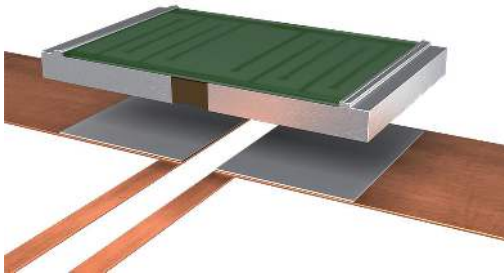


## ISA-PLAN® // PRECISION RESISTORS

### SMP-PW // Size 2010



#### Features

- 1 W permanent power at 130 °C
- Constant current up to 24 A (5 mΩhm)
- Excellent long-term stability
- High pulse power rating
- Mounting: Reflow-, and IR-soldering
- *Detail specification ESCC 4001/027*
- SnPb tinned terminals

#### Applications

- Aerospace



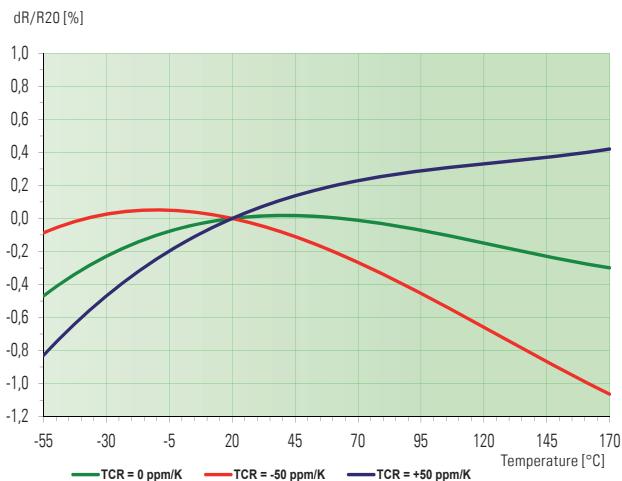
#### Technical data

Resistance values	<b>Ωhm</b>	0.005 to 1 *	
Tolerance	<b>%</b>	0.5 / 1 *	
Temperature coefficient	<b>ppm/K</b>	<b>&lt;10 mΩhm</b>	<b>≥10 mΩhm</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>	1	
Stability (nominal load) deviation after 2000h, acc. to ESCC Generic Specification		±0.2% (T <sub>K</sub> =130 °C)	

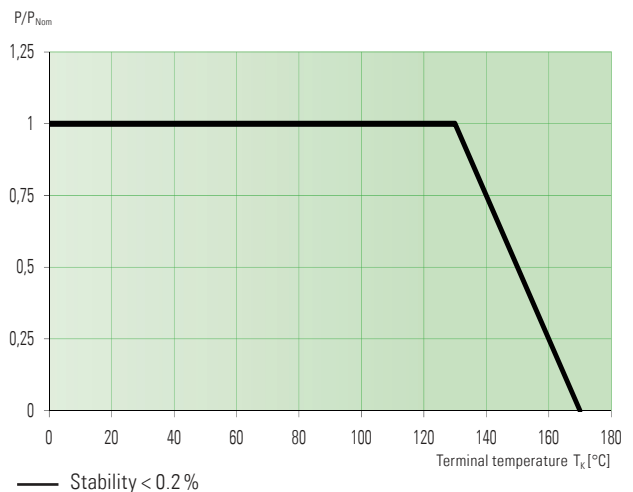
\* For detailed information see table on page 2

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

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



#### Power derating curve





**SMP-PW // Size 2010**

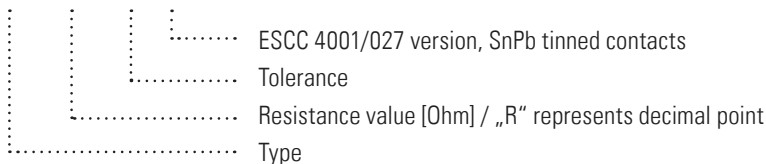
**Available standard resistance values and tolerances \***

