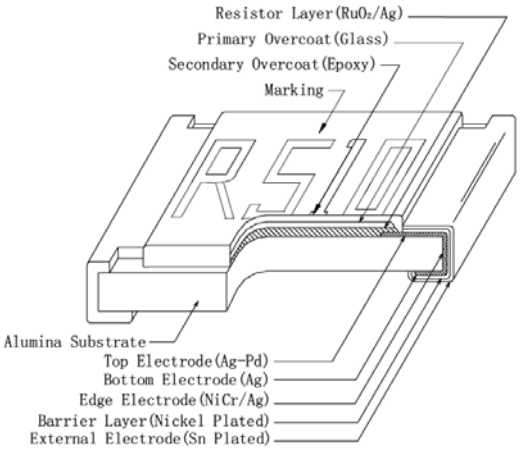
Thick Film Chip Resistor – Low Ohmic



Features

- Low Inductance
- Battery Charge Current Sensing
- Highly Reliable Multilayer Electrode Construction
- Higher Component and Equipment Reliability
- Excellent Performance at High Frequency
- Reduced Size of Final Equipment
- RoHS Compliant

RoHS Compliant

Applications

- For televisions, audio recorders, notebook computers, battery chargers, desktop computers and telecommunication equipment.

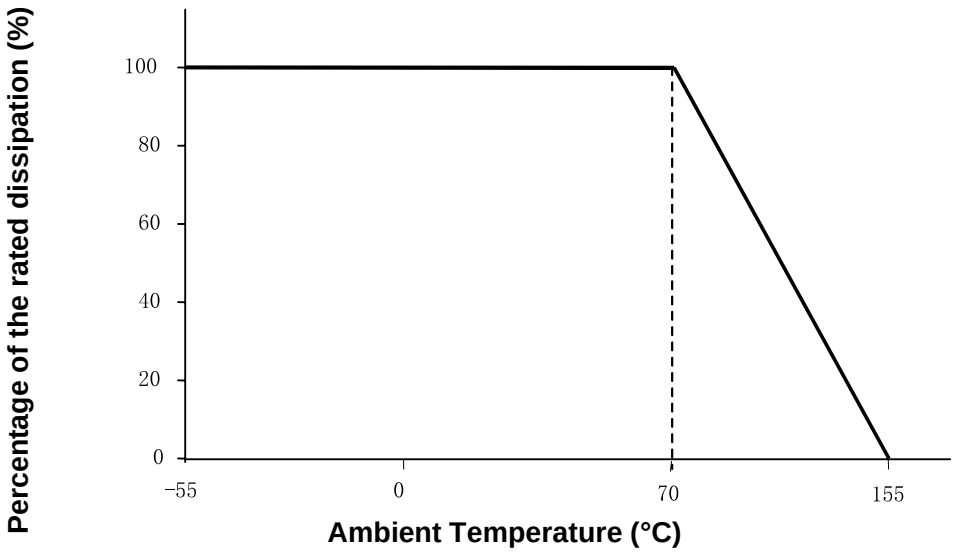
Absolute Maximum Ratings & Characteristics

Type Name	Size Code	Tolerance	Power Rating @70°C	MAX Working Voltage	MAX Overload Voltage	TCR ppm/°C	Resistance Range	Rated Working Temperature
RL1210	3225	J: ±5% Note	1/3W	200V	400V	±1500	0.010Ω ~ 0.018Ω (E-24)	-55°C~+155°C
						±1500	0.020Ω ~ 0.100Ω (E-24)	
						±500	0.102Ω ~ 0.976Ω (E-96)	

Note: ±1% is available upon request.

