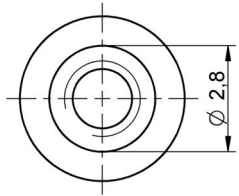
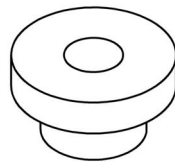
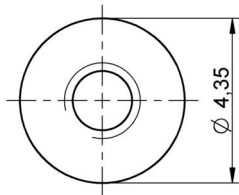
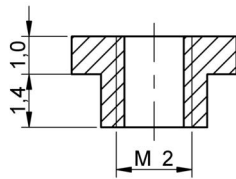
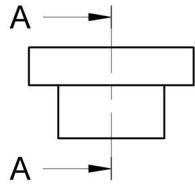


**A Dimensions: [mm]**

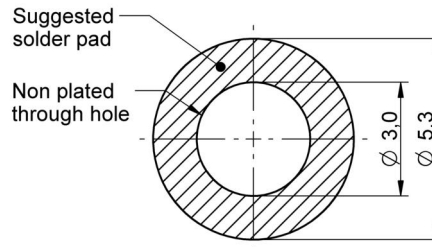


sectional drawing A-A



Scale - 5:1

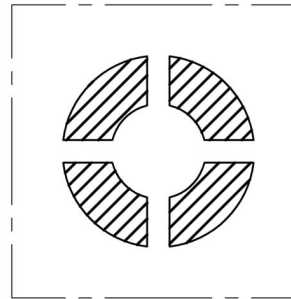
**B Recommended land pattern: [mm]**



Scale - 5:1

**C Stencil suggestion:**

Stencil Example:



Scale - 3:1



**D Properties:**

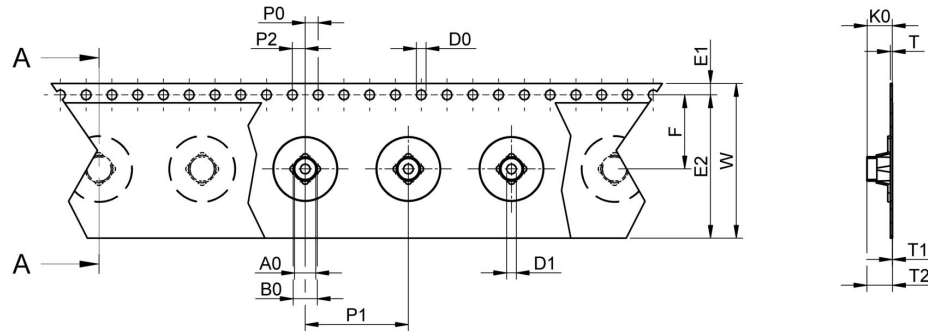
Properties	Value
Surface	Tin plated
Material	11SMnPb30
Thread	M2
Tightening torque	0.2 Nm
Solder Cream Thickness	150 µm
Packaging	Reel

**E General information:**

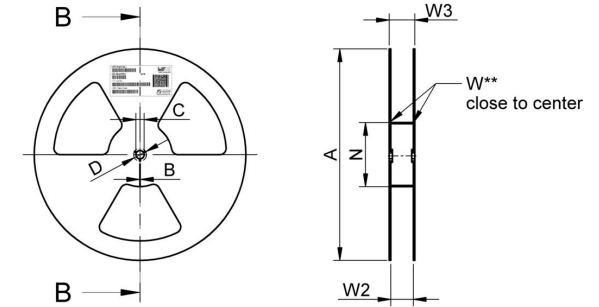
Technical Tolerances according to DIN ISO 2768m

In tape & reel packaging a kapton-film is fixed on the top of the spacer to realize automatic assembly

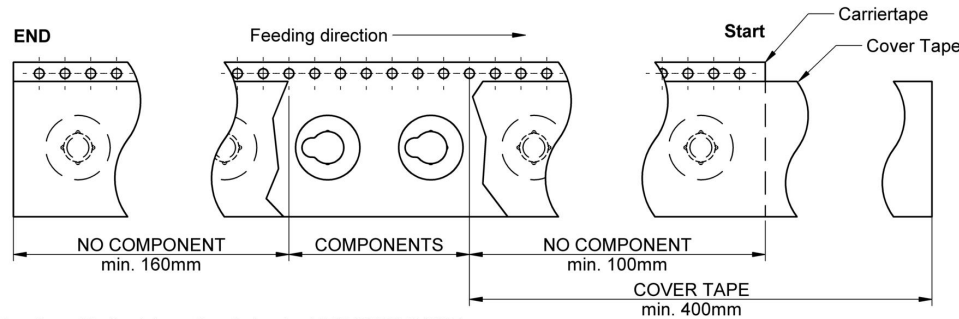
				Projection 	DESCRIPTION
					<b>WA-SMSI SMT Steel Spacer, M2 Thread Internal</b>
				Würth Elektronik eiSos GmbH & Co. KG EMC & Inductive Solutions Max-Eyth-Str. 1 74638 Waldenburg Germany Tel. +49 (0) 79 42 945 - 0 www.we-online.com eiSos@we-online.com	Order.- No. <b>9774010243R</b>
1.0	2015-03-11	SSt	SKI		
REV	DATE	BY	CHECKED		SIZE A4



