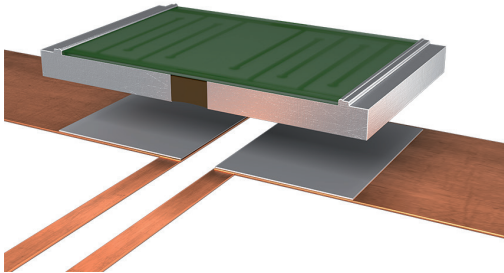


## ISA-PLAN® // PRECISION RESISTORS

### SMT-PW // Size 2817



#### Features

- 3 W permanent power at 130 °C
- Constant current up to 27 A (4 mΩm)
- Excellent long-term stability
- High pulse power rating
- Mounting: Reflow-, and IR-soldering
- *Detail specification ESCC 4001/027*
- SnPb tinned terminals

#### Applications

- Aerospace



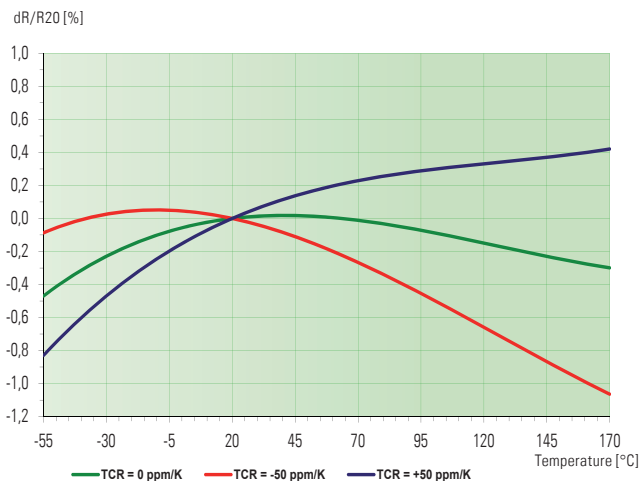
#### Technical data

Resistance values	<b>Ωm</b>	0.004 to 2 *	
Tolerance	<b>%</b>	0.5 / 1 *	
Temperature coefficient	<b>ppm/K</b>	<b>&lt;10 mΩm</b>	<b>≥10 mΩm</b>
-55 °C to +22 °C		-140, +0	-100, +0
+22 °C to +170 °C		±100	±60
+22 °C to +60 °C		±100	±50
Applicable temperature range	<b>°C</b>	-55 to +170	
Power rating	<b>W</b>	3	
Stability (nominal load) deviation after 2000h, acc. to ESCC Generic Specification		±0.2% (T <sub>K</sub> =130 °C)	

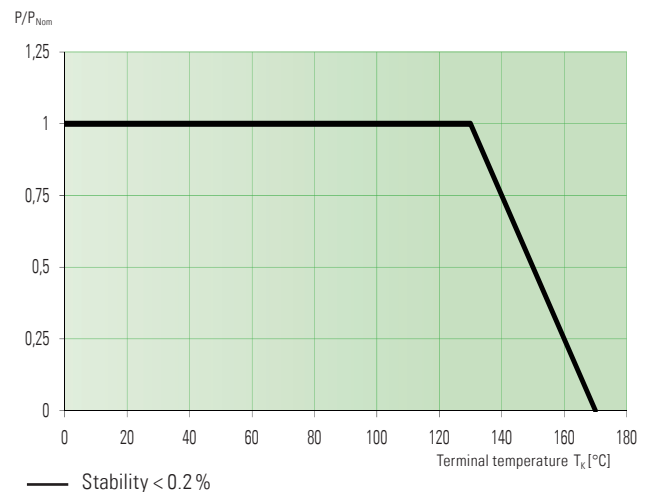
\* For detailed information see table on page 2

T<sub>K</sub> = terminal temperature

#### Temperature dependence of the electrical resistance of MANGANIN® resistors at +22 °C to +60 °C



#### Power derating curve





## SMT-PW // Size 2817

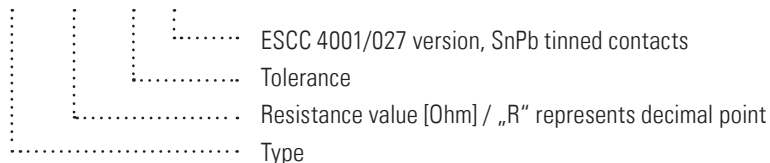
### Available standard resistance values and tolerances \*