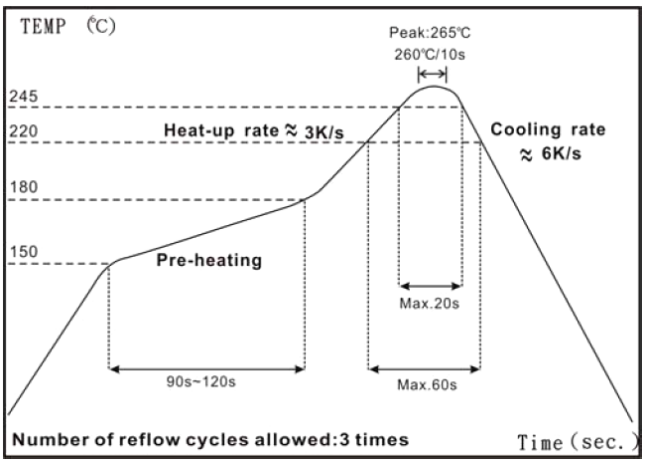
Power Derating Curve

For resistors operate in the ambient temperature over 70°C, loading power ratio will derate in accordance with following curve.

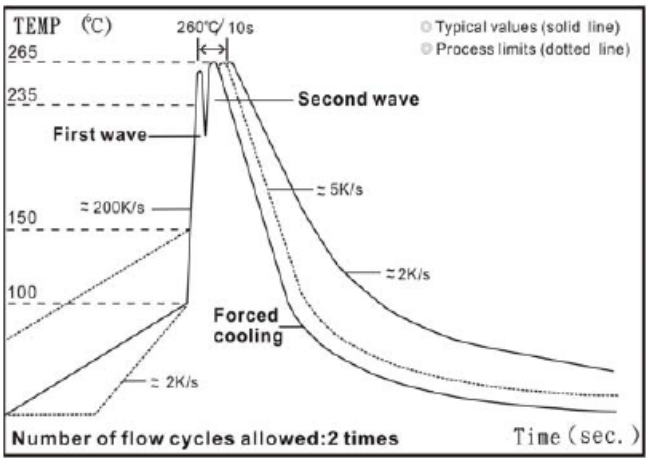


Max. dissipation of rated power as a function of the ambient temperature

Soldering Condition

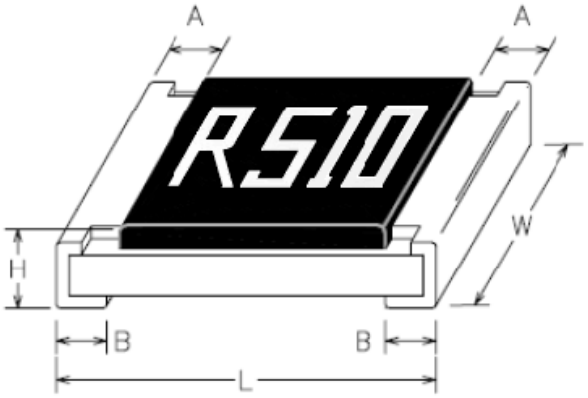


IR Reflow soldering



Wave soldering (Flow soldering)

Dimensions (in mm)



Type Name	Size Code	L	W	H	A	B	Average Weight
RL1210	3225	3.20 ± 0.20	2.60± 0.15	0.55 ± 0.10	0.50 ± 0.25	0.50 ± 0.20	15.04 mg

Marking Information

Examples:

4 digits marking (±5%)