Ordering code	ESCC component number
SMP-R010-0.5-PW	400102701R010D
SMP-R010-1.0-PW	400102701R010F
SMP-R015-1.0-PW	400102701R015F
SMP-R018-1.0-PW	400102701R018F
SMP-R020-0.5-PW	400102701R020D
SMP-R020-1.0-PW	400102701R020F
SMP-R025-0.5-PW	400102701R025D
SMP-R025-1.0-PW	400102701R025F
SMP-R027-0.5-PW	400102701R027D
SMP-R027-1.0-PW	400102701R027F
SMP-R033-0.5-PW	400102701R033D
SMP-R033-1.0-PW	400102701R033F
SMP-R039-1.0-PW	400102701R039F
SMP-R047-0.5-PW	400102701R047D
SMP-R047-1.0-PW	400102701R047F
SMP-R050-0.5-PW	400102701R050D
SMP-R050-1.0-PW	400102701R050F
SMP-R056-0.5-PW	400102701R056D
SMP-R056-1.0-PW	400102701R056F
SMP-R082-1.0-PW	400102701R082F
SMP-R100-0.5-PW	400102701R100D
SMP-R100-1.0-PW	400102701R100F
SMP-R180-1.0-PW	400102701R180F
SMP-R200-0.5-PW	400102701R200D
SMP-R200-1.0-PW	400102701R200F
SMP-R220-0.5-PW	400102701R220D
SMP-R220-1.0-PW	400102701R220F
SMP-R330-0.5-PW	400102701R330D
SMP-R330-1.0-PW	400102701R330F
SMP-R390-0.5-PW	400102701R390D
SMP-R390-1.0-PW	400102701R390F
SMP-R470-0.5-PW	400102701R470D
SMP-R470-1.0-PW	400102701R470F
SMP-R500-0.5-PW	400102701R500D
SMP-R560-1.0-PW	400102701R560F
SMP-1R00-0.5-PW	4001027011R00D
SMP-1R00-1.0-PW	4001027011R00F

\* other resistance values on request

**Ordering code**

SMP - R010 - 1.0 - PW





## SMP-PW // Size 2010

### Recommended solder profile

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

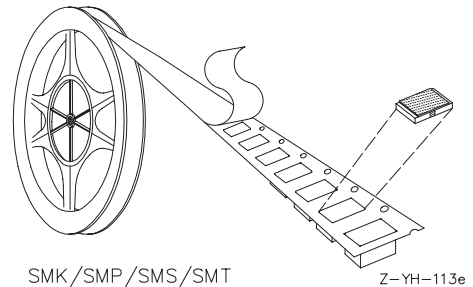
### Packaging information

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

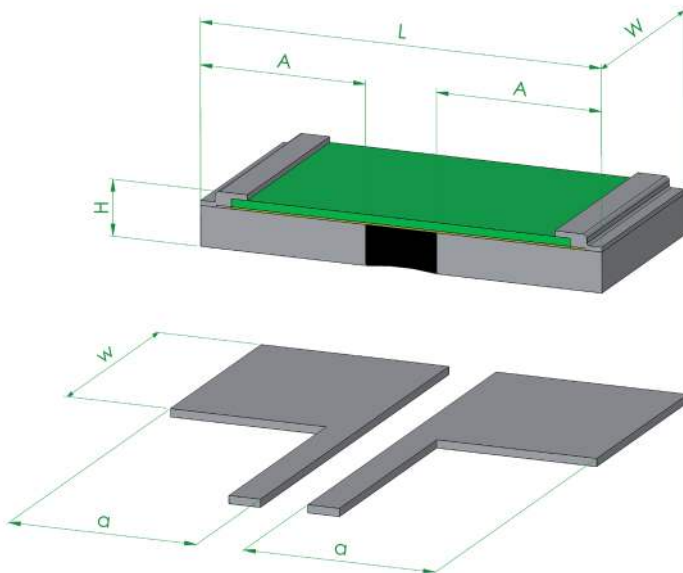
### Form of delivery

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-651a



type:	L	W	A	H
SMP	5.08 ± 0.1	2.54 ± 0.1	(2.14)	0.7 ± 0.2

solder pad type:	l	w	a
SMP	5.4	2.8	2.4

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