

# PMR205

- RC unit, metallized paper with integrated resistor
- 0.1 – 1.0  $\mu\text{F}$ , 22 - 680  $\Omega$ , 125 VAC, +85  $^{\circ}\text{C}$

- Small dimensions
- High dU/dt capability.
- Excellent self-healing properties.  
Ensures long life even when subjected to frequent overvoltages.
- Self-extinguishing encapsulation.
- Good resistance to ionisation due to impregnated dielectric.
- The impregnated paper ensures excellent stability giving outstanding reliability properties, especially in applications having continuous operation.

## TYPICAL APPLICATIONS

RC unit for use in DC and AC applications for:

- contact protection
- interference suppression of contacts
- transient suppression

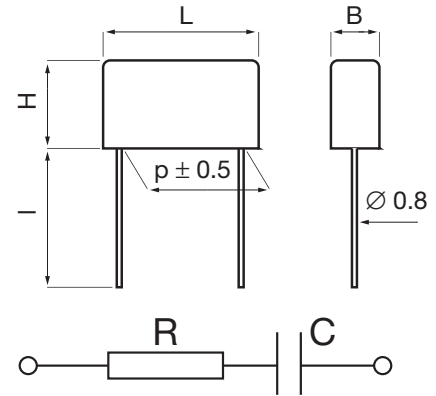
## CONSTRUCTION

Single layer metallized paper. Encapsulated and impregnated in self-extinguishing material meeting the requirements of UL 94V-0. The resistance in the metal layer is utilized as series resistance, integrated resistor.

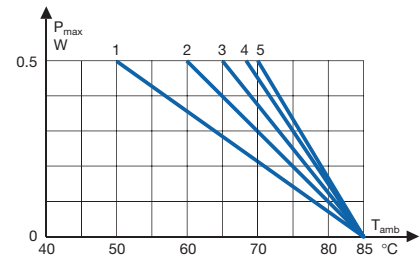
## TECHNICAL DATA

<b>Rated voltage</b>	250 VDC, 125 VAC
<b>Capacitance range</b>	0.1–1.0 $\mu\text{F}$
<b>Capacitance tolerance</b>	$\pm 20\%$
<b>Resistance range</b>	22 – 680 $\Omega$
<b>Resistance tolerance</b>	$\pm 30\%$
<b>Peak pulse voltage</b>	375 V
<b>Temperature range</b>	-40 to +85 $^{\circ}\text{C}$
<b>Climatic category</b>	40/085/56/B
<b>Series resistance</b>	The series resistance is defined at 1 kHz for RC $\geq 50 \mu\text{s}$ and at 100 kHz for RC $< 50 \mu\text{s}$ .
<b>Insulation resistance</b>	$\geq 3000 \text{ M}\Omega$ for C $\leq 0.33 \mu\text{F}$ $\geq 1000 \text{ s}$ for C $> 0.33 \mu\text{F}$ Measured at 100 VDC after 60 s, +23 $^{\circ}\text{C}$
<b>Power ratings</b>	The average losses may reach 0.5 W provided the surface temperature does not exceed + 85 $^{\circ}\text{C}$ . For maximum permitted power dissipation v temperature, see derating curves.

Curve	Dimensions
1	B = 5.2
2	B = 7.3
2	B = 7.8
3	B = 7.6
4	B = 9.0
5	B = 11.3



I: standard: 30 +5/-0 mm (code R30)  
option: short leads, tolerance +0/-1 mm (standard 6 mm, code R06)  
Other lead lengths on request.



Maximum allowable power dissipation vs ambient temperature and case sizes.

## ENVIRONMENTAL TEST DATA

<b>Vibration</b>	IEC 60068-2-6, Test Fc	3 directions at 2 hour each 10 – 500 Hz at 0.75 mm or 98 m/s <sup>2</sup>	No visible damage, No open or short circuit
<b>Bump</b>	IEC 60068-2-29, Test Eb	4000 bumps at 390 m/s <sup>2</sup>	No visible damage, No open or short circuit
<b>Solderability</b>	IEC 60068-2-20, Test Ta	Solder globule method	Wetting time < 1 s
<b>Humidity</b>	IEC 60068-2-3, Test Ca	+40 $^{\circ}\text{C}$ and 90 – 95% R.H.	56 days