R510 = 0.51 Ohm

Test and Requirements

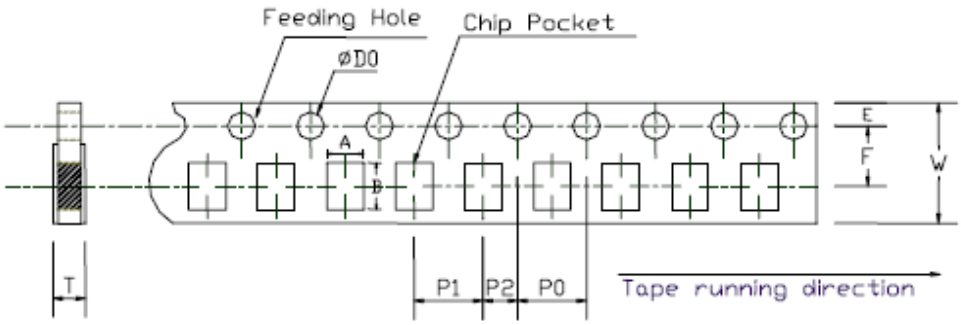
Test Item	Test Method	Test Condition	Requirement ±5%
Temperature Coefficient of Resistance(T.C.R.)	JIS C 5201 4.8 IEC 60115-1 4.8	-55°C~+155°C, 20°C is the reference temperature	Within the specification
Short Time Overload	JIS C 5201 4.13 IEC 60115-1 4.13	2.5 times RCWV or max. overload voltage for 5 seconds	±2.0%
Insulation Resistance	JIS C 5201 4.6 IEC 60115-1 4.6	Max. overload voltage for 1 minute	≥10G
Voltage Proof	JIS C 5201 4.7 IEC 60115-1 4.7	1.42 times RCWV (RMS) for 1 minute	no breakdown or flashover
Substrate Bending Test	JIS C 5201 4.33 IEC 60115-1 4.33	Bending once with 5 seconds for 3 mm	±1.0%
Resistance to soldering heat	JIS C 5201 4.18 IEC 60115 4.18	260±5°C for 10 seconds	±1.0%
Leaching	JIS C 5201 4.18 IEC 60115 4.18	260±5°C for 60 seconds	no leaching
Solderability	JIS C 5201 4.17 IEC 60115-1 4.17	245±5°C for 3 seconds	>95% coverage
Endurance at upper category temperature	JIS C 5201 4.23 IEC 60115-1 2.23.2	at +155°C for 1000 hrs	±1.5%
Rapid change of temperature	JIS C 5201 4.19 IEC 60115-1 4.19	-55°C~+155°C, 5 cycles	±1.0%
Damp heat with load	JIS 5201 4.24	40±2°C, 90~95% R.H. or max. working voltage for 1000 hrs with 1.5hrs “ON” and 0.5 hrs “OFF”	±3.0%
Endurance	JIS C 5201 4.25 IEC 60115-1 4.25.1	70±2°C, or max. working voltage for 1000 hrs with 1.5 hrs “ON” and 0.5 hrs “OFF”	±3.0%

Note: RCWV：Rated Continuous Working Voltage.

$$RCWV = \sqrt{\text{Rated power (W)} \times \text{Resistance value (R)}}$$

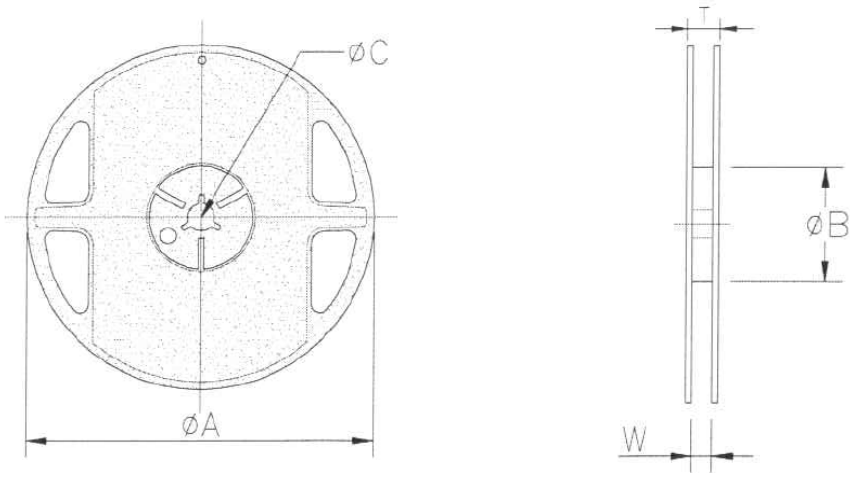
Packing Information:

Carrier Tape Dimensions (in mm)



