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(RJ)
General Purpose Precision Resistor

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Product Introduction

Token's precision resistor is designed as a low-cost alternative to traditional solutions for precision applications.

Features :

- High thermal conductivity and specific gravity rods.
- Power Rating : 0.16W~3W, precision tolerance tight to A5(±0.05).
- Superior electrical TCR performances narrowed to C7(±5) ppm/℃.
- Epoxy coating, precision metal film, Lead (Pb)-free and RoHS compliant.

Applications :

- Telecom,
- Measuring and Calibration Equipment,
- Industrial Process Control Systems,
- Audio,
- Vedio

The (RJ) series are manufactured using vacuum sputtering system to deposit multiple layers of mixed metals and passivative materials onto a carefully treated high grade ceramic substrate, the resistors are coated with layers of blue lacquer.

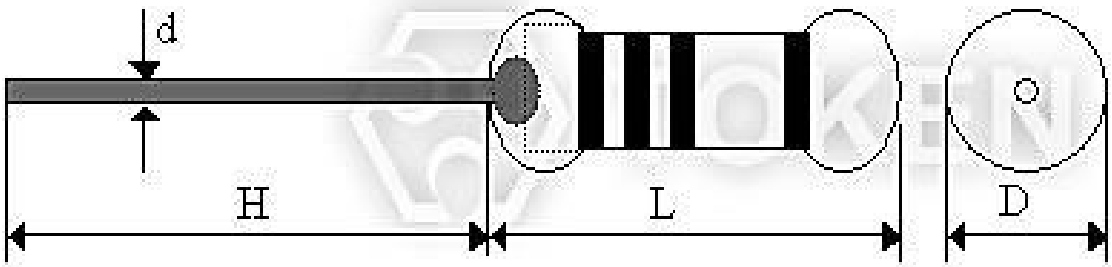
The metal-film technology is capable of supporting accuracy characteristics over a broad resistance range. Types include axial through-hole and metal film fusible resistor for special purpose.

(RJ) Series equate Vishay, IRC, EBG, and Panasonic Precision Devices with more competitive price and fast delivery. Contact us with your specific needs. Besides, you can link to Token official website "Precision Resistors" to get more information.

Characteristics - Standard Size

Characteristics - Standard Size (RJ)

Type		RJ72	RJ73	RJ74	RJ16	RJ17	RJ18
MIL-R-10509F type		RN50	RN55	RN60	RN65	RN70	RN75
Resistance range (Ω)		0.1 ~ 22M					
Resistance tolerance (%)		A5 (±0.05), B (±0.10), C (±0.25), D (±0.5), F (±1), J (±5.0)					
Temperature coefficient (ppm/℃)		C7 (±5), C6 (±10), C5 (±15), C3 (±25), C2 (±50), C1 (±100)					
Climatic category (LCT/UCT/days)		55 / 125 / 56					
Rated dissipation (W) P_{70}		0.16	0.25	0.5	1.0	2.0	3.0
Operating voltage (V) U_{max}		200	250	300	350	450	500
Short time over load voltage (V) U_{max}		400	500	600	700	900	1000
Operating Temperature range		-55℃ to 125℃					
Insulation voltage		>500V					
Insulation resistance		>1GΩ					
Dimensions (Unit: mm)	L (Max.)	3.8	6	10	12	16	26
	D (Max.)	2.0	2.5	3.5	4.5	5.5	8.6
	d ± 0.1	0.4	0.5	0.6	0.7	0.8	0.8
	H ± 2	24	24	26	26	26	26

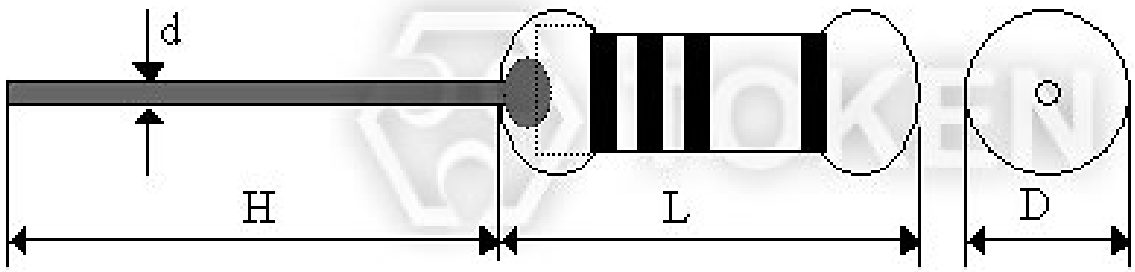


Standard Size (RJ) Dimensions

Characteristics - Compact Size

Characteristics - Compact Size (RJ)

Type		RJ73S	RJ74S	RJ16M	RJ16S	RJ17M	RJ17S	RJ18M	RJ18S
MIL-R-10509F type		RN50	RN55	RN60	RN60	RN65	RN65	RN70	RN70
Resistance range (Ω)		0.1 ~ 22M							
Resistance tolerance (%)		A5 (±0.05), B (±0.10), C (±0.25), D (±0.50), F (±1.0), J (±5.0)							
Temperature coefficient (ppm/℃)		C7 (±5), C6 (±10), C5 (±15), C3 (±25), C2 (±50), C1 (±100)							
Climatic category (LCT/UCT/days)		55 / 125 / 56							
Rated dissipation (W) P_{70}		0.25	0.5	1.0	1.0	2.0	2.0	3.0	3.0
Operating voltage (V) U_{max}		250	300	350	350	400	400	450	450
Short time over load voltage (V) U_{max}		500	600	700	700	800	800	900	900
Operating Temperature range		-55℃ to 125℃							
Insulation voltage		>500V							
Insulation resistance		>1GΩ							
Dimensions (mm)	L (Max.)	3.8	6.0	6.3	10	10	12	12	16
	D (Max.)	2.0	2.54	2.54	3.5	3.5	4.5	4.5	5.5
	d ± 0.1	0.5	0.6	0.6	0.6	0.7	0.8	0.8	0.8
	H ± 2	24	24	24	26	26	26	26	26



Compact Size (RJ) Dimensions

- **Notice: Resistance out of range, tolerance and temperature coefficient match are under request.**

Order Codes

Order Codes (RJ)

RJ16	22R	B	C6	P

Part Number
RJ72
RJ73
RJ74
RJ73S
RJ74S
RJ16M

Resistance Value (Ω)	
22R	22
220R	220
2K2	2.2K
22K	22K
2M2	2.2M
22M	22M

Resistance Tolerance (%)	
A5	±0.05
B	±0.10
C	±0.25
D	±0.5
F	±1.0
J	±5.0

Temperature Coefficient (PPM/℃)	
C1	±100
C2	±50
C3	±25
C5	±15
C6	±10
C7	±5

Package	
P	Bulk
TB	Taping Box

General Information

High Precision Devices Made in Token

Token is equipped to design and produce custom components to meet many design and reliability demands.

Token's line of high-reliability and precision products reflects a long-term commitment to our industrial and military customers. In addition to standard industry-grade resistor products, we also have many resistive products designed to meet various military source-controlled drawings.

We continually strive to meet the changing application requirements of the markets by developing new products and manufacturing technologies on an on-going basis.

Enhanced Precision and Stability for Low-Cost Uses

Every component Token provides to the commercial, industrial, and military markets for cost-efficiency uses is backed by the comprehensive testing and failure analysis capabilities of our own technical staff, whom are industrial experts in understanding and meeting the requirements of the environment.

Low TCR - Fast Approach to a Steady State

Token Electronics provides a precision Temperature Coefficient of Resistance TCR as low as 2 ppm/℃, If you must guarantee a smaller resistance change in your application. TCR is the best known parameter used to specify a resistor's stability, and is used to depict the resistive element's sensitivity to temperature change due to ambient temperature variations.

A resistor's TCR tells how much its value changes as its temperature changes. It is usually expressed in ppm/℃ (parts per million per degree Centigrade) units.

Long-Term Proven Service

Our technical expertise, our knowledge of the industry, our broad product offering, and our ability to work long-term are all part of Token's ongoing commitment to meeting the changing requirements of our most reliability-conscious customer, today and in the future.