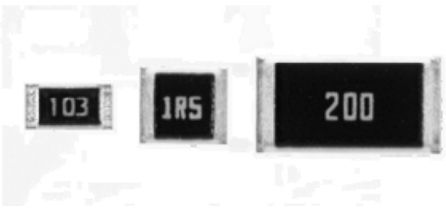
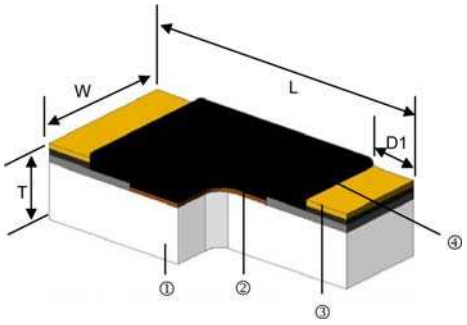
Features:

- Thin film passivated NiCr resistive element with Ni/Au planted terminations
- Tolerance as low as 0.1%
- Extremely low TCR down to ±25ppm/ºC
- Power derating from 100% at 70ºC to zero at + 155ºC
- Customized bonding pattern design
- RoHS compliant / lead-free



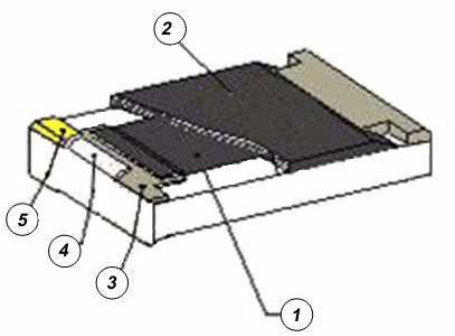
Electrical Specifications							
Type / Code	Power Rating (Watts) @ 70ºC	Maximum Working Voltage (1)	Maximum Overload Voltage (2)	Resistance Temperature Coefficient	Ohmic Range (Ω) and Tolerance		
					0.1%	0.5%	1%
RNCW0201	0.031W	15V	30V	± 50 ppm/ºC ± 100 ppm/ºC	-	50 - 33K	50 - 33K
RNCW0402	0.063W	25V	50V	±25 ppm/ºC ±50 ppm/ºC ±100 ppm/ºC	10 - 100K	10 - 100K	10 - 100K
RNCW0603	0.063W	50V	100V	±25 ppm/ºC ±50 ppm/ºC ±100 ppm/ºC	10 - 332K	10 - 332K	10 - 332K

(1) Operating Voltage = √(P*R) or Max Operating Voltage listed above, whichever is lower
(2) Overload Voltage = 2.5*√(P*R) or Max Overload Voltage listed above, whichever is lower
Operating Temperture Range: -55 ~ +155ºC



Mechanical Specifications					
Type / Code	L Body Length	W Body Width	T Body Height	D1 Top Termination	Unit
RNCW0201	0.023 ± 0.002 0.58 ± 0.05	0.011 ± 0.002 0.29 ± 0.05	0.009 ± 0.002 0.23 ± 0.05	0.005 ± 0.002 0.12 ± 0.05	inches mm
RNCW0402	0.039 ± 0.002 1.00 ± 0.05	0.020 ± 0.002 0.50 ± 0.05	0.012 ± 0.002 0.30 ± 0.05	0.008 ± 0.004 0.20 ± 0.10	inches mm
RNCW0603	0.061 ± 0.004 1.55 ± 0.10	0.031 ± 0.004 0.80 ± 0.10	0.018 ± 0.004 0.45 ± 0.10	0.012 ± 0.008 0.30 ± 0.20	inches mm