Type Name	A	B	W	E	F	P0	P1	P2	ØD0	T
RL1210	2.8±0.1	3.5±0.2	8.0±0.2	1.75±0.1	3.5±0.05	4.0±0.1	4.0±0.05	2.0±0.05	1.5+0.1/-0	0.85±0.1

Reel Dimensions (in mm)



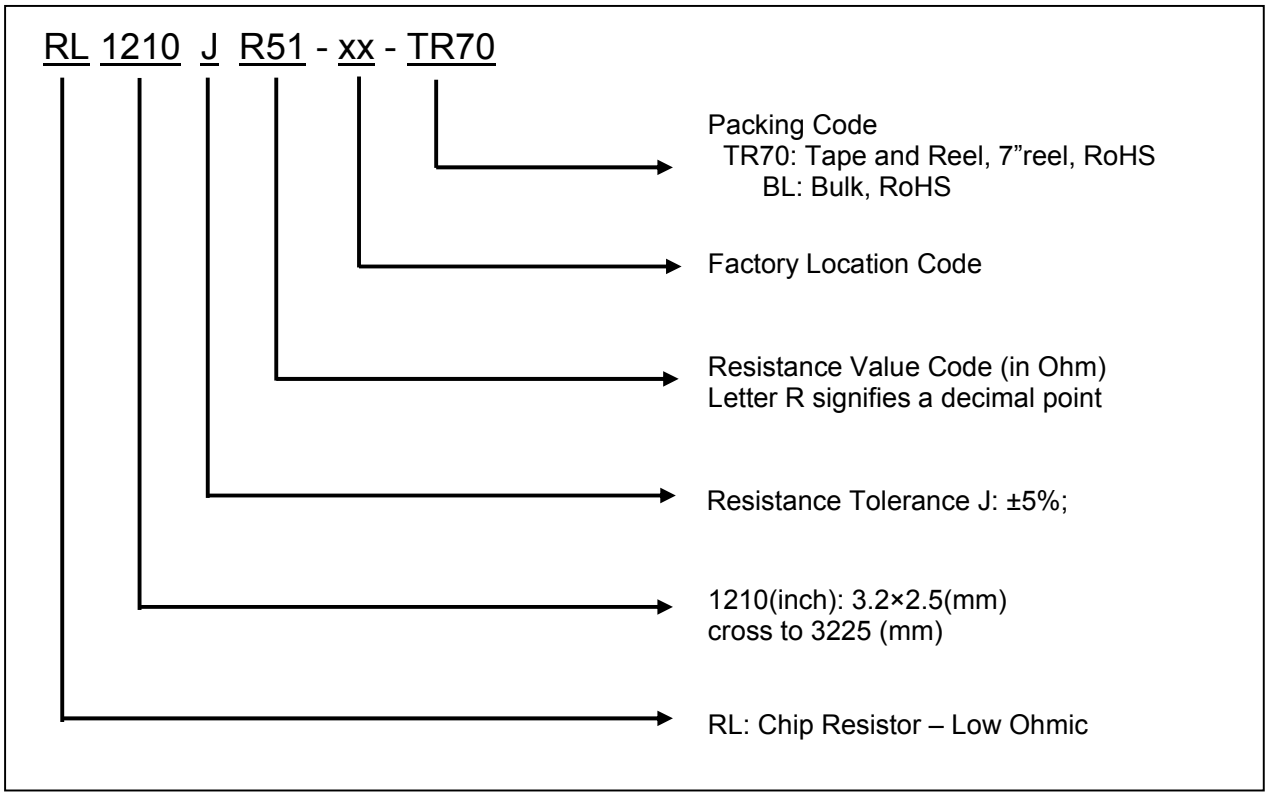
Reel Diameter	PCS per Paper Tape	A	B	C	W	T
7”	5,000	180+0/-3	60+1/-0	13.0±0.2	9.0±0.3	11.4±1

Carton Information

PCS per Carton	Carton Size (LxWxH)
300,000	400X400X200 (in mm)

