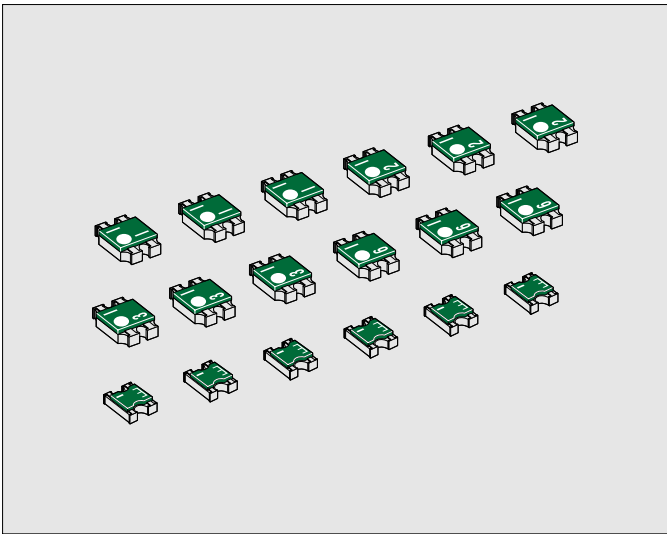


RAC10 1A, RAC16 1A, 2A

●Features

- 1. The RAC10 1A and RAC16 1A, 2A Series are small size chip attenuators, suitable for high density surface packaging.
- 2. Suitable for use as DC and up to UHF band frequencies.
- 3. Similar foot print for chip resistor networks.
- 4. Standard impedance of 50 ohm and 75 ohm are available up to 600 ohm available on request.
- 5. Replaces conventional attenuation circuits with one chip in place of three discrete resistors.



●Dimensions and Circuit

RAC16 1A, 2A

RAC10 1A

RAC16 : Impedance on Termination 1
Attenuation factor on Termination 3
Dot mark on Termination 4

RAC10 : Dot mark on Termination 1
Attenuation factor on Termination 2 to 3

Circuit

Unbalanced π Type

Unit : mm

Style	Terminal Style	L	W	H	Q	a	b	*P	*Unit weight/pc.
RAC10 1A	C	1.0±0.05	1.0±0.05	0.35±0.10	0.33±0.10	0.15±0.10	0.25 ^{+0.05} _{-0.10}	0.65	1.1mg
RAC16 1A, 2A	A	1.6±0.1	1.6±0.1	0.55 ^{+0.05} _{-0.10}	0.5 ±0.1	0.25±0.10	0.25 ^{+0.15} _{-0.10}	0.8	3.5mg

*Values for reference

●Product Classification

Example

RAC

①Product Type

10

②Size

1

③Characteristic Impedance

A

④Circuits

1

⑤Attenuation Factor

C

⑥ Terminal Style

TH

⑦Packaging

Style

①Product Type

Code	Width
10	1.0mm
16	1.6mm

③Characteristic Impedance

Code	Characteristic Impedance
1	50 ohm
2	75 ohm

④Circuits

Code	Circuits
A	Unbalanced π Type

⑤Attenuation Factor

Code	Attenuation Factor
X	0.5dB
1	1dB
2	2dB
3	3dB
4	4dB
5	5dB
6	6dB
7	7dB
8	8dB
9	9dB
A	10dB
B	11dB
C	12dB
D	13dB
E	14dB
F	15dB
G	16dB
L	20dB

⑥ Terminal Style

Code	Termination Style	Application
A	Type Without corner	RAC16
C	With corner	RAC10

*⑦Packaging

Code	Packaging	Application
B	Bulk(Loose Packaging)	RAC10,16
TP	Paper Tape.	RAC16
TH	Paper Tape.(2mm pitch)	RAC10

*Refer to Taping and Packaging information in page 34,35

●Ratings

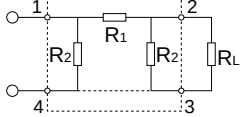
Style	Characteristic Impedance	Attenuation dB	Attenuation Factor Tolerance dB	Attenuation Range	VSWR Voltage standing wave Ratio	Rated Input Power mW/element	Category Temperature Range °C
RAC10 1A	50 ohm	0.5	±0.1	DC≤f≤3GHz	1.1max.	100	−40~+125
		1	±0.3	DC ≤ f ≤ 1.5GHz 1.5GHz < f ≤ 3GHz	1.2max. 1.3max.		
		2					
		3					
		4					
		5					
		6	±0.4				
		7					
		8					
		9					
		10	±0.75				
		11	±0.8				
		12					
		13					
		14					
		15					
		16					
		20	±2.5	DC ≤ f ≤ 3GHz	1.3max.		
RAC16 1A	50 ohm	1	±0.3	DC ≤ f ≤ 3GHz	1.2max.		
		2	±0.3				
		3	±0.5				
		6	±0.75				
		10	±0.75				
RAC16 2A	75 ohm	1	±0.3				
		2	±0.3				
		3	±0.5				
		6	±0.75				
		10					

*The following information is available.

1. 0dB attenuation.

2. Test methods for Attenuation Factor and VSWR characteristics.

●Performance Characteristics JIS C 5201-1 : 1998

Description	Requirements			Test Methods
	0.5~2dB	3dB~5dB	6dB~20dB	
Characteristic impedance	50 ohm, 75 ohm			Measuring Circuit  RL=50 ohm 75 ohm
Insulation resistance	At least 100M ohm			50Vd.c., 60s
Solderability	In accordance with Clause 4.17.4.5			Clause 4.17 Dip into 235°C solder bath for 2s.
Resistance to soldering heat	Within±0.1dB No major visible damage.	Within±0.2dB	Within±0.3dB	Clause 4.18 Dip into 260°C solder bath for 5s.
Rapid change of temperature	Within±0.1dB No major visible damage.	Within±0.2dB	Within±0.3dB	Clause 4.19 5 cycles between -55°C and +125°C
Endurance at 85°C	Within±0.1dB	Within±0.2dB	Within±0.3dB	Clause 4.25.1 Rated voltage, 1.5h"ON", 0.5h"OFF" 85°C, 1000h.
Bend strength of the face plating	Within±0.1dB	Within±0.2dB	Within±0.3dB	Clause 4.33 Amount of bend 3mm, 10s