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

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

\*( ): Inch size

# ■Features

- · 0805 size 0.25W
- · RoHS qualified
- $\cdot$  ELV qualified
- · AEC-Q200 qualified



# ■ Structure (4) Inside termination Intermediate termination (1) Substrate ② Resistive film ③ Overcoat film (2) Outside termination

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

# ■Part No. Explanation (Example)

R X Z	1 0	Т		1 0 3	J
	Rated power		1	Nominal	Resistance
Product type	and Size	Packaging form		resistance	tolerance

RXZ:
Anti-surge

Rated power
and Size
10:0.25W,0805
18:0.33W,1206
33:0.5W,1210

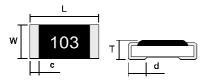
Packaging form						
T : 4mm pitch taping $\phi$ 180 reel						

Nominal					
resistance					
The resistance value					
is indicated					
by 3-digit numbers.					

Resistance						
tolerance						
J±5% F±1%						

and the third one is the number of zeros "0" following to the first two numbers (multiple of 10).

#### **■**Dimensions



\* External dimensions are for reference only.

Overcoat film color : Black

	L	W	Т	С	d	
RXZ10	$2.00 \pm 0.15$	$1.25 \pm 0.15$	0.55 + 0.10 - 0.05	0.25 + 0.20 - 0.10	$0.40 \pm 0.15$	
RXZ18	3.10 + 0.20 - 0.10	$1.55 \pm 0.15$	0.55 + 0.10 - 0.05	0.35 ± 0.20	0.50 + 0.20 - 0.15	
RXZ33	3.10 + 0.20 -0.10	$2.60 \pm 0.15$	$0.60 \pm 0.10$	0.35 ± 0.20	0.50 + 0.20 - 0.15	

The resistance value is indicated by 3-digit numbers.

Indication color of resistance value: yellow

(Unit: mm)

<sup>\*</sup>The first two numbers are significant numbers,

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

#### ■ Ratings

	Rated	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				1.0Ω~10MΩ	J(±5%)	-55°C~+155°C		1.0Ω~9.1Ω	± 250 × 10 - 6/°C
	1501/	200V	1.012 1010112	3(=370)	-33 6-4133 6		$10\Omega{\sim}10M\Omega$	$\pm 200 \times 10^{-6}$ °C	
	2007	1.0 Ω ~ 1.5 M Ω	F(±1%)	-55°C~+155°C		1.0Ω~9.1Ω	$\pm 250 \times 10^{-6}$ /°C		
			1.012 - 1.510112	1 ( - 170)	-33 0+133 0		10Ω~1.5MΩ	$\pm 200 \times 10^{-6} / ^{\circ}C$	
RXZ18 0.33W		400V	1.0Ω~10ΜΩ	J(±5%)	-55°C~+155°C		1.0Ω~9.1Ω	$\pm 250 \times 10^{-6}$ /°C	
	200V						10Ω~10MΩ	± 200 × 10 <sup>-6</sup> /°C	
	2007		1.0 Ω∼1M Ω	F(±1%)	-55°C~+155°C		1.0Ω~9.1Ω	± 250 × 10 <sup>-6</sup> /°C	
							10Ω~1.5MΩ	± 200 × 10 <sup>-6</sup> /°C	
RXZ33	0.5W	200V	400V	1.0Ω~10ΜΩ	J(±5%) F(±1%)	-55°C~+155°C		1.0Ω~10ΜΩ	± 200 × 10 <sup>-6</sup> /°C

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

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

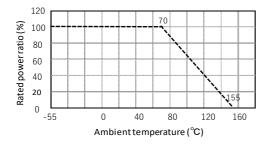
- (\*2) The applied voltage in short time overload test = 2.5 × rated voltage

  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.
- \* Temperature Coefficient of Resistance (T.C.R) is based on JIS C5201-1 6.2 between two points: 25°C and 125°C.

#### ■Specifications and test methods

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