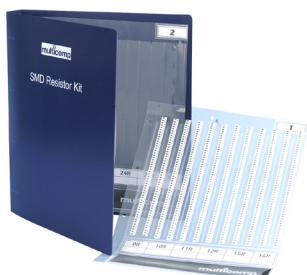


Surface Mount Resistor Kit

0805 Case Size



RoHS
Compliant



Specifications Table

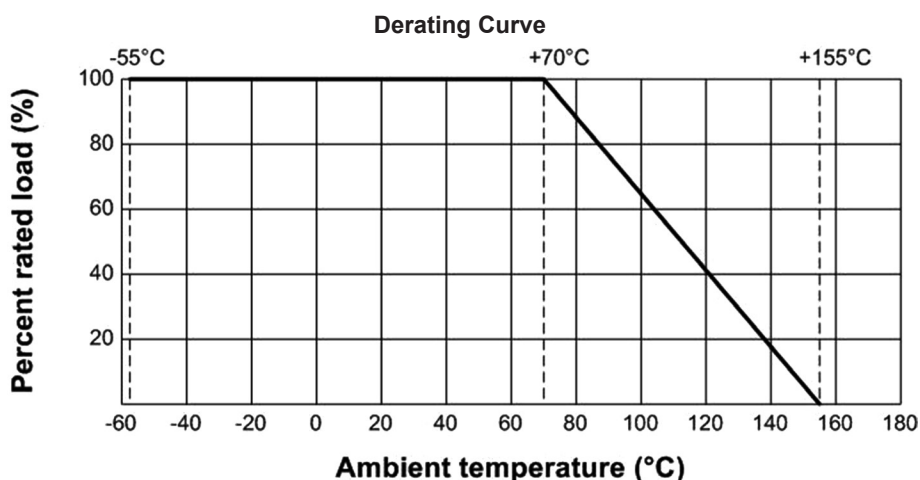
Type	Power Rating	Resistance Tolerance	Nominal Resistance
MC 0805	0.1W (1/10W)	±5%	10Ω

Ratings:

Type	MC 0805
Power Rating	0.1W (1/10W)
Rated Current(Jumper)	2A
Max. Overload Current(Jumper)	5A
Max. Working Voltage	150V
Max. Overload Voltage	300V
Dielectric Withstanding Voltage	500V
Temperature Range	-55°C +155°C
Ambient Temperature	+70°C

Power Rating:

Resistors shall have a power rating based on continuous load operation at an ambient temperature of 70°C . For temperature in excess of 70°C , The load shall be derate as shown in figure.



Surface Mount Resistor Kit

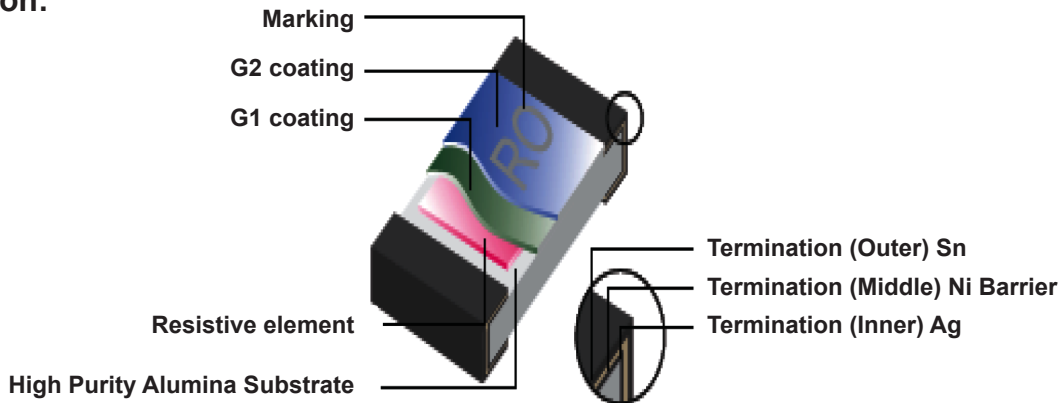
0805 Case Size



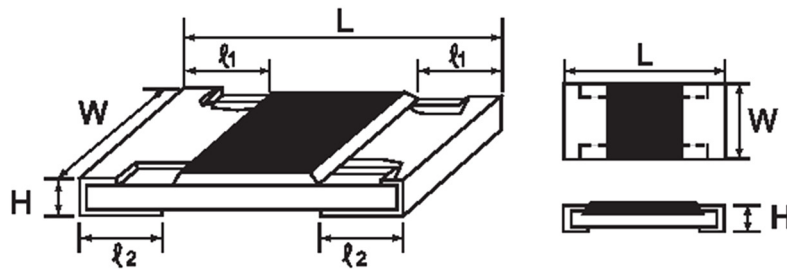
Nominal Resistance:

Effective figures of nominal resistance shall be in accordance with E-24 and E-96 series
 E-96 series for 1 % and E-24 series for 2 % and 5 %

Construction:



Power Rating and Dimensions:



Dimension :