Ordering code	ESCC component number	Ordering code	ESCC component number
SMT-R004-1.0-PW	ESCC 400102706R004F	SMT-R150-1.0-PW	ESCC 400102703R15F
SMT-R005-0.5-PW	ESCC 400102706R005D	SMT-R180-0.5-PW	ESCC 400102703R18D
SMT-R005-1.0-PW	ESCC 400102706R005F	SMT-R180-1.0-PW	ESCC 400102703R18F
SMT-R008-0.5-PW	ESCC 400102706R008D	SMT-R200-0.5-PW	ESCC 400102703R2D
SMT-R010-0.5-PW	ESCC 400102703R01D	SMT-R220-0.5-PW	ESCC 400102703R22D
SMT-R010-1.0-PW	ESCC 400102703R01F	SMT-R220-1.0-PW	ESCC 400102703R22F
SMT-R015-0.5-PW	ESCC 400102703R015D	SMT-R270-0.5-PW	ESCC 400102703R27D
SMT-R015-1.0-PW	ESCC 400102703R015F	SMT-R270-1.0-PW	ESCC 400102703R27F
SMT-R018-0.5-PW	ESCC 400102703R018D	SMT-R330-0.5-PW	ESCC 400102703R33D
SMT-R020-0.5-PW	ESCC 400102703R02D	SMT-R330-1.0-PW	ESCC 400102703R33F
SMT-R020-1.0-PW	ESCC 400102703R02F	SMT-R390-1.0-PW	ESCC 400102703R39F
SMT-R022-0.5-PW	ESCC 400102703R022D	SMT-R470-0.5-PW	ESCC 400102703R47D
SMT-R022-1.0-PW	ESCC 400102703R022F	SMT-R470-1.0-PW	ESCC 400102703R47F
SMT-R025-1.0-PW	ESCC 400102703R025F	SMT-R500-0.5-PW	ESCC 400102703R5D
SMT-R027-0.5-PW	ESCC 400102703R027D	SMT-R560-1.0-PW	ESCC 400102703R56F
SMT-R030-0.5-PW	ESCC 400102703R03D	SMT-R680-0.5-PW	ESCC 400102703R68D
SMT-R033-1.0-PW	ESCC 400102703R033F	SMT-R680-1.0-PW	ESCC 400102703R68F
SMT-R039-0.5-PW	ESCC 400102703R039D	SMT-R820-1.0-PW	ESCC 400102703R82F
SMT-R039-1.0-PW	ESCC 400102703R039F	SMT-1R00-0.5-PW	ESCC 4001027031R0D
SMT-R040-1.0-PW	ESCC 400102703R04F	SMT-1R00-1.0-PW	ESCC 4001027031R0F
SMT-R047-0.5-PW	ESCC 400102703R047D	SMT-2R00-0.5-PW	ESCC 4001027032R0D
SMT-R047-1.0-PW	ESCC 400102703R047F	SMT-2R00-1.0-PW	ESCC 4001027032R0F
SMT-R050-0.5-PW	ESCC 400102703R05D		
SMT-R050-1.0-PW	ESCC 400102703R05F		
SMT-R056-0.5-PW	ESCC 400102703R056D		
SMT-R060-0.5-PW	ESCC 400102703R06D		
SMT-R068-1.0-PW	ESCC 400102703R068F		
SMT-R082-0.5-PW	ESCC 400102703R082D		
SMT-R100-0.5-PW	ESCC 400102703R1D		
SMT-R100-1.0-PW	ESCC 400102703R1F		
SMT-R120-1.0-PW	ESCC 400102703R12F		

\* other resistance values on request

### Ordering code

SMT - R010 - 1.0 - PW





**SMT-PW // Size 2817**

**Recommended solder profile**

Reflow- and IR-soldering				
Temperature	°C	260	255	217
Time	sec	peak	40	90

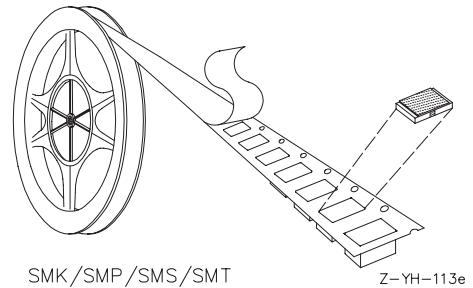
**Packaging information**

Specification	DIN EN 60286-3			
Tape width	mm	12		
Reel size	inch	13		

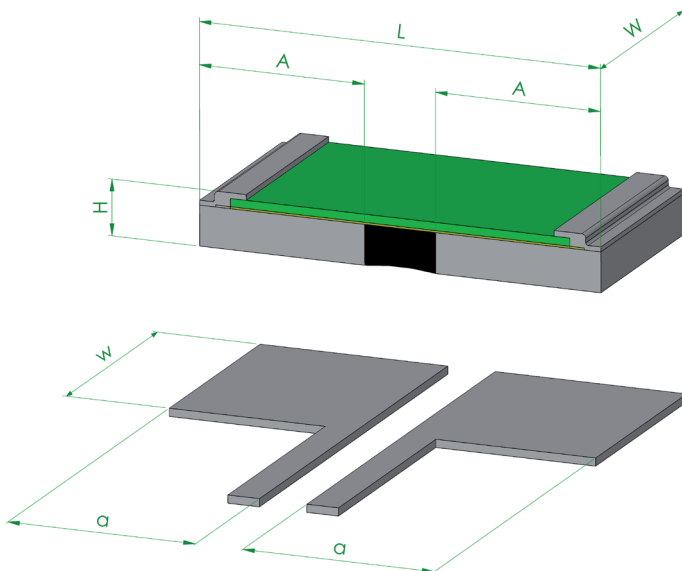
**Form of delivery**

Tape	pcs	up to 500		
Tape and reel	pcs	>500		

Slight deformations during soldering do not affect technical properties of the component.



**Mechanical dimensions and pcb-layout proposal (Reflow-soldering) [mm] // Z-YE-1019a**



type	L	W	H	A
SMT	7.1 ±0.2	4.2 ±0.1	0.8 ±0.2	3.1

solder pad type:	l	w	a
SMT	7.4	4.6	3.4

**Disclaimer** // All products, product specifications and data are subject to change without notice.

The product specifications do not expand or otherwise modify Isabellenhütte's terms and conditions of sale, including but not limited to, the warranty expressed therein. Isabellenhütte makes no warranty, representation or guarantee other than as set forth in its terms and conditions of sale.

Information provided in datasheets and/or specifications may vary from actual results in different applications. Any statements made by Isabellenhütte regarding the suitability of products for certain types of applications are based on its knowledge of typical requirements that are often placed on its products. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in the application intended.

No license, express or implied, or otherwise, to any intellectual property rights is granted by this document. Any and all liability arising out of the application or use of any product shall be as set forth in Isabellenhütte's terms and conditions of sale.