RL1210J Series

How to Order



E-24 Series of Resistance Value

xxx (code)	Ω	xxx (code)	Ω	xxx (code)	Ω	xxx (code)	Ω	xxx (code)	Ω	xxx (code)	Ω	xxx (code)	Ω
R010	0.010	R011	0.011	R012	0.012	R013	0.013	R015	0.015	R016	0.016	R018	0.018
R020	0.020	R022	0.022	R024	0.024	R027	0.027	R030	0.030	R036	0.036	R039	0.039
R043	0.043	R056	0.056	R062	0.062	R068	0.068	R075	0.075	R082	0.082	R091	0.091

E-96 Series of Resistance Value

xxx (code)	Ω	xxx (code)	Ω	xxx (code)	Ω	xxx (code)	Ω	xxx (code)	Ω	xxx (code)	Ω	xxx (code)	Ω
R100	0.100	R102	0.102	R105	0.105	R107	0.107	R110	0.110	R113	0.113	R115	0.115
R118	0.118	R121	0.121	R124	0.124	R127	0.127	R130	0.130	R133	0.133	R137	0.137
R140	0.140	R143	0.143	R147	0.147	R150	0.150	R154	0.154	R158	0.158	R162	0.162
R165	0.165	R169	0.169	R174	0.174	R178	0.178	R182	0.182	R187	0.187	R191	0.191
R196	0.196	R200	0.200	R205	0.205	R210	0.210	R215	0.215	R221	0.221	R226	0.226
R232	0.232	R237	0.237	R243	0.243	R249	0.249	R255	0.255	R261	0.261	R267	0.267
R274	0.274	R280	0.280	R287	0.287	R294	0.294	R301	0.301	R309	0.309	R316	0.316
R324	0.324	R332	0.332	R340	0.340	R348	0.348	R357	0.357	R365	0.365	R374	0.374
R383	0.383	R392	0.392	R402	0.402	R412	0.412	R422	0.422	R432	0.432	R442	0.442
R453	0.453	R464	0.464	R475	0.475	R487	0.487	R499	0.499	R511	0.511	R523	0.523
R536	0.536	R549	0.549	R562	0.562	R576	0.576	R590	0.590	R604	0.604	R619	0.619
R634	0.634	R649	0.649	R665	0.665	R681	0.681	R698	0.698	R715	0.715	R732	0.732
R750	0.750	R768	0.768	R787	0.787	R806	0.806	R825	0.825	R845	0.845	R866	0.866
R887	0.887	R909	0.909	R931	0.931	R953	0.953	R976	0.976				

How to contact us:

US HEADQUARTERS
28040 WEST HARRISON PARKAWAY, VALENCIA, CA 91355-4162
Tel: (800) TAITRON (800) 824-8766 (661) 257-6060
Fax: (800) TAITFAX (800) 824-8329 (661) 257-6415
Email: taitron@taitroncomponents.com
Http://www.taitroncomponents.com

TAITRON COMPONETS MEXICO, S.A .DE C.V.
BOULEVARD CENTRAL 5000 INTERIOR 5 PARQUE INDUSTRIAL ATITALAQUIA, HIDALGO C.P. 42970 MEXICO
Tel: +52-55-5560-1519
Fax: +52-55-5560-2190

TAITRON COMPONETS INCORPORATED E REPRESENTAÇÕES DO BRASIL LTDA
RUA DOMINGOS DE MORAIS, 2777, 2.ANDAR, SALA 24 SAÚDE - SÃO PAULO-SP 04035-001 BRAZIL
Tel: +55-11-5574-7949
Fax: +55-11-5572-0052

TAITRON COMPONETS INCORPORATED, SHANGHAI REPRESENTATIVE OFFICE
METROBANK PLASA, 1160 WEST YAN'AN ROAD, SUITE 1502, SHANGHAI, 200052,CHINA
Tel: +86-21-5424-9942
Fax: +86-21-5424-9931