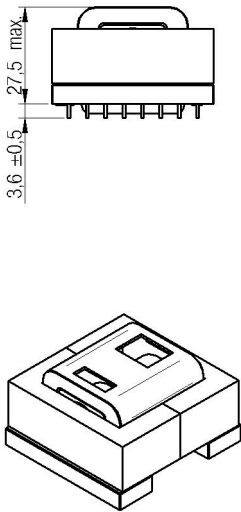
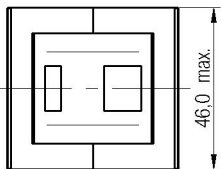
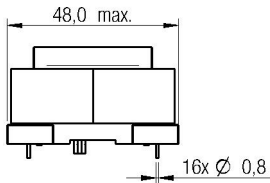
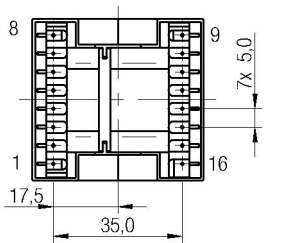
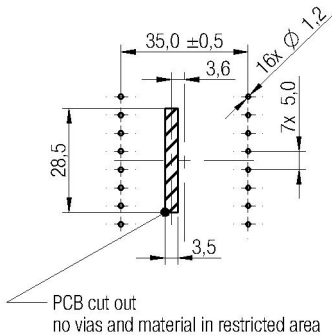


A Dimensions: [mm]



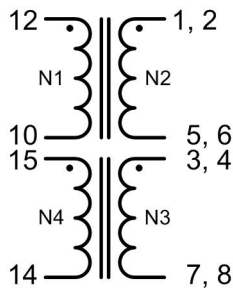
Scale - 1:2

B Recommended land pattern: [mm]



Scale - 1:2

C Schematic:



D Electrical Properties:

Properties	Test conditions		Value	Unit	Tol.
Inductance	100 kHz/ 100 mV	L	475	μH	±10%
Turns ratio		n	35 : 2 : 2 : 3		±3%
Saturation current	$I_{\Delta L/L} < 20\%$	I_{sat}	5.0	A	typ.
DC Resistance 1	@ 20°C	R_{DC1}	128	mΩ	max.
DC Resistance 2	@ 20°C	R_{DC2}	4.0	mΩ	max.
DC Resistance 3	@ 20°C	R_{DC3}	4.0	mΩ	max.
DC Resistance 4	@ 20°C	R_{DC4}	192	mΩ	max.
Leakage inductance	100 kHz/ 100 mV	L_S	100	μH	±10%
Insulation test voltage	W1,4 => W2,3	U_T	4000	V (AC)	

E General information:

It is recommended that the temperature of the part does not exceed +125°C under worst case conditions.

- Storage Temperature: -20°C to 60°C
- Operating Temperature: -40°C to 125°C
- Test conditions of Electrical Properties: 20°C, 33% RH if not specified differently

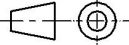
Designed to comply with the following requirements as defined by IEC61558-2-16; Reinforced insulation for a working voltage of 250 V_{RMS}

				Projection		DESCRIPTION
						WE-LLCR Resonant Converter
				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.
1.1	2014-04-01	SSt	SSt			760895731
1.0	2013-07-22	SSt	WW			
REV	DATE	BY	CHECKED			Size: ETD44
						SIZE
						A4



D2 Application Properties:

Properties		Value	Unit
Input voltage	U_i	360-400	V (DC)
Output voltage	U_O	12	V
Output current	I_O	20.8	A
Auxiliary voltage	U_{aux}	18.0	V
Switching frequency	f_{switch}	70-120	kHz

				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-LLCR Resonant Converter		
1.1	2014-04-01	SSt	SSt			Order.- No.	 COMPLIANT RoHS&REACH WÜRTH ELEKTRONIK	SIZE
1.0	2013-07-22	SSt	WW			760895731		A4
REV	DATE	BY	CHECKED			Size: ETD44		

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.

H Soldering Specifications:



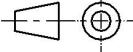
H4: Classification Wave Soldering Profile:



H5: Classification Wave Profile

Profile Feature	Pb-Free Assembly	Sn-Pb Assembly
Preheat - Temperature Min (T_{smin}) - Temperature Typical ($T_{stypical}$) - Temperature Max (T_{smax}) - Time (t_s) from (T_{smin} to T_{smax})	100°C 120°C 130°C 70 seconds	100°C 120°C 130°C 70 seconds
Δ preheat to max Temperature	150°C max.	150°C max.
Peak temperature (T_p)	250°C - 260°C	235°C - 260°C
Time of actual peak temperature (t_p)	max. 10 seconds max. 5 second each wave	max. 10 seconds max. 5 second each wave
Ramp-down rate - Min - Typical - Max	~ 2 K/s ~ 3.5 K/s ~ 5 K/s	~ 2 K/s ~ 3.5 K/s ~ 5 K/s
Time 25°C to 25°C	4 minutes	4 minutes

refer to EN 61760-1:2006

					Projection 		DESCRIPTION		
							WE-LLCR Resonant Converter		
					Würth Elektronik eiSos GmbH & Co. KG EMC & Inductive Solutions Max-Eyth-Str. 1 74638 Waldenburger Germany Tel. +49 (0) 79 42 945 - 0 www.we-online.com eiSos@we-online.com		Order.- No.		SIZE
1.1	2014-04-01	SSt	SSt			760895731	A4		
1.0	2013-07-22	SSt	WW						
REV	DATE	BY	CHECKED				Size: ETD44		

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

I Cautions and Warnings:

The following conditions apply to all goods within the product series of **WE-LLCR** 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 usage 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. 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 endangered 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 to customer specific products.

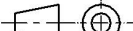
Cleaning agents that are used to clean the customer application might damage or change the characteristics of the component, body, pins or termination.

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

Product specific:
 Follow all instructions mentioned in the data sheet, especially:

- The soldering profile has to be complied with according to the technical reflow soldering specification, otherwise this will void the warranty.
- All products shall 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 ensured.
- Violation of the technical product specifications such as exceeding the nominal rated current will void the warranty.



					Projection 		DESCRIPTION		
							WE-LLCR Resonant Converter		
					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.	 COMPLIANT RoHS&REACH WÜRTH ELEKTRONIK	SIZE
1.1	2014-04-01	SSt	SSt	760895731		A4			
1.0	2013-07-22	SSt	WW						
REV	DATE	BY	CHECKED				Size: ETD44		

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.

