



# RWP Series Datasheet

SMD | Power Metal Film Resistors | Metal Film  
Epoxy Encapsulation

## ORDERING CODE - Example

New SAP Part Nr.:

RWP	502	J	K	-	13-	100R	AA
Serie	Size	Tol.	Pack-Code	TCR	Package type	R Value	Special
	502 = 5020	F = ±1% J = ±5%	K = Blister Tape	- Base on spec.	13- = 13 inch (Reel diameter)		AA = Standard

Historical VTM Part Nr.:

RWP	5020	J	K	-	13	100R
Type	Size	Tol.	K = Blister tape reel	TC	Reel diam.	R Value

## APPLICATIONS

- Consumer & Electronics
- Industrial
- Power & Energy

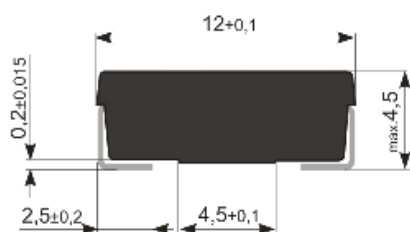
## FEATURES

- Suitable for automatic pick and place
- All welded construction
- Small package size
- Moulded encapsulation
- RoHS & REACH Compliant

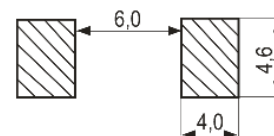
## ELECTRICAL SPECIFICATIONS

Type	RWP502		
Historical Part Number	RWP5020		
Nominal Power Rating	P <sub>25</sub>	[W]	2,2
	P <sub>70</sub>		1,6
Resistance Range	[Ω]	10R ...1M	1R ...1M
E-Series		E96	E12 (preferred)
Tolerances	±[%]	F = 1%	J = 5%
Temperature Coefficient	±[10 <sup>-6</sup> K <sup>-1</sup> ]	50	200
Working Temperature Range	[°C]	-55 ... +200	
Thermal Resistance	[KW <sup>-1</sup> ]	90	
Max. Working Voltage	[V] <sub>RMS</sub>	500	
Dielectric Withstanding Voltage IEC115-1 clause 4.7 (1[min])	[V] <sub>RMS</sub>	1000	
Insulation Resistance IEC115-1 clause 4.6	[MΩ]	>1000	

