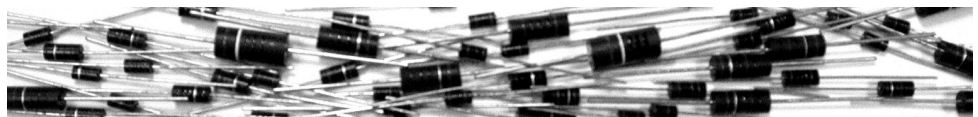
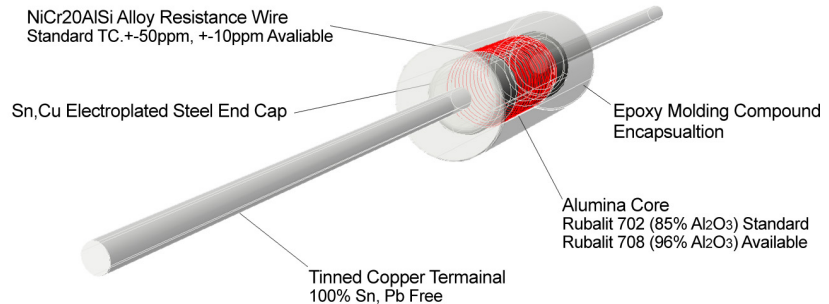




# RWIM, RWNM Miniature Wirewound Resistor

Precision , High Power , Epoxy Molded

RoHS  
Compliant



## FEATURES

- Precision High Power Wirewound Resistor, Products of Advanced Electronic Material, Precision Computer Numerical Control Manufacturing, and Tightest Quality Control Process.
- Superior Overload as well as Surge, Pulse Durability.
- High Power-To-Size Ratio, Enlarged Terminal, Epoxy Body Contour Designed For Heat Dissipation.
- Superior Temperature Coefficient Characteristics TCR, Resistance vs. Temperature Change Within 10ppm/°C to 90ppm/°C, In Normal Working Condition The Resistance Drift <1.00%
- RWNS: Non-Inductive (Ayrton-Perry Winding) Specifications Designed for Capable of Withstanding Repeated Energy Pulses, High Frequency Working Conditions,
- RoHS Compliant Products
- Customized Specification OEM/ODM Manufacturing Mode Available Upon Request.

## APPLICATIONS

- For Short Term Pulsing, High Power Dissipation, Capacity Discharge, Voltage Division, Switching Power Supply, DC-to-DC Conversion, and Motor Control...Applications
- Industries including White Goods, 3C Products, Automotives, Communication and Medical...

## ELECTRICAL SPECIFICATION

Model	.	RWIM2010	RWIM2813	RWIM4518	RWIM5322	RWIM7930
Power Rating P*	Watts	1/2W	1W	2W	3W	5W
Resistance Range R**	Ohm	R100 ~ 1K20	R100 ~ 5K00	R100 ~ 12K0	R100 ~ 20K0	R100 ~ 50K0
Non-Inductive Resistance		R100 ~ 200R <sup>*4</sup>	R100 ~ 1K00	R100 ~ 2K40	R100 ~ 4K00	R100 ~ 10K0
Standard Tolerance %	±%	0.5%, 1%, 5%				
Temperature Coefficient ***	ppm/°C	0.100Ω~0.99Ω ±90ppm, 1.00Ω~10.00Ω ±50ppm, >10.00Ω ±20ppm				
Operating Temperature	°C	-55°C ~ +155°C				
Maximum Working Voltage	Volts	( P x R ) <sup>1/2</sup>				
Weight 1000pcs	gm	100	125	175	1160	2760

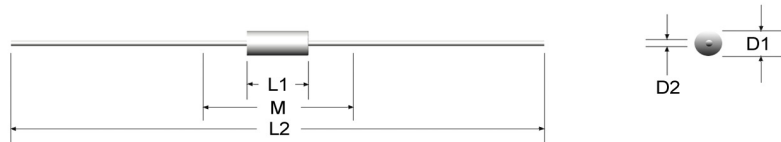
P.\*= Power rating at 70°C, R\*\*.= Nominal DC Resistance at 25°C, TCR\*\*\*= Two standard series of test temperature, First series : 25°C, 0°C, -15°C and -55°C, The second series : 25°C, 50°C, 75°C, 125°C, and 150°C TCR= (R2-R1) / R1(T2-T1) x 10<sup>6</sup>. \*4 Contact for special resistance value

