Würth Elektronik eiSos GmbH & Co. KG **EMC & Inductive Solutions**

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Product / F ☐ Major change ☐ Minor change	Process Change Notificati	on (PCN)
PCN #:	PCN_UtWPCC_20220228	Change Category:
Affected Series:	760308103147, 760308103305,760308102306, 760308103307	 □ Equipment / Location ☑ General Data □ Material □ Process
PCN Date:	November 30, 2021	☐ Product Design
Effective Date:	February 28, 2022	□ Shipping / Packaging□ Supplier□ Software
Contact:	Product Management	Data Sheet Change:
Phone:	+49 (0) 7942 - 945 5001	
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DESCRIPTION AND PURPOSE OF CHANGE:

Because of a database mismatch, some datasheet parameters of the articles 760308103147, 760308103305, 760308102306 and 760308103307 will be corrected.

DETAIL OF CHANGE:

The Self Resonance Frequency values of the NFC antenna parts of the articles 760308103305,760308102306 and 760308103307 and The lead length and lead distance of the part 760308103147 will be changed as follows.

760308103305: The Self Resonance Frequency of the NFC antenna is changed from 16 MHz to 50 MHz.

Before:

Electrical Properties:

			Value		Unit	Tol.
Properties		Test conditions -				
			1	2		
Inductance	L	125 kHz/ 10 mA 13.56 MHz	8.8	1.4	μН	±10%
Q-Factor	Q	125 kHz/ 10 mA 13.56 MHz	30	47		typ.
Rated Current	IR	$\Delta T = 40 \text{ K}$	2.6	5	Α	max.
Saturation Current	I _{SAT}		5	5	Α	typ.
DC Resistance	R _{DC}	@ 20 °C	220	100	mΩ	max.
DC Resistance	R _{DC}	@ 20 °C	190	80	mΩ	typ.
Self Resonant Frequency	fres		22	16	MHz	

After:

Electrical Properties:

Properties		Test conditions	Value		Unit	Tol.
riopeities		lest conditions	1	2	UIIIL	101.
Inductance	L	125 kHz/ 10 mA 13.56 MHz	8.8	1.4	μН	±10%
Q-Factor	Q	125 kHz/ 10 mA 13.56 MHz	30	47		typ.
Rated Current DC	I _{R DC}	ΔT = 40 K	2.6	5	Α	max.
DC Resistance	R _{DC}	@ 20 °C	190	80	mΩ	typ.
DC Resistance	R _{DC}	@ 20 °C	220	100	mΩ	max.
Self Resonant Frequency	fres		22	50	MHz	typ.

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760308102306: The Self Resonance Frequency of the NFC antenna is changed from 19 MHz to 50 MHz.

Before:

Electrical Properties:

Properties		Test conditions	Val	lue	Unit	Tol.		
rioperues		Test conditions	1	2				
Inductance	L	125 kHz/ 10 mA 13.56 MHz	8	1.4	μН	±10%		
Q-Factor	Q	125 kHz/ 10 mA 13.56 MHz	19	47		typ.		
Rated Current	I _R	$\Delta T = 40 \text{ K}$	2	5	Α	max.		
Saturation Current	I _{SAT}		5	5	Α	typ.		
DC Resistance	R _{DC}	@ 20 °C	400	100	mΩ	max.		
DC Resistance	R _{DC}	@ 20 °C	330	80	mΩ	typ.		
Self Resonant Frequency	fres		17.5	19	MHz			

After:

Electrical Properties:

Properties	т.	Test conditions	Val	lue	Unit	Tol.
rroperues		lest conditions	1	2		
Inductance	L	125 kHz/ 10 mA 13.56 MHz	8	1.4	μН	±10%
Q-Factor	Q	125 kHz/ 10 mA 13.56 MHz	19	47		typ.
Rated Current DC	IRDC	ΔT = 40 K	2	5	Α	max.
DC Resistance	R _{DC}	@ 20 °C	330	80	mΩ	typ.
DC Resistance	R _{DC}	@ 20 °C	400	100	mΩ	max.
Self Resonant Frequency	f _{res}		17.5	50	MHz	typ.

760308103307: The Self Resonance Frequency of the NFC antenna is changed from 24 MHz to 54 MHz.

Before:

Electrical Properties:

Properties	Toet conditi	Test conditions	Va	Unit	Tol.	
rioperues		rest conditions	1	2	OIIIL	101.
Inductance	L	125 kHz/ 10 mA 13.56 MHz	7.8	1.6	μН	±10%
Q-Factor	Q	125 kHz/ 10 mA 13.56 MHz	19	47		typ.
Rated Current	I _R	$\Delta T = 40 \text{ K}$	1.5	4	Α	max.
Saturation Current	I _{SAT}		3	7	Α	typ.
DC Resistance	R _{DC}	@ 20 °C	340	90	mΩ	max.
DC Resistance	R _{DC}	@ 20 °C	330	80	mΩ	typ.
Self Resonant Frequency	f _{res}		22	24	MHz	

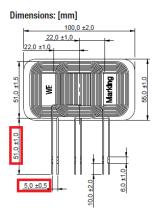
After:

Electrical Properties:

Properties		Test conditions	Value		Unit	Tol.		
rioperues		lest collultions	1	2	UIIIL	101.		
Inductance	L	125 kHz/ 10 mA 13.56 MHz	7.8	1.6	μН	±10%		
Q-Factor	Q	125 kHz/ 10 mA 13.56 MHz	19	47		typ.		
Rated Current DC	I _{R DC}	ΔT = 40 K	1.5	4	Α	max.		
DC Resistance	R _{DC}	@ 20 °C	330	80	mΩ	typ.		
DC Resistance	R _{DC}	@ 20 °C	340	90	mΩ	max.		
Self Resonant Frequency	fres		22	54	MHz	typ.		

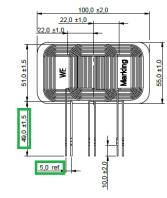
760308103147: The lead length is changed from 51.0 mm \pm 1.0 mm to 49.0 mm \pm 1.5 mm. The lead distance is changed from 5.0 mm \pm 0.5 mm to 5.0 mm ref.

Before:



After:

Dimensions: [mm]



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RELIABILITY / QUALIFICATION SUMMARY:

Process / Product approval is according to internal requirements released by the Total Quality Department and the Product Management Department.