

Excellent Integrated System Limited

Stocking Distributor

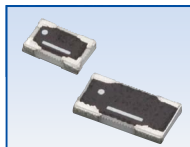
Click to view price, real time Inventory, Delivery & Lifecycle Information:

[Susumu](#)

[RM3216A-104/104-PBVW10](#)

For any questions, you can email us directly:

sales@integrated-circuit.com



Metal thin film resistor networks

■ RM series

AEC-Q200 Compliant

Features

- Ultra accuracy: relative resistance tolerance $\pm 0.01\%$, relative TCR $\pm 1 \text{ ppm}/^\circ\text{C}$
- Ultra reliability: 10,000 hours of $85^\circ\text{C}/85\text{RH}$ test or 10,000 of 155°C high temperature exposure test causes less than $\pm 0.1\%$ resistance drift

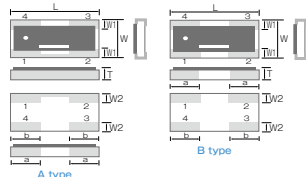
Applications

- Applications that require a precise relative resistance ratio such as voltage dividers, and gain-setting circuits for amplifiers.

Specifications

* All products are made to order.

Dimensions



Dimension (inch)	RM2012 (0805)	RM3216 (1209)
L	2.00 $\pm$ 0.20	3.20 $\pm$ 0.20
W	1.25 $\pm$ 0.20	1.60 $\pm$ 0.20
W1	0.40 $\pm$ 0.20	0.40 $\pm$ 0.25
W2	0.35 $\pm$ 0.20	0.40 $\pm$ 0.20
a	0.50 $\pm$ 0.20	1.00 $\pm$ 0.25
b	0.60 $\pm$ 0.20	1.00 $\pm$ 0.20
T	0.40 $\pm$ 0.10	0.40 $\pm$ 0.10

(unit : mm)

Electrical characteristics

Series name	RM2012 0.05W/Element, 0.1W/Package	RM3216 0.063W/Element, 0.125W/Package
Resistance range (Ω)	100 ~ < 300 300 ~ 100kΩ	100 ~ < 300 300 ~ 330kΩ
Absolute resistance tolerance (%)	± 0.05 (W) ± 0.1 (B) ± 0.5 (D)	— — —
Relative resistance tolerance (%)	± 0.01 (L) ± 0.02 (P) ± 0.05 (W)	Resistance ratio=1 Resistance ratio $\leq$ 10 Resistance ratio $\leq$ 100
Absolute TCR (ppm/°C)	± 25 (P) ± 1 (X)	— Resistance ratio=1
Relative TCR (ppm/°C)	± 2 (W) ± 5 (V)	1 < Resistance ratio $\leq$ 3 Resistance ratio > 3
Maximum voltage / element	25V	50V
Operating temperature	−55°C ~ 155°C	−55°C ~ 155°C
Packaging	1,000pcs 5,000pcs	Code10 Code50

* Relative resistance tolerance is defined as the ratio of the actual R2/R1 against the specified R2/R1 as expressed

$$\left[\frac{\text{actual } R2/R1}{\text{specified } R2/R1} - 1 \right] \times 100$$

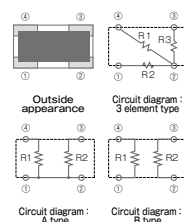
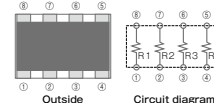
* Relative TCR is defined as : (TCR of R2)/(TCR of R1)

Standard resistance value pairings

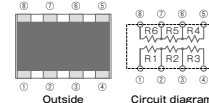
Ratio	R1(Ω)	R2(Ω)	Ratio	R1(Ω)	R2(Ω)	Ratio	R1(Ω)	R2(Ω)	Ratio	R1(Ω)	R2(Ω)	Ratio	R1(Ω)	R2(Ω)
1 : 1	1k	1k	1 : 3	1k	3k	1 : 5	1k	5k	1 : 9	1k	9k	1 : 20	1k	20k
	10k	10k		10k	30k		10k	50k		10k	90k		10k	200k
	1k	2k	1 : 4	1k	4k	1 : 6	1k	6k	1 : 10	1k	10k	1 : 25	1k	25k
	10k	20k		10k	40k		10k	60k		10k	100k		10k	50k

Standard circuits

2012/3216Size

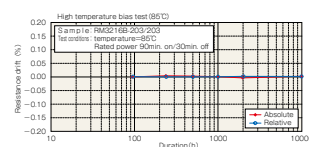
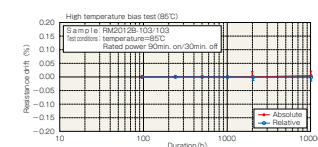
3216Size 4 element type
(array, network with different resistance values)

3216Size 6 element type

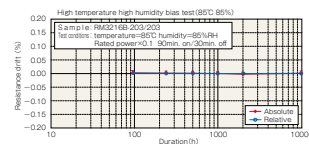
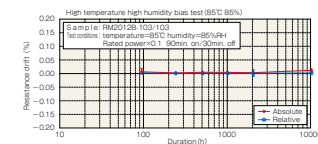


10000 hour reliability test data

Life test



High temperature high humidity bias test



Part numbering system

RM 2012 A - * / *** - P W X L 10**

Series code | circuits | Size | Packaging: 10 (1000pcs) 50 (5000pcs)

Relative resistance tolerance
Relative TCR
Absolute resistance tolerance
Absolute TCR
Resistance value (R1/R2)

Please contact us for specific custom requirements for resistance values, resistance ratios, number of elements, circuitry and any others.