

RWN Series Datasheet

SMD | Power Resistor Non - Inductive | Flat Wire
Epoxy Encapsulation

APPLICATIONS



Automotive



Consumer & Electronics

FEATURES

Suitable for automatic pick and place

All welded construction

Small package size

Molded encapsulation

Non – inductive style

RoHs & REACH Compliant

ORDERING CODE - Example

New SAP Part Nr.:

RWN	502	J	K	-	13-	R01	AA
Series	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

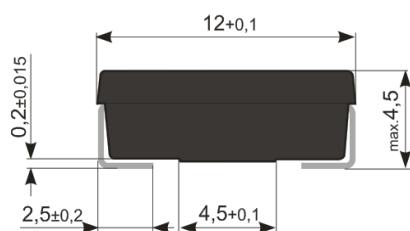
Historical VTM Part Nr.:

RWN	5020	J	K	-	13	R01
Type	Size	Tol.	K = Blister tape reel	TC	Reel diam.	R Value

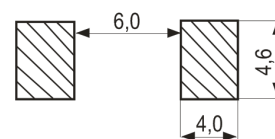
ELECTRICAL SPECIFICATIONS

Type			RWN502
Historical Part Number			RWN5020
Nominal Power Rating	P ₂₅ P ₇₀	[W]	2,2 1,6
Resistance Range		[Ω]	R002 ... R05 (Other values upon request)
E-Series (preferred)			R002, R003, R005 ≥ R01 : E12 (Other upon request)
Tolerances		±[%]	F = 1% ; J = 5%
Temperature Coefficient		±[10 ⁻⁶ K ⁻¹]	Depends on the value, please check the table below
Working Temperature Range		[°C]	-55 ... +200
Thermal Resistance		[KW ⁻¹]	100
Max. Working Voltage		[V] _{RMS}	$\sqrt{P_{70} \times R}$
Dielectric Withstanding Voltage IEC115-1 clause 4.7 (1[min])		[V] _{RMS}	1000
Insulation Resistance IEC115-1 clause 4.6		[MΩ]	>1000

DIMENSIONS [mm]



SOLDER PAD

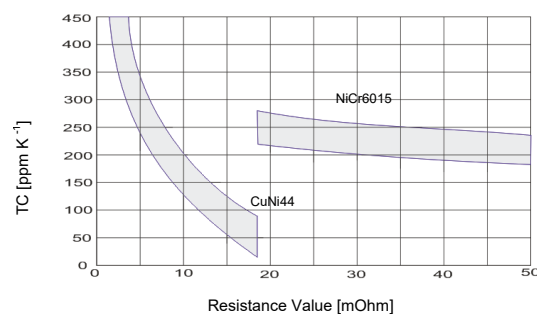


RWN Series Datasheet

PERFORMANCE DATA

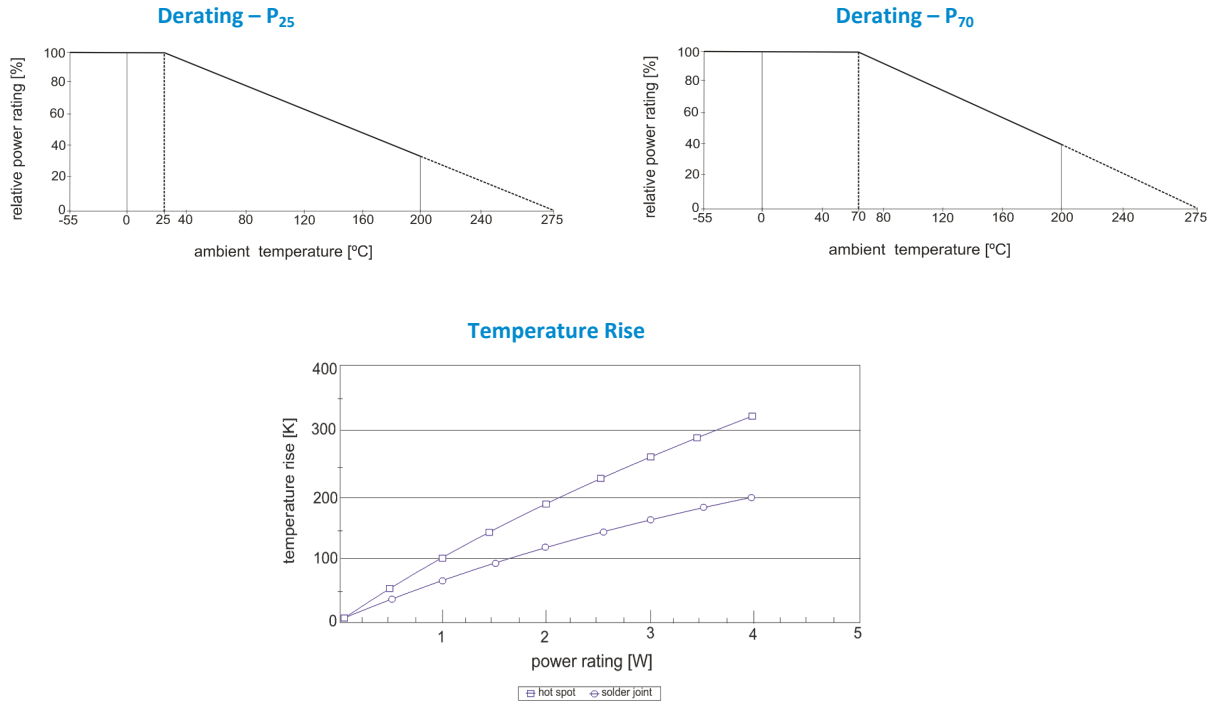
Type		RWN502
Historical Part Number		RWN5020
Derating Linear	[°C]	70...200 (0W)
Climatic Category		55/175/56
Endurance <i>IEC60115-1 clause 4.25</i> (P_{70} @ 70[°C], 1000[h])	±[%]	1,0
Damp Heat, Steady State <i>IEC60115-1 clause 4.24</i> (40[°C], 93[% r.h.], 56[d])	±[%]	0,25
Climatic Sequence <i>IEC60115-1 clause 4.23</i>	±[%]	1,0
Resistance to Soldering Heat <i>IEC60115-1 clause 4.18</i> (260 ^{±5} [°C], 3,5 ^{±1} [s])	±[%]	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
Single Pulse	i_{max} [A] $E_{i,max}$ [mWs] $T_{imp,max}$ [ms]	50 625 5
Periodic Pulse Load	i_{max} [A] $E_{i, per, max}$ [mWs] $T_{imp, max}$ [ms] t_{pause} [ms]	30 (0R002 ... 0R018) 40 (0R022 ... 0R05) 225 5 100
Solderability <i>IEC60068-2-20</i> (245 ^{±5} [°C] 3 ^{±0,5} [s])		Solder bath method (> 95% coverage)
Marking <i>IEC60062</i>		Printed in clear (Type – Value – Tolerance)