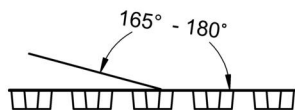
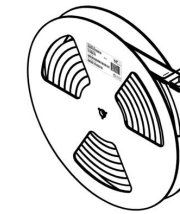
size	A0	B0	W	P1	T	T1	T2	K0	D0	D1	E1	E2	F	P0	P2	Tape	VPE / packaging unit
	tolerance	typ.	typ.	±0,3	±0,1	max.	min.	ref.	typ.	+0,1	min.	±0,1	min.	±0,05	±0,1	±0,05	
9774010243	3,30	4,45	24,00	16,00	0,60	0,10	3,10	2,80	1,50	1,50	1,75	22,25	11,50	4,00	2,00	Polystyrene	1500
9774015243	3,30	4,45	24,00	16,00	0,60	0,10	3,50	3,20	1,50	1,50	1,75	22,25	11,50	4,00	2,00	Polystyrene	1200
9774020243	3,30	4,45	24,00	16,00	0,60	0,10	4,00	3,70	1,50	1,50	1,75	22,25	11,50	4,00	2,00	Polystyrene	1050
9774025243	3,30	4,45	24,00	16,00	0,60	0,10	4,50	4,20	1,50	1,50	1,75	22,25	11,50	4,00	2,00	Polystyrene	950
9774030243	3,30	4,45	24,00	16,00	0,60	0,10	5,50	5,20	1,50	1,50	1,75	22,25	11,50	4,00	2,00	Polystyrene	800
9774035243	3,30	4,45	24,00	16,00	0,60	0,10	5,70	5,20	1,50	1,50	1,75	22,25	11,50	4,00	2,00	Polystyrene	800
9774040243	3,30	4,45	24,00	16,00	0,60	0,10	7,20	6,70	1,50	1,50	1,75	22,25	11,50	4,00	2,00	Polystyrene	600
9774045243	3,30	4,45	24,00	16,00	0,60	0,10	7,20	6,70	1,50	1,50	1,75	22,25	11,50	4,00	2,00	Polystyrene	600
9774050243	3,30	4,45	24,00	16,00	0,60	0,10	7,20	6,70	1,50	1,50	1,75	22,25	11,50	4,00	2,00	Polystyrene	600
9774060243	3,30	4,45	24,00	16,00	0,60	0,10	8,70	8,20	1,50	1,50	1,75	22,25	11,50	4,00	2,00	Polystyrene	500
9774070243	3,30	4,45	24,00	16,00	0,60	0,10	10,20	9,70	1,50	1,50	1,75	22,25	11,50	4,00	2,00	Polystyrene	400
9774080243	3,30	4,45	24,00	16,00	0,60	0,10	10,20	9,70	1,50	1,50	1,75	22,25	11,50	4,00	2,00	Polystyrene	400



	A	B	C	D	N	W1	W2	W3	W3	
tolerance	± 2,0	min.	± 0,8	min.	± 2,0	+ 2	max.	min.	max.	
Tape width	24mm	330,00	1,50	13,00	20,20	60,00	24,40	30,40	23,90	27,40



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



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

REV	DATE	BY	CHECKED
1.0	2015-03-11	SSt	SKI
REV	DATE	BY	CHECKED

Projection

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

**WA-SMSI SMT Steel Spacer, M2 Thread Internal**

Order.- No. **9774010243R**

COMPLIANT RoHS&REACH WÜRTH ELEKTRONIK

SIZE  
A4

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:



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 60-120 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 mm <sup>3</sup> <350	Volume mm <sup>3</sup> 350 - 2000	Volume mm <sup>3</sup> >2000
<b>PB-Free Assembly</b>	< 1.6 mm	260°C	260°C	260°C
<b>PB-Free Assembly</b>	1.6 - 2.5 mm	260°C	250°C	245°C
<b>PB-Free Assembly</b>	≥ 2.5 mm	250°C	245°C	245°C

refer to IPC/JEDEC J-STD-020D

				Projection 	DESCRIPTION
					<b>WA-SMSI SMT Steel Spacer, M2 Thread Internal</b>
				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. <b>9774010243R</b>
1.0	2015-03-11	SSt	SKI		COMPLIANT RoHS&REACH WÜRTH ELEKTRONIK
REV	DATE	BY	CHECKED		SIZE A4

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.

## I Cautions and Warnings:

The following conditions apply to all goods within the product series of **WA-SMSI** 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 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.

### Product Specific:

Follow all instructions 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. Surface discoloration due to reflow processing is permitted.
- Wave soldering is not applicable. Reflow soldering is recommended.
- 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.
- The maximum permissible torques must be complied with to prevent mechanical destruction of the elements and PCB.



				Projection 	DESCRIPTION
					<b>WA-SMSI SMT Steel Spacer, M2 Thread Internal</b>
				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. <b>9774010243R</b>
1.0	2015-03-11	SSt	SKI		<b>COMPLIANT</b> <b>RoHS&amp;REACH</b> WÜRTH ELEKTRONIK
REV	DATE	BY	CHECKED		SIZE A4

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.





Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.