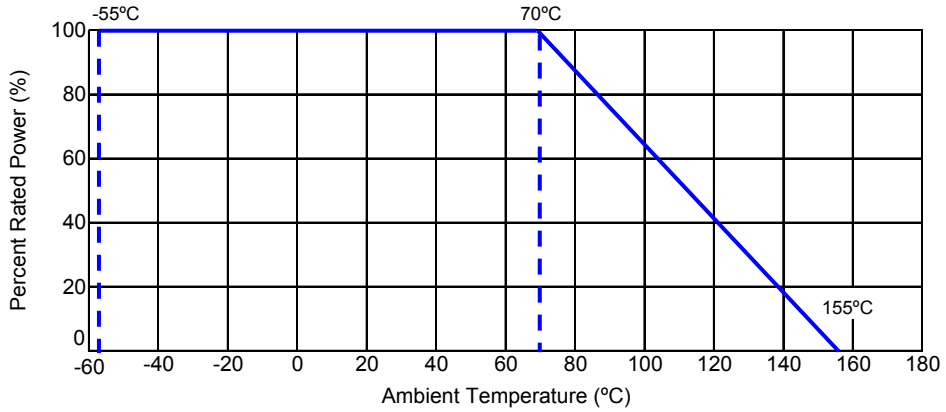
	Metal	Thickness
1	Passivated NiCr	-
2	Overcoat	-
3	Ag/Pd Conductor	-
4	Ni Plating	3 ~ 6 um
5	Au Plating	0.1 ~ 0.25 um



Performance Characteristics		
Item	Requirement	Test Method
Short Time Overload	ΔR±0.5%	RCWV*2.5 or Max. Overload Voltage for 5 seconds
Insulation Resistance	>1000MΩ	Apply 100V_{DC} for 1 minute
Endurance	ΔR±0.2%	70±2ºC, Max. Working Voltage for 1000 hrs with 1.5 hrs "ON" and 0.5 hrs "OFF"
	>7kΩΔR±0.5%	
Damp Heat with Load	ΔR±0.2%	40±2ºC, 90~95% R.H. Max. Working Voltage for 1000 hrs with 1.5 hrs "ON" and 0.5 hrs "OFF"
Dry Heat	ΔR±0.2%	at +155ºC for 1000 hrs
Bending Strength	ΔR±0.2%	Bending apmlitude 3mm for 10 seconds
Solderability	95% min. coverage	245±5ºC for 3 seconds
Resistance to Soldering Heat	ΔR±0.2%	260±5ºC for 10 seconds
Dielectric Withstand Voltage	by type	Apply Max Overload Voltage for 1 minute
Thermal Shock	ΔR±0.25%	-55ºC ~ 150ºC, 100 cycles
Low Temperature Operation	ΔR±0.2%	1 hour, - 65ºC, followed by 45 minutes of RCWV

Reference Standards: MIL_STD_202, JIS_C 5201-1
Storage Temperature: 25±3ºC; Humidity <80% R.H.

Power Derating Curve:



How to Order

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
R	N	C	W	0	2	0	1	F	T	D	4	K	7	0

Product Series	
RNCW	Wirebondable

Size	Power
0201	0.031W
0402	0.063W
0603	0.125W

Tolerance		
Code	Tol	Value
B	0.1%	E96
D	0.5%	
F	1%	E24

Packaging			
Code	Description	Size	Quantity
T	7" Reel Paper Tape	0201, 0402	10,000
		0603	5,000

TCR	
Code	ppm
E	25
C	50
D	100

Resistance Value
Four characters with the multiplier used as the decimal holder.
50 ohm = 50R0 10 Kohm = 10K0

Legacy Part Number (before January 3, 2011):

SEI Type	Code	TCR	Nominal Resistance	Tolerance	Packaging
RNCW	05	T1	4.7K	5%	R

Type	Description
RNCW	Wirebondable

Code	Wattage	Size
05	0.031W	0201
10	0.063W	0402
16	0.125W	0603

TCR	
T1	100ppm
T2	50ppm
T9	25ppm

Tolerance	Values
0.1%, 0.5%	E96
1%	E24

Styles	Quantity	Description	Code
05, 10	10,000	7" reel paper tape	R
16	5,000		