Type	Dimension (mm)				
	$L \pm 0.15$	$W +0.15 / -0.10$	$H \pm 0.1$	$l1 \pm 0.2$	$l2 \pm 0.2$
MC 0805	2	1.25	0.55	0.4	0.4

Power Rating :

Type	Power Rating	Tolerance	Resistance	Standard Series
MC 0805	0.1W (1/10W)	Jumper	< 50mΩ	E-24
		±5	10Ω ~ 1MΩ	

Surface Mount Resistor Kit

0805 Case Size



Performance Specification :

Characteristics	Limits	Test Methods (JIS C 5201-1)
Insulation resistance	1,000 MΩ or more	Apply 500V DC between protective coating and termination for 1 min, then measure
Dielectric withstanding voltage	No evidence of flashover mechanical damage, arcing or insulation break down	Apply 300V AC between protective coating and termination for 1 minute
Temperature coefficient	1Ω - 10Ω : ± 400 PPM/°C 11Ω - 100Ω : ± 200 PPM/°C >100Ω : ± 100 PPM/°C	Natural resistance change per temp. degree centigrade. $\frac{R_2 - R_1}{R_1(t_2 - t_1)} \times 10^6 \text{ (PPM/°C)}$ R ₁ : Resistance value at room temperature (t ₁) R ₂ : Resistance value at room temp. plus 100°C (t ₂)
Short time overload	Resistance change rate is ± (2.0% + 0.1Ω) Max.	Permanent resistance change after the application of a potential of 2.5 times RCWV for 5 seconds
Solderability	95 % coverage Min.	Test temperature of solder : 245 ± 3°C Dwell time in solder : 2 ~ 3 seconds
Soldering temp. Reference	Electrical characteristics shall be satisfied. Without distinct deformation in appearance. (95 % coverage Min.)	<p><u>Wave soldering condition:</u> (2 cycles Max.) Pre-heat : 100°C to 120°C, 30 ±5 sec. Suggestion solder temp.: 235°C to 255°C, 10 sec. (Max.) Peak temp.: 260°C</p> <p><u>Reflow soldering condition:</u> (2 cycles Max.) Pre-heat : 150°C to 180°C, 90°C to 120 sec. Suggestion solder temp.: 235°C to 255°C, 20 to 40 sec. Peak temp.: 260°C</p> <p><u>Hand soldering condition:</u> The soldering iron tip temperature should be less than 300°C and maximum contract time should be 5 sec.</p>



Surface Mount Resistor Kit

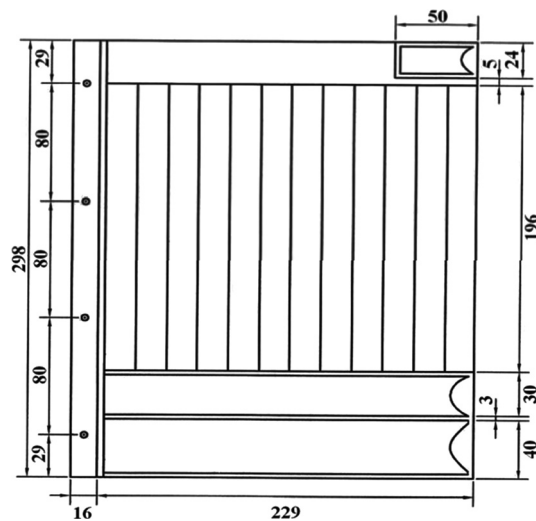
0805 Case Size



Characteristics	Limits	Test Methods (JIS C 5201-1)															
Soldering Heat	Resistance change rate is: $\pm(1\% +0.05\Omega)$ Max.	Dip the resistor into a solder bath having a temperature of $260^{\circ}\text{C} \pm 3^{\circ}\text{C}$ and hold it for 10 ± 1 seconds.															
Temperature cycling	Resistance change rate is $\pm(1\% +0.05\Omega)$ Max.	Resistance change after continuous 5 cycles for duty cycle specified below :															
		<table border="1"> <thead> <tr> <th>Step</th> <th>Temperature</th> <th>Time</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>$-55^{\circ}\text{C} \pm 3^{\circ}\text{C}$</td> <td>30 mins</td> </tr> <tr> <td>2</td> <td>Room temp.</td> <td>10 to 15 mins</td> </tr> <tr> <td>3</td> <td>$+155^{\circ}\text{C} \pm 2^{\circ}\text{C}$</td> <td>30 mins</td> </tr> <tr> <td>4</td> <td>Room temp.</td> <td>10 to 15 mins</td> </tr> </tbody> </table>	Step	Temperature	Time	1	$-55^{\circ}\text{C} \pm 3^{\circ}\text{C}$	30 mins	2	Room temp.	10 to 15 mins	3	$+155^{\circ}\text{C} \pm 2^{\circ}\text{C}$	30 mins	4	Room temp.	10 to 15 mins
		Step	Temperature	Time													
		1	$-55^{\circ}\text{C} \pm 3^{\circ}\text{C}$	30 mins													
		2	Room temp.	10 to 15 mins													
3	$+155^{\circ}\text{C} \pm 2^{\circ}\text{C}$	30 mins															
4	Room temp.	10 to 15 mins															
Load life in humidity	Resistance change rate is $\pm(3\% +0.1\Omega)$ Max.	Resistance change after 1,000 hours (1.5 hours "on", 0.5 hour "off") at RCWV in a humidity chamber controlled at $40^{\circ}\text{C} \pm 2^{\circ}\text{C}$ and 90 to 95 % relative humidity															
Load Life	Resistance change rate is $\pm(3\% +0.1\Omega)$ Max.	Permanent resistance change after 1,000 hours operating at RCWV, with duty cycle of (1.5 hours"on", 0.5 hour "off") at $70^{\circ}\text{C} \pm 2^{\circ}\text{C}$ ambient															
Terminal bending	Resistance change rate is $\pm(1\% +0.05\Omega)$ Max.	Twist of Test Board : Y/X = 5/90mm for 10 seconds															

