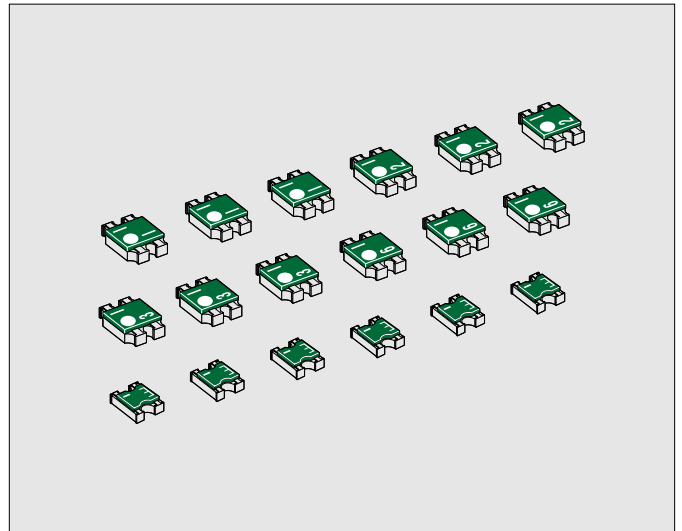


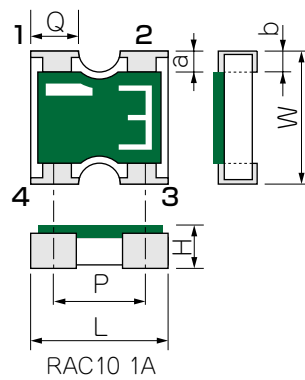
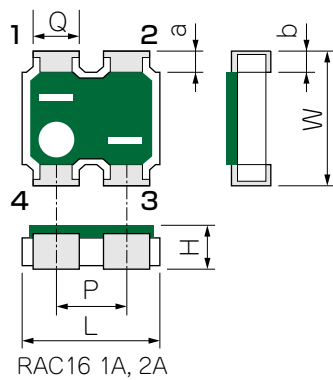
RAC10 1A, RAC16 1A, 2A

Features

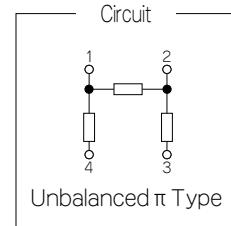
1. The RAC10 1A and RAC16 1A, 2A Series are small size chip attenuators, suitable for high density surface packaging.
2. Suitable for use as DC and up to UHF band frequencies.
3. Similar foot print for chip resistor networks.
4. Standard impedance of 50 Ω and 75 Ω are available up to 600 Ω available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



Dimensions and Circuit



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



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 ^{+0.15} _{-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 16 1 A
 (1)Product Type (2)Size (3)Characteristic Impedance (4)Circuits

1
 (5)Attenuation Factor

030
 (6)Attenuation Factor Tolerance

A TP
 (7)Terminal Style (8)Packaging

Style

(1)Product Type

(3)Characteristic Impedance
 Code Characteristic Impedance

(2)Size	
Code	Width
10	1.0mm
16	1.6mm

1	50 Ω
2	75 Ω

(4)Circuits	
Code	Circuits
A	Unbalanced π Type

(5)Attenuation 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)Attenuation Factor Tolerance	
Code	Attenuation Factor Tolerance
010	±0.1dB
030	±0.3dB
040	±0.4dB
050	±0.5dB
075	±0.75dB
080	±0.8dB
250	±2.5dB

*(8)Packaging		
Code	Packaging	Application
B	Bulk(Loose Packaging)	RAC10,16
TP	Paper Tape.	RAC16
TH	Paper Tape.	RAC10

*Refer to Taping and Packaging information in page 32.33

(7)Terminal Style		
Code	Termination Style	Application
A	□Type Without corner	RAC16
C	□Type With corner	RAC10

CHIP ATTENUATORS RAC10 1A, RAC16 1A, 2A

■ Ratings

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

*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	50Ω, 75Ω			Measuring Circuit
Insuration resistance	At least 100MΩ			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