## ARTICLE TABLE

Capacitance $\mu\text{F}$	Resistance $\Omega$	Max dimensions in mm				Quantity per package			Weight g	Article code
		B	H	L	p	R30 pcs	R06 pcs	reel taped pcs		
0.10	33	5.2	10.5	18.5	15.2	500	1000	600	1.7	PMR205AB6100M033R30
0.10	47	5.2	10.5	18.5	15.2	500	1000	600	1.7	PMR205AB6100M047R30
0.10	100	5.2	10.5	18.5	15.2	500	1000	600	1.7	PMR205AB6100M100R30
0.10	220	5.2	10.5	18.5	15.2	500	1000	600	1.7	PMR205AB6100M220R30
0.15	68	5.2	10.5	18.5	15.2	500	1000	600	1.7	PMR205AB6150M068R30
0.15	100	5.2	10.5	18.5	15.2	500	1000	600	1.7	PMR205AB6150M100R30
0.22	47	7.3	13.0	19.0	15.2	400	800	400	3.0	PMR205AB6220M047R30
0.22	100	7.3	13.0	19.0	15.2	400	800	400	3.0	PMR205AB6220M100R30
0.22	220	7.3	13.0	19.0	15.2	400	800	400	3.0	PMR205AB6220M220R30
0.22	330	7.3	13.0	19.0	15.2	400	800	400	3.0	PMR205AB6220M330R30
0.22	470	7.3	13.0	19.0	15.2	400	800	400	3.0	PMR205AB6220M470R30
0.25	200	7.3	13.0	19.0	15.2	400	800	400	3.0	PMR205AB6250M200R30
0.25	350	7.3	13.0	19.0	15.2	400	800	400	3.0	PMR205AB6250M350R30
0.25	600	7.3	13.0	19.0	15.2	400	800	400	3.0	PMR205AB6250M600R30
0.33	47	7.8	13.5	18.5	15.2	400	800	400	3.3	PMR205AB6330M047R30
0.47	22	7.6	14.0	24.0	20.3	250	1500	250	4.0	PMR205AC6470M022R30
0.47	33	7.6	14.0	24.0	20.3	250	1500	250	4.0	PMR205AC6470M033R30
0.47	47	7.6	14.0	24.0	20.3	250	1500	250	4.0	PMR205AC6470M047R30
0.47	68	7.6	14.0	24.0	20.3	250	1500	250	4.0	PMR205AC6470M068R30
0.47	100	7.6	14.0	24.0	20.3	250	1500	250	4.0	PMR205AC6470M100R30
0.47	150	7.6	14.0	24.0	20.3	250	1500	250	4.0	PMR205AC6470M150R30
0.47	220	7.6	14.0	24.0	20.3	250	1500	250	4.0	PMR205AC6470M220R30
0.47	330	7.6	14.0	24.0	20.3	250	1500	250	4.0	PMR205AC6470M330R30
0.47	470	9.0	15.0	24.0	20.3	200	1200	250	5.0	PMR205AC6470M470R30
0.47	680	11.3	16.5	24.0	20.3	150	1000	180	7.0	PMR205AC6470M680R30
1.0	33	10.6	16.1	30.5	25.4	150	1000		8.6	PMR205AE7100M033R30
1.0	47	11.3	16.5	24.0	20.3	150	1000		7.0	PMR205AC7100M047R30
1.0	68	11.3	16.5	24.0	20.3	150	1000		7.0	PMR205AC7100M068R30
1.0	100	11.3	16.5	24.0	20.3	150	1000		7.0	PMR205AC7100M100R30
1.0	150	11.3	16.5	24.0	20.3	150	1000		7.0	PMR205AC7100M150R30
1.0	220	11.3	16.5	24.0	20.3	150	1000		7.0	PMR205AC7100M220R30

## ORDERING INFORMATION

The article code for the standard part is given in the article table.  
For other options, see page 12.

## MARKING

- RIFA
- RIFA article code
- RC unit
- Rated capacitance and resistance
- Rated voltage
- MP, for metallized paper
- Climatic category according to IEC 60068-1, appendix A
- Passive flammability class
- Circuit diagram
- Manufacturing code (year, month)