TEMPERATURE COEFFICIENT



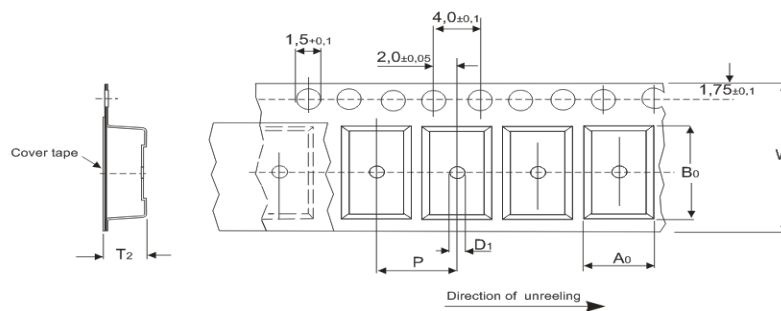
RWN Series Datasheet

PERFORMANCE GRAPHS

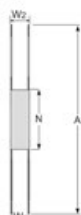


PACKAGING

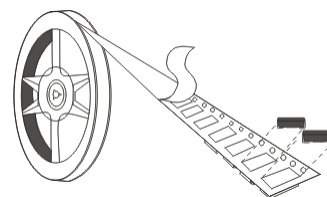
The standard packaging for RWN, dimensions below.



Type	A0	B0	W	D1	P	T2
RWN502	5,4	12,4	24	1,5	8	5



Type	W1	W2	N	A
RWN502	25,4	29,5	90	330



Type	Packaging	Pieces
RWN502	13(inch) Blister tape	1500

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

YAGEO:

[RWN502FK-13-R005AA](#) [RWN502FK-13-R01AA](#) [RWN502FK-13-R047AA](#) [RWN502FK-13-R05AA](#) [RWN502FK-13-R003AA](#) [RWN502FK-13-R018AA](#) [RWN502FK-13-R033AA](#) [RWN502FK-13-R002AA](#) [RWN502FK-13-R0045AA](#) [RWN502FK-13-R004AA](#) [RWN502FK-13-R0068AA](#) [RWN502FK-13-R006AA](#) [RWN502FK-13-R007AA](#) [RWN502FK-13-R008AA](#) [RWN502FK-13-R009AA](#) [RWN502FK-13-R011AA](#) [RWN502FK-13-R012AA](#) [RWN502FK-13-R013AA](#) [RWN502FK-13-R015AA](#) [RWN502FK-13-R016AA](#) [RWN502FK-13-R022AA](#) [RWN502FK-13-R024AA](#) [RWN502FK-13-R027AA](#) [RWN502FK-13-R02AA](#) [RWN502FK-13-R036AA](#) [RWN502FK-13-R039AA](#) [RWN502FK-13-R03AA](#) [RWN502FK-13-R043AA](#) [RWN502FK-13-R051AA](#) [RWN502JK-13-R002AA](#) [RWN502JK-13-R003AA](#) [RWN502JK-13-R0045AA](#) [RWN502JK-13-R004AA](#) [RWN502JK-13-R005AA](#) [RWN502JK-13-R0068AA](#) [RWN502JK-13-R006AA](#) [RWN502JK-13-R007AA](#) [RWN502JK-13-R008AA](#) [RWN502JK-13-R009AA](#) [RWN502JK-13-R011AA](#) [RWN502JK-13-R012AA](#) [RWN502JK-13-R013AA](#) [RWN502JK-13-R015AA](#) [RWN502JK-13-R016AA](#) [RWN502JK-13-R018AA](#) [RWN502JK-13-R01AA](#) [RWN502JK-13-R022AA](#) [RWN502JK-13-R024AA](#) [RWN502JK-13-R027AA](#) [RWN502JK-13-R02AA](#) [RWN502JK-13-R033AA](#) [RWN502JK-13-R036AA](#) [RWN502JK-13-R039AA](#) [RWN502JK-13-R03AA](#) [RWN502JK-13-R043AA](#) [RWN502JK-13-R047AA](#) [RWN502JK-13-R051AA](#)