Kit resistors:

Insert for Chip Kit



Dimensions : Millimetres

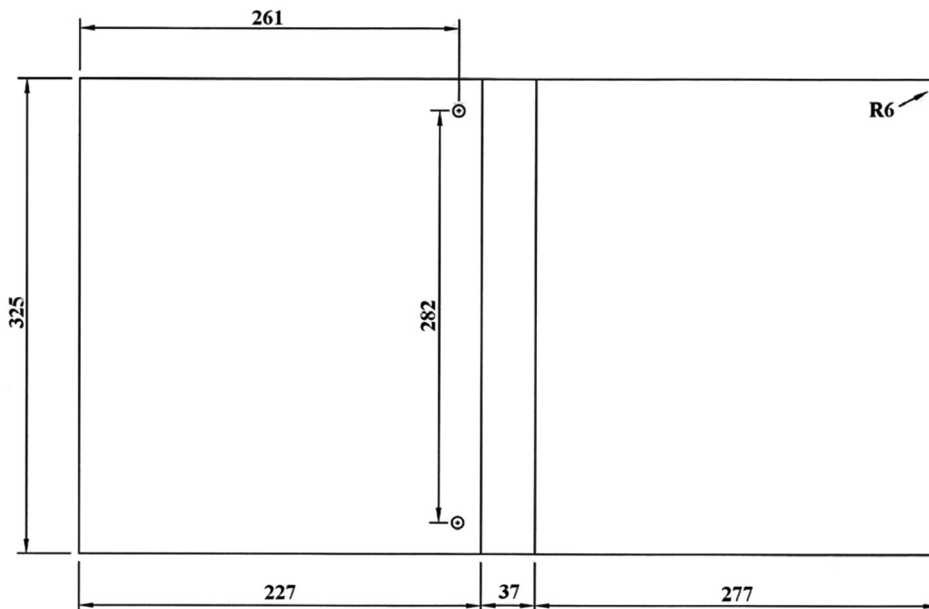


Surface Mount Resistor Kit

0805 Case Size



Album for Chip Kit:



Dimensions : Millimetres

Chip Kit Resistors:

Product : MC Kit (0805) +/-5%
 E24 Series = 122 values (0R&10R to 1M)
 Quantity : 100pcs per value
 Total Qty : 12,200pcs.

NO.	Value
1	0E
2	10R
3	11R
4	12R
5	13R
6	15R
7	16R
8	18R
9	20R
10	22R

NO.	Value
11	24R
12	27R
13	30R
14	33R
15	36R
16	39R
17	43R
18	47R
19	51R
20	56R

NO.	Value
21	62R
22	68R
23	75R
24	82R
25	91R
26	100R
27	110R
28	120R
29	130R
30	150R

NO.	Value
31	160R
32	180R
33	200R
34	220R
35	240R
36	270R
37	300R
38	330R
39	360R
40	390R



Surface Mount Resistor Kit

0805 Case Size



NO.	Value
41	430R
42	470R
43	510R
44	560R
45	620R
46	680R
47	750R
48	820R
49	910R
50	1K
51	1K1
52	1K2
53	1K3
54	1K5
55	1K6
56	1K8
57	2K
58	2K2
59	2K4
60	2K7

NO.	Value
61	3K
62	3K3
63	3K6
64	3K9
65	4K3
66	4K7
67	5K1
68	5K6
69	6K2
70	6K8
71	7K5
72	8K2
73	9K1
74	10K
75	11K
76	12K
77	13K
78	15K
79	16K
80	18K

NO.	Value
81	20K
82	22K
83	24K
84	27K
85	30K
86	33K
87	36K
88	39K
89	43K
90	47K
91	51K
92	56K
93	62K
94	68K
95	75K
96	82K
97	91K
98	100K
99	110K
100	120K

NO.	Value
101	130K
102	150K
103	160K
104	180K
105	200K
106	220K
107	240K
108	270K
109	300K
110	330K
111	360K
112	390K
113	430K
114	470K
115	510K
116	560K
117	620K
118	680K
119	750K
120	820K
121	910K
122	1M

Part Number Table

Description	Part Number
Resistor Kit, 0805, E24, 5%	MC0805WAJE024KIT

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