## DIMENSIONS [mm]



### SOLDER PAD

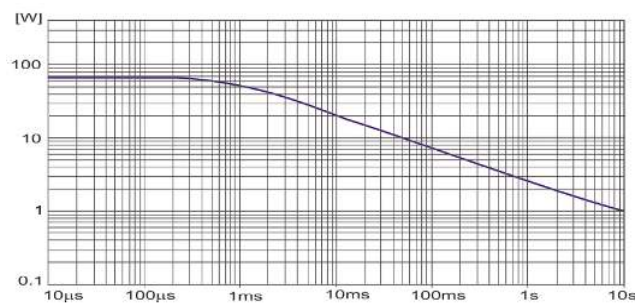


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## PERFORMANCE DATA

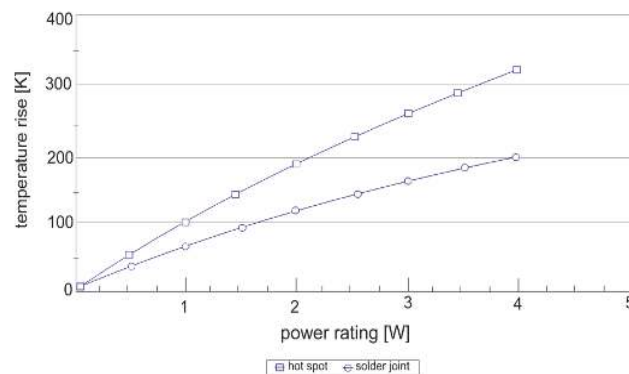
Type		<b>RWP502</b>
Historical Part Number		RWP5020
Derating Linear	[°C]	70...200 (0W)
Climatic Category		55/200/56
Endurance <i>IEC60115-1 clause 4.25</i> <i>(<math>P_{70}</math> @ 70[°C], 1000[h])</i>	±[%]	1,5
Damp Heat, Steady State <i>IEC60115-1 clause 4.24</i> <i>(40[°C], 93[% r.h.], 56[d])</i>	±[%]	1,5
Climatic Sequence <i>IEC60115-1 clause 4.23</i>	±[%]	1,0
Resistance to Soldering Heat <i>IEC60115-1 clause 4.18</i> <i>(260<sup>±5</sup>[°C], 3,5<sup>±1</sup>[s])</i>	±[%]	0,25
Short Time Overload <i>IEC60115-1 clause 4.13</i>	±[%]	1,0
Temperature Shock <i>IEC60115-1 clause 4.19</i>	±[%]	0,25
Board-bending Test		No interruption
Solderability <i>IEC60068-2-20</i> <i>(245<sup>±5</sup>[°C] 3<sup>±0,5</sup>[s])</i>		Solder bath method (> 95% coverage)
Marking <i>IEC60062</i>		Printed in clear (Type – Value – Tolerance)

## PULSE PERFORMANCE



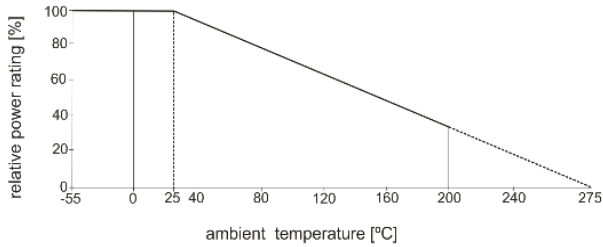
## PERFORMANCE GRAPHS

Temperature Rise

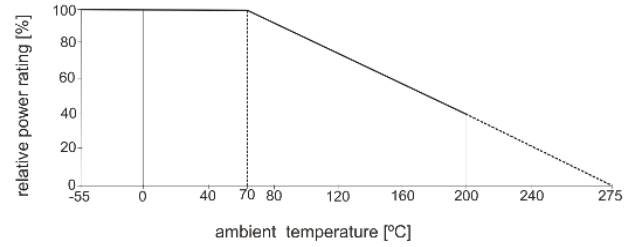


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Derating – P<sub>25</sub>

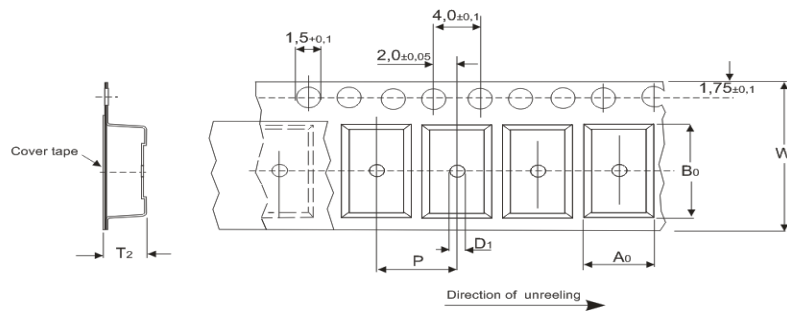


Derating – P<sub>70</sub>



## PACKAGING

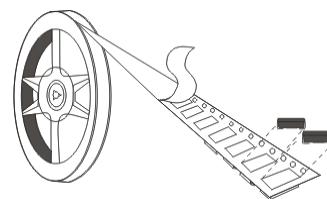
The standard packaging for RWP, dimensions below.



Type	A0	B0	W	D1	P	T2
RWP502	5,4	12,4	24	1,5	8	5



Type	W1	W2	N	A
RWP502	25,4	29,5	90	330



Type	Packaging	Pieces
RWP502	13(inch) Blister tape	1500