## PART NUMBER

RWIM- □□□□ - □□ - □□□□ - □ - □□					
Model	Size Inch	Power Watts	Resistance	Tolerance	Packaging
RW = Rssistor, Wirewound,	2010		R = Decimal, K = 1000x	D = +0.5%	BB = Bulk/Bag
I = Inductive,	2813		Example	F = +-1.0%	TR = Tape/Reel
N = Non-Inductive	4518		1K00 = 1000Ohm	G = +-2.0%	TA = Tape/Ammo Pack
M = Epoxy Molded	5322		R100 = 0.100Ohm	J = +-5.0%	
	7930				

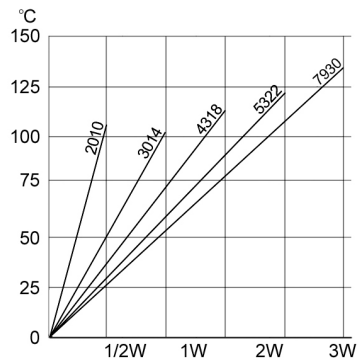
- Consult with our R&D team for special purpose use of components.

## DIMENSIONS

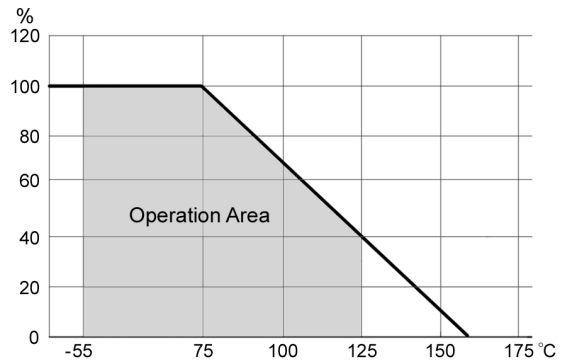


Model	Dimensions inches / millimeters +-inches					
	L1±0.020"	L2±0.020"	D1 ±0.020"	D2±0.020"	M±0.020"	Taping Width
RWIM2010	0.200 / 05.08	2.36 / 60.00	0.100 / 2.54	0.0236 / 0.60	0.905 / 23.00	2.519 / 64.00
RWIM2813	0.276 / 07.00		0.130 / 3.30			
RWIM4518	0.450 / 11.57		0.180 / 4.57			
RWIM5322	0.530 / 13.54	3.15 / 80.00	0.216 / 5.50	0.0314 / 0.80	1.122 / 28.51	3.307 / 82.00
RWIM7930	0.790 / 20.00		0.295 / 7.50			

## TEMPERATURE RISE ( In °C )



## DERATING ( Rated Power In % )



## PERFORMANCE CHARACTERISTICS

Parameter MIL-R-26F	Conditions Of Test	Test Results
Thermo Shock 4.6.3	Chamber, -55°C +0°C, -3°C to 150°C +3°C, -0°C, 5 cycles, Min. 15 min. at each extremes	±(1.0% + 0.05Ω)ΔR
Short Time Overload 4.6.4	Overload voltage : 5 Times rated wattage for 5 seconds	±(1.0% + 0.05Ω)ΔR
Solderability 4.6.5/208	Bath Temperature 260±5°C, Immersion Time 5±0.5seconds JIS C 5201 4.18	>90% of contact face covered new solder
Resistance To Solder Heat	Bath Temperature 260±5°C, Immersion Time 5±0.5seconds JIS C 5201 4.18	±(1.0% + 0.05Ω)ΔR
Dielectric Withstanding Voltage 4.6.8	Magnitude of test voltage : > 500 volts rms. Duration 1 minute	Pass
Insulation Resistance 4.6.9-302	Magnitude of test voltage : 500 ±10% volts rms. Duration 1 minute	>10 <sup>9</sup> Ω
High Temperature Exposure 4.6.10	Exposed to an ambient temperature of 175°C +5°C, -0°C, 250 ±8 hours	±(2.0%+0.05Ω)ΔR
Low Temperature Storage 4.6.12	At a temperature of -65°C ±2°C for a period of 24 ±4 hours	±(1.0%+0.05Ω)ΔR
Life 4.6.16	Test temp 70°C±2°C, Rated DC working voltage, 1.5Hrs on / 0.5Hrs. off. 1000 Hrs.	±(2.0%+0.05Ω)ΔR

## PACKAGING Inches / Millimeter

Model	Tape Width	Pitch	Reel Dia.	Pc /Reel	Parts No.	Pc / Bulk
RWIM2010	2.520 / 64.0	0.197 / 5.00	11.41/ 290	4000	TR20	250
RWIM2813				3000	TR28	250
RWIM4518				1000	TR45	250
RWIM5322	3.307 / 84.0	0.393 / 10.0		500	TR53	250
RWIM7930				500	TR79	250