

**Anti-sulfurated · anti-surge chip resistors RXZseries**

**RXZ10 (0805) RXZ18 (1206) RXZ33 (1210)**

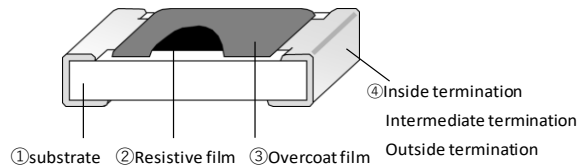
**Not recommended : RXZ18(1206) , RXZ33(1210)**

\*( ) : Inch size

■ Features

- 0805 size 0.25W
- RoHS qualified
- ELV qualified
- AEC-Q200 qualified
- The use of special inside termination contribute to high performance of anti-sulfuration.

■ Structure



\*This is only a schematic drawing of the structure.

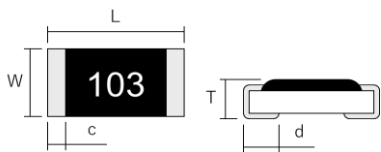
■ Part No. Explanation (Example)

R	X	Z	1	0	T	1	0	3	J
Product type			Rated power and Size		Packaging form	Nominal resistance			Resistance tolerance
RXZ : Anti-surge			10:0.25W,0805 18:0.33W,1206 33:0.5W,1210		T : 4mm pitch taping φ 180 reel	The resistance value is indicated by 3-digit numbers.			J ± 5% F ± 1%

\*The first two numbers are significant numbers, and the third one is the number of zeros "0" following to the first two numbers (multiple of 10).

\*If there is a decimal point in resistance value, it is indicated by "R" and all numbers are significant numbers.

■ Dimensions



\* External dimensions are for reference only.  
Overcoat film color : Black  
The resistance value is indicated by 3-digit numbers.  
Indication color of resistance value : yellow

	L	W	T	c	d
RXZ10	2.00 ± 0.15	1.25 ± 0.15	0.55 <sup>+0.10</sup> / <sub>-0.05</sub>	0.25 <sup>+0.20</sup> / <sub>-0.10</sub>	0.40 ± 0.15
RXZ18	3.10 <sup>+0.20</sup> / <sub>-0.10</sub>	1.55 ± 0.15	0.55 <sup>+0.10</sup> / <sub>-0.05</sub>	0.35 ± 0.20	0.50 <sup>+0.20</sup> / <sub>-0.15</sub>
RXZ33	3.10 <sup>+0.20</sup> / <sub>-0.10</sub>	2.60 ± 0.15	0.60 ± 0.10	0.35 ± 0.20	0.50 <sup>+0.20</sup> / <sub>-0.15</sub>

**Not recommended : RXZ18(1206) , RXZ33(1210)**

(Unit: mm)

## ■ Ratings

	Rated power	Limiting element voltage(*1)	Maximum overload voltage(*2)	Range of rated resistance	Tolerance on rated resistance	Category temperature range	Temperature Coefficient of Resistance(T.C.R)	
RXZ10	0.25W	150V	200V	1.0Ω~10MΩ	J(±5%)	-55°C~+155°C	1.0Ω~9.1Ω	$\pm 250 \times 10^{-6}/^{\circ}\text{C}$
							10Ω~10MΩ	$\pm 200 \times 10^{-6}/^{\circ}\text{C}$
				1.0Ω~1.5MΩ	F(±1%)	-55°C~+155°C	1.0Ω~9.1Ω	$\pm 250 \times 10^{-6}/^{\circ}\text{C}$
							10Ω~1.5MΩ	$\pm 200 \times 10^{-6}/^{\circ}\text{C}$
RXZ18	0.33W	200V	400V	1.0Ω~10MΩ	J(±5%)	-55°C~+155°C	1.0Ω~9.1Ω	$\pm 250 \times 10^{-6}/^{\circ}\text{C}$
							10Ω~10MΩ	$\pm 200 \times 10^{-6}/^{\circ}\text{C}$
				1.0Ω~1MΩ	F(±1%)	-55°C~+155°C	1.0Ω~9.1Ω	$\pm 250 \times 10^{-6}/^{\circ}\text{C}$
							10Ω~1.5MΩ	$\pm 200 \times 10^{-6}/^{\circ}\text{C}$
RXZ33	0.5W	200V	400V	1.0Ω~10MΩ	J(±5%) F(±1%)	-55°C~+155°C	1.0Ω~10MΩ	$\pm 200 \times 10^{-6}/^{\circ}\text{C}$

(\*1) Rated voltage =  $\sqrt{\text{Rated power} \times \text{Resistance value}}$

In the case of rated voltage over above limiting element voltage, limiting element voltage will be the maximum.

(\*2) The applied voltage in short time overload test =  $2.5 \times$  rated voltage

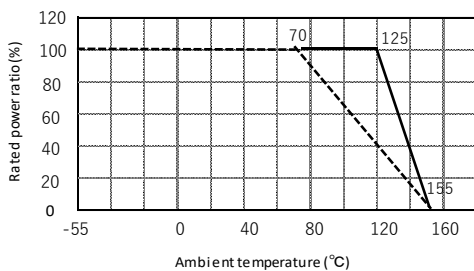
In the case of the applied voltage in short time overload test over above maximum overload voltage, maximum overload voltage will be the maximum.

\* There are the supplementary information about rating on reference page.

## ■ Specifications and test methods

Item	Specifications	Test method
Overload	$\pm (2\%+0.05\Omega)$	JIS C5201-1 8.1 2.5× Rated voltage, for 5 seconds
Bend strength of the face plating	$\pm (1\%+0.05\Omega)$	JIS C5201-1 9.8 Bending distance : 3mm
Resistance to soldering heat	$\pm (1\%+0.05\Omega)$	JIS C5201-1 11.2 260±5°C.10(sec.)
Solderability	Covered with more than 95%	JIS C5201-1 11.1 245±3°C.2(sec.)
Rapid change of temperature	$\pm (1\%+0.05\Omega)$	JIS C5201-1 10.1 -55°C⇔+125°C,1000(times)
Loadlife in humidity	$\pm (3\%+0.05\Omega)$	60±2°C.90~95% R.H 1000h
Endurance at 70°C	$\pm (3\%+0.05\Omega)$	JIS C5201-1 7.1 70±2°C.1000h

## ■ Derating curve



\* Rated power of the resistor is the maximum power

which can be loaded continuously at the ambient temperature of 70°C. For the ambient temperature above 70°C, please use according to the load derating curve (dotted line). Please note that the component surface temperature does not exceed operating temperature range.

\* When the component temperature is 155°C or less, the load reduction beginning temperature can be changed to 125°C of the dotted line.(solid line)