Elektronik elSos GmbH & Co KG products are netliner designed on intended for use in equipment which is used in developed for usage before the design-in stage. In addition, nuclear control, train control, ship control, train sportation signal, disaster prevention, medical, public information network etc.. Worth Elektronik elSos 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 developed relicital circuits that require high stafety and reliability inclusions or performance.



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 not authorized tor 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 elSos GmbH & Co KG must be informed about the intent of such usage before the design-in stage. In addition, sufficient reliability valuation checks for safety must be performed on every electronic component which is used in electrical incurbic for soft mance.



L <sub>C</sub> (mm)	W <sub>C</sub> (mm)	<u>,</u> u	No. of Middle Carton (pcs.)	Qty. (pcs.)	Material
typ.	typ.	typ.			
380,00	370,00	247,00	1	300	Paper

		CHECKED EIGa	REVISION 003.000	DATE (YYYY-MM-DD) 2021-07-05	GENERAL TOLERANCE DIN ISO 2768-1 m		PROJECTION METHOD	]@-
ROMES COMPLIANT COMPLIANT REACC COMPLIANT REACC REAC		WE-HCF SMT High Current Inductor 7443630310						
	Germany Tel. +49 (0) 79 42 945 - 0 www.we-online.com eiSos@we-online.com	SIZE/TYPE 2013			BUSINESS UNIT eiSos	status Valid		PAGE 6/9

This electronic component has been designed and developed for usage in general electronic equipment only. This product is not authorized for use in equipment only and and and reliability standard and reliability standard and reliability required or where a failure of the product is not authorized for use in 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 Winth Elektronik elSos 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 reasonably expected to cause severe personal injury or death, unless the parties have executed an agreement specifically governing such use. Moreover Winth Elektronik elSos 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 inclusions or performance.

#### **Classification Reflow Profile for SMT components:**



#### **Classification Reflow Soldering Profile:**

Profile Feature		Value		
Preheat Temperature Min	T <sub>s min</sub>	150 °C		
Preheat Temperature Max	T <sub>s max</sub>	200 °C		
Preheat Time $\rm t_s$ from $\rm T_{s\ min}$ to $\rm T_{s\ max}$	t <sub>s</sub>	60 - 120 seconds		
Ramp-up Rate (T <sub>L</sub> to T <sub>P</sub> )		3 °C/ second max.		
Liquidous Temperature	TL	217 °C		
Time $\mathbf{t}_{\mathrm{L}}$ maintained above $\mathbf{T}_{\mathrm{L}}$	tL	60 - 150 seconds		
Peak package body temperature	Т <sub>р</sub>	$T_p \le T_c$ , see Table below		
Time within 5°C of actual peak temperature	t <sub>p</sub>	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-020E

#### Package Classification Reflow Temperature (T<sub>c</sub>):

Properties	Volume mm <sup>3</sup> <350	Volume mm <sup>3</sup> 350-2000	Volume mm <sup>3</sup> >2000
PB-Free Assembly I Package Thickness < 1.6 mm	260 °C	260 °C	260 °C
PB-Free Assembly   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

ROHSAT REACTOR HALOGEN ALOGEN IZZ "C COMPLIANT REACTOR HALOGEN IZZ "C REACTOR HALOGEN IZZ "C		CHECKED EIGa	REVISION 003.000	DATE (YYYY-MM-DD) 2021-07-05	GENERAL TOLERANCE DIN ISO 2768-1m		PROJECTION METHOD	<u>}</u>
		WE-HCF SMT High Current						
	Wirth Elektronik elSos GmbH & Co. KG EMC & Inductive Solutions Max-Eyth-Str. 1 74638 Waldenburg Germany	Induct	or			ORDER CODE	3630310	
	Tel. +49 (0) 79 42 945 - 0	size/type 2013			BUSINESS UNIT eiSos	status Valid		PAGE 7/9

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 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 elSos GmbH & Co KG must be informed about the intent of such usage before the design-in stage. In addition, sufficient reliability valuation checks for safety must be produced on expected on cause severe personal injury or death, unless the parties have executed an agreement specifically governing such use. Moreover Würth Elektronik elSos GmbH & Co KG must be informed about the intent of such usage before the design-in stage. In addition, sufficient reliability valuation checks for safety must be produced on expected controlic component which is used in the relatival or cause. A leading of the electrical circuits the relatival expected on expected and electrical controls must be produced on expected on expected and the intent of such usage before the design-in stage. In addition, sufficient reliability valuation checks for safety must be produced on expected and the electrical circuits that require high safety and reliability for the electrical circuits that require high safety and reliability for the electrical circuits that require high safety and reliability for the electrical circuits that require high safety and reliability for the electrical circuits that require high safety and reliability for the electrical circuits that require high safety and reliability for the electrical circuits that require high safety and reliability for the electrical circuits that the electrical circuits that the electrical circuits the electrica

#### **Cautions and Warnings:**

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

#### **General:**

- This electronic component was designed and manufactured for use in general electronic equipment.
- Würth Elektronik must be asked for written approval (following the PPAP procedure) before incorporating the components into any
  equipment in fields such as military, aerospace, aviation, nuclear control, submarine, transportation (automotive control, train control,
  ship control), transportation signal, disaster prevention, medical, public information network, etc. where higher safety and reliability are
  especially required and/or if there is the possibility of direct damage or human injury.
- · Electronic components that will be used in safety-critical or high-reliability applications, should be pre-evaluated by the customer.
- The component was designed and manufactured to be used within the datasheet specified values. If the usage and operation conditions
  specified in the datasheet are not met, the wire insulation may be damaged or dissolved.
- Do not drop or impact the components, as the core may flake apart.
- Würth Elektronik products are qualified according to international standards, which are listed in each product reliability report. Würth
  Elektronik does not guarantee any customer qualified product characteristics beyond Würth Elektroniks' specifications, for its validity and
  sustainability over time.
- The customer is responsible for the functionality of their own products. All technical specifications for standard products also apply to customer specific products.

#### **Product specific:**

#### Soldering:

- · The solder profile must comply with the Würth Elektronik technical soldering specification. All other profiles will void the warranty.
- All other soldering methods are at the customers' own risk.

#### **Cleaning and Washing:**

Washing agents used during the production to clean the customer application may damage or change the characteristics of the wire
insulation, marking or plating. Washing agents may have a negative effect on the long-term functionality of the product.

#### Potting:

If the product is potted in the costumer application, the potting material may shrink or expand during and after hardening. Shrinking
could lead to an incomplete seal, allowing contaminants into the core. Expansion could damage the core or wire contacts. We
recommend a manual inspection after potting to avoid these effects.

#### **Storage Conditions:**

- A storage of Würth Elektronik products for longer than 12 months is not recommended. Within other effects, the terminals may suffer degradation, resulting in bad solderability. Therefore, all products shall be used within the period of 12 months based on the day of shipment.
- Do not expose the components to direct sunlight.
- The storage conditions in the original packaging are defined according to DIN EN 61760-2.

#### Packaging:

 The packaging specifications apply only to purchase orders comprising whole packaging units. If the ordered quantity exceeds or is lower than the specified packaging unit, packaging in accordance with the packaging specifications cannot be ensured.

#### Handling:

- · Violation of the technical product specifications such as exceeding the nominal rated current will void the warranty
- Applying currents with audio-frequency signals may result in audible noise due to the magnetostrictive material properties.
- Due to heavy weight of the components, strong forces and high accelerations may have the effect to damage the electrical connection
  or to harm the circuit board and will void the warranty.

These cautions and warnings comply with the state of the scientific and technical knowledge and are believed to be accurate and reliable. However, no responsibility is assumed for inaccuracies or incompleteness

Reach Reach		CHECKED EIGa	REVISION 003.000	DATE (YYYY-MM-DD) 2021-07-05	GENERAL TOLERANCE DIN ISO 2768-1m		PROJECTION METHOD	-	€-
		WE-HC	FSMT	High Curre	nt				
	Würft Elektronik elsos GmbH & Co. KG EMC & Inductive Solutions Max-Eyth-Str. 1 74638 Waldenburg Germany Tel. +49 (0) 79 42 945 - 0 www.we-online.com elSos@we-online.com	Induct	or			ORDER CODE	363031	0	
		SIZE/TYPE 2013			BUSINESS UNIT eiSos	status Valid			PAGE 8/9

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 Wirth Elektronik elSos GmbH & Co KG products are neither designed on rinended for use in equipment which is used in effective (a transportation (automotive control, train control, ship control, train control, ship control, train control, trai

#### **Important Notes**

## The following conditions apply to all goods within the product range of Würth Elektronik eiSos GmbH & Co. KG:

#### 1. General Customer Responsibility

Some goods within the product range of Würth Elektronik eiSos GmbH & Co. KG contain statements regarding general suitability for certain application areas. These statements about suitability are based on our knowledge and experience of typical requirements concerning the areas, serve as general guidance and cannot be estimated as binding statements about the suitability for a customer application. The responsibility for the applicability and use in a particular customer design is always solely within the authority of the customer. Due to this fact it is up to the customer to evaluate, where appropriate to investigate and decide whether the device with the specific product characteristics described in the product specification is valid and suitable for the respective customer application or not.

#### 2. Customer Responsibility related to Specific, in particular Safety-Relevant Applications

It has to be clearly pointed out that the possibility of a malfunction of electronic components or failure before the end of the usual lifetime cannot be completely eliminated in the current state of the art, even if the products are operated within the range of the specifications. In certain customer applications requiring a very high level of safety and especially in customer applications in which the malfunction or failure of an electronic component could endanger human life or health it must be ensured by most advanced technological aid of suitable design of the customer application that no injury or damage is caused to third parties in the event of malfunction or failure of an electronic component. Therefore, customer is cautioned to verify that data sheets are current before placing orders. The current data sheets can be downloaded at www.we-online.com.

#### 3. Best Care and Attention

Any product-specific notes, cautions and warnings must be strictly observed. Any disregard will result in the loss of warranty.

#### 4. Customer Support for Product Specifications

Some products within the product range may contain substances which are subject to restrictions in certain jurisdictions in order to serve specific technical requirements. Necessary information is available on request. In this case the field sales engineer or the internal sales person in charge should be contacted who will be happy to support in this matter.

#### 5. Product R&D

Due to constant product improvement product specifications may change from time to time. As a standard reporting procedure of the Product Change Notification (PCN) according to the JEDEC-Standard inform about minor and major changes. In case of further queries regarding the PCN, the field sales engineer or the internal sales person in charge should be contacted. The basic responsibility of the customer as per Section 1 and 2 remains unaffected.

#### 6. Product Life Cycle

Due to technical progress and economical evaluation we also reserve the right to discontinue production and delivery of products. As a standard reporting procedure of the Product Termination Notification (PTN) according to the JEDEC-Standard we will inform at an early stage about inevitable product discontinuance. According to this we cannot guarantee that all products within our product range will always be available. Therefore it needs to be verified with the field sales engineer or the internal sales person in charge about the current product availability expectancy before or when the product for application design-in disposal is considered. The approach named above does not apply in the case of individual agreements deviating from the foregoing for customer-specific products.

#### 7. Property Rights

All the rights for contractual products produced by Würth Elektronik eiSos GmbH & Co. KG on the basis of ideas, development contracts as well as models or templates that are subject to copyright, patent or commercial protection supplied to the customer will remain with Würth Elektronik eiSos GmbH & Co. KG does not warrant or represent that any license, either expressed or implied, is granted under any patent right, copyright, mask work right, or other intellectual property right relating to any combination, application, or process in which Würth Elektronik eiSos GmbH & Co. KG components or services are used.

#### 8. General Terms and Conditions

Unless otherwise agreed in individual contracts, all orders are subject to the current version of the "General Terms and Conditions of Würth Elektronik eiSos Group", last version available at www.we-online.com.

		CHECKED EIGa	REVISION 003.000	DATE (YYYY-MM-DD) 2021-07-05	general tolerance DIN ISO 2768-1m		PROJECTION METHOD	∲-
ROHS REACH HALOGEN 125 °C GRADE1		WE-HCF SMT High Current						
	Wirth Elektronik eiSos GmbH & Co. KG EMC & Inductive Solutions Max-Eyth-Str. 1 74638 Waldenburg Germany Tel 449 (0) 79 42 945 - 0 www.we-online.com eiSos@we-online.com	Induct	or			ORDER CODE	3630310	
		SIZE/TYPE		BUSINESS UNIT	STATUS		PAGE	
WÜRTH ELEKTRONIK		2013			eiSos	Valid		9/9

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 Wirth Elektronik elSos GmbH & Co KG products are neither designed on rinended for use in equipment which is used in effective (a transportation (automotive control, train control, ship control, train control, ship control, train control, trai

### **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Fixed Inductors category:

Click to view products by Wurth manufacturer:

Other Similar products are found below :

CR43NP-680KC CR54NP-820KC CR54NP-8R5MC CTX32CT-100 70F224AI MGDQ4-00004-P MHL1ECTTP18NJ MHL1JCTTD12NJ PE-51506NL PE-53601NL PE-53602NL PE-53630NL PE-53824SNLT PE-92100NL PG0434.801NLT PG0936.113NLT 9310-16 PM06-2N7 PM06-39NJ A01TK 1206CS-471XJ HC2-2R2TR HC2LP-R47-R HC3-2R2-R 1206CS-151XG RCH664NP-140L RCH664NP-4R7M RCH8011NP-221L RCP1317NP-332L RCP1317NP-391L RCR1010NP-470M RCR110DNP-331L DH2280-4R7M DS1608C-106 ASPI-4020HI-R10M-T B10TJ B82477P4333M B82498B3101J000 B82498B3680J000 ELJ-RE27NJF2 1812CS-153XJ 1812CS-183XJ 1812CS-223XJ 1812LS-104XJ 1812LS-105XJ 1812LS-124XJ 1812LS-154XJ 1812LS-223XJ 1812LS-224XJ 1812